

# Differentiation Strategies and Examples: Grades 3–5

A.C.C.E.S.S.: All Children Challenged and Equipped for Success in School

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# Table of Contents

Introduction	4
What is differentiation?	5
Misconceptions and Truths	5
The Philosophy, Practices, and Principles of Differentiation	6
Model for Differentiation of Instruction	8
A Process for Planning and Implementing Differentiated Lessons	9
Standards and KUDs: Beginning with the End in Mind	10
K: What Students Should KNOW	11
U: What Students Should UNDERSTAND	11
D: What Students Should DO	12
State Standards and KUDs	13
KUDs and Differentiation	16
Differentiating for Student Readiness	16
Uncovering Student Readiness	16
Pre-assessment: Gauging Readiness Before Instruction	18
Formative Assessment: Gauging Readiness During Instruction	22
General Strategies for Differentiating for Student Readiness	29
Differentiating for Student Interest	66
What is interest?	66
Responding to Student Interest	69
General Strategies for Differentiating for Student Interest	71
Differentiating for Student Learning Profile	97
Uncovering the Student Learning Profile	97
Strategies for Differentiating for Student Learning Profile	98
Examples of Adjusting Content, Process, and Product for Student Learning Profile	100
Appendix: Differentiation Strategies and Examples	132
Differentiation Lesson-Planning Menu	133
Learning Goals as KUDs	136
Tiered Tasks	137

ThinkDots	138
Role Cards	139
Agenda	145
Agenda Cards	146
This Week's Agenda	147
Task Contract	148
Super Stars Contract	149
Super Stars Contract with Activity Descriptions	150
Math Facts Contract	151
Independent Reading Contract	152
Thumbs-Up Homework	153
Jigsaw (Template A)	154
Jigsaw (Template B)	155
RAFT	156
Choice Grid	157
Learning Menu	159
Learning Menu for a Central Text	160
Entry Points	161
Tri-Mind	162
VAK Tasks	163
Multiple Intelligences: Eight Ways	164
Multiple Intelligences: The Profiler	165

# Portions derived from the following sources:

Tomlinson C.A. (2014). *The Differentiated Classroom: Responding to the Needs of All Learners*. (2<sup>nd</sup> ed). Alexandria, VA: ASCD.

Doubet, K.J., & Hockett, J.A. (2017). *Differentiation in Elementary Schools: Strategies to Engage and Equip All Learners*. Alexandria, VA: ASCD.

Tomlinson, C.A., & Sousa, D. (2011). *Differentiation and the Brain: How Neuroscience Supports the Learner-Friendly Classroom*. Solution Tree.

# Introduction

This handbook was designed by the Tennessee Department of Education to accompany professional learning on differentiated instruction. It features content and strategies from face-to-face workshops, as well as additional content designed to extend teacher understanding and support teachers as they design differentiated lessons and tasks in their own classrooms.

Differentiation is *not* new. Effective teachers have always taught in ways that acknowledge and respond to their students' shared and individual needs. At the same time, research reveals that differentiation is not well-understood or consistently and thoughtfully applied, regardless of grade level, subject area, or teaching context. In other words, many teachers recognize the need for differentiation; fewer teachers feel equipped with a clear understanding of how to do it well.

With that in mind, this handbook strives to balance clarifying what differentiation is—and isn't—with building teachers' skills in planning for and implementing differentiation. The first pages are dedicated to defining differentiation using a model developed by Dr. Carol Ann Tomlinson, who is widely regarded as the international expert in differentiated instruction. The remaining pages provide explicit guidance for how to design differentiated lessons and tasks, beginning with clear learning goals derived from standards and extending to specific adjustments that teachers can make to content, process, and product for student readiness, interest, and learning profile. This handbook makes several assumptions that are important for teachers and leaders to note:

- Differentiation is a journey for the teaching life. Most teachers practice some form of
  differentiation as proactive planning for students' varied needs. At the same time, fully realized,
  differentiation is a complex endeavor that requires a range of sophisticated skills that are
  developed over time and with practice. This handbook provides teachers at all levels of
  expertise with insights and tools for their own professional growth.
- Examples are instructive and illustrative. The examples provided in this handbook represent a range of content areas and grade levels, are aligned with standards, and take the developmental needs of various groups of learners into account. However, teachers are expected and encouraged to adapt these examples to best fit their purposes. No example of differentiation is an optimal fit for every context, every teacher, every classroom, and every learner. There are many other strategies and applications that teachers can use to respond to learner needs. Also, examples assume that not all students read independently and that tasks will often be delivered orally or with other supports.
- Collaboration and feedback aid are critical to teacher growth. Although this handbook can be used by individual teachers, the content, strategies, and examples are best leveraged in professional learning and other school-based context where teachers are collaborating with colleagues to develop, refine, and receive feedback on their ideas.

# What is differentiation?

# **Misconceptions and Truths**

There is a wide range of definitions of and beliefs about differentiation, including misconceptions about what it is and is not. The table below shows some of these misconceptions, alongside corrective truths.

Portions adapted from Tomlinson (2014), Tomlinson, Narvaez, & Brimijoin (2008), and Doubet & Hockett (2015; 2017)

Misconception	Truth
Differentiation is new, or the latest educational fad.	Differentiation is as old as the craft of teaching and will never go out of style.
Differentiation is a set of strategies, tools, or teaching tricks.	Differentiation is a philosophy of and model for effective teaching and learning that goes beyond strategies.
Differentiation should happen every day, or differentiation should only happen once in a while.	Differentiation is a potential response to regular and ongoing analysis of students' characteristics and students' learning.
Differentiation requires writing individualized lesson plans for every student.	Differentiation calls for instructional adjustments that responds to <i>patterns</i> in student needs.
Differentiation doesn't allow for whole-class instruction.	Differentiation incorporates a range of instructional strategies, including whole-class instruction.
Differentiation relies on leveling students through ability grouping.	Differentiation relies on <i>flexible</i> grouping for a variety of community-building and instructional purposes.
Differentiation is giving some students low-level tasks and other students high-level tasks.	Differentiation calls for respectful tasks that respond to students' readiness, interest, and learning preferences.
Differentiation is better for (or easier in) some grade levels or subjects than others.	Differentiation is for all grade levels and subjects. Each subject and grade level presents unique opportunities for and challenges to planning for differentiation.
Differentiation lets some students out of standards.	Differentiation is the means by which all students make progress toward and beyond standards.
Differentiation is primarily an approach to teaching certain groups of students (e.g., students with individualized education programs (IEPs), English language learners, gifted students) or to teaching in special programs or settings.	Differentiation is necessary for teaching all students in all kinds of settings, including the general education classroom.
Differentiation is just another name for good teaching.	Differentiation is rooted in good teaching, but good teaching is not always differentiated.

# The Philosophy, Practices, and Principles of Differentiation

Differentiation is both a philosophy and a principle- and practice-driven model for effective teaching and learning. Understanding the big picture of differentiation as well as the key components is critical to implementing it in today's classrooms.

# The Philosophy of Differentiation (Tomlinson, 2014)

Most of what teachers do in their classrooms is guided by their own philosophy of teaching and learning. Differentiation works best in classrooms where certain beliefs motivate why, what, and how teachers approach planning for and responding to student differences (Tomlinson, 2014). Four tenets about the capabilities and potential of all students, and about the role and responsibility of all teachers, represent assumptions of the teacher of a differentiated classroom.

# 1. Diversity is normal and valuable.

The teacher of a differentiated classroom understands and embraces the reality that students represent a rich range of diverse experiences and characteristics. Differences are something to celebrate, rather than something to ignore or to fix; they are assets, not liabilities, to the classroom community. The teacher honors who students are as individuals *and* as a group, based on shared and unique traits.

# 2. Every child has hidden and extensive capacity to learn.

The teacher of a differentiated classroom knows that traditional measures of ability such standardized test scores and grades, do not tell the whole story of who a student is or what a student can do. The teacher assumes that every student can learn and that a student's greatest strengths may be under the surface and require the teacher to dig deep to uncover what will help that student learn and grow.

# It is the teacher's responsibility to be the engineer of student success.

The teacher of a differentiated classroom defines student success as growth toward and beyond goals, as well as growth relative to oneself (e.g., where you started compared to where you ended up). This growth does not happen by accident; it is the result of the teacher taking ownership of and intentionally planning for all students' learning. Such teachers do not dismiss or minimize a student's chances for success based on (for example) student's English language skills, IEP, or home life. They commit to doing what they can with the time they have to make sure every child grows.

# Educators should be the champions of every student who enters the schoolhouse doors.

The teacher of a differentiated classroom believes that educators are champions for all students and is an advocate of every child in his/her charge. This includes children who are easy to miss and those who are hard to ignore; children who are academically far

behind and those far ahead; and children who have many advantages and those who have very few advantages.

These four beliefs lay a philosophical groundwork for differentiation to take root. It is easy to picture differentiation being implemented in the classroom of a teacher who holds these convictions. It is hard, by contrast, to picture differentiation being implemented in the classroom of a teacher who believes that diversity is undesirable or a nuisance; that some children can learn but others cannot; that student success is determined by factors beyond the teacher's control; or that some children are not reachable or teachable.

Teachers of differentiated classrooms understand that their role has limits, but they are convinced that they have the power and responsibility to effect growth in all children in diverse classrooms.

# **The Practices and Principles of Differentiation**

Differentiating instruction involves making proactive adjustments to *what* students learn (i.e., content), *how* they learn it (i.e., process), and how they *show* what they learn (i.e., product), according to students' individual and shared characteristics. The <u>Model for Differentiation of Instruction</u> on the next page is adapted from Carol Tomlinson's Model for Differentiation of Instruction. This model is comprised of practices and principles that, read together, provide a definition of differentiation:

When teachers differentiate, they make proactive adjustments to **content, process**, and **product**, according to patterns in student readiness, interest, or learning profile, using instructional strategies, informed by standards-aligned learning goals; pre- and formative assessment; and interest/preference surveys and inventories, implemented through varied instructional groupings, flexible classroom routines, and efficient management tools and techniques in the context of supportive, growth-oriented, community-centered classrooms.

# **Model for Differentiation of Instruction**

Based on Tomlinson (2014)

When teachers differentiate, they make proactive adjustments to					
Content	Product				
The information, ideas, and skills that students will take in or grapple with in order to reach the learning goals.	The activities through which students take in and make sense of key ideas in the content using essential knowledge and skills.	How students demonstrate and extend what they know, understand, and can do as a result of a unit or series of			
		lessons.			

# according to patterns in student

Readiness	Interests	Learning Profile	
The student's proximity to	The student's personal and	The student's preferred	
specified learning goals.	situational passions, affinities,	approaches to learning, as	
	and kinships that motivate	influenced by thinking style,	
	learning.	intelligence preference, cultural	
		background, or gender.	

# using instructional strategies such as

Graphic Organizers	Jigsaw	Entry Points
Tiered Tasks	RAFTs	Tri-Mind
ThinkDots	Choice Grids	Thinking Caps
Learning Stations	Learning Menus	VAK Tasks (Expression Options)
Contracts and Agendas	Interest Centers	MI (Multiple Intelligences)
Role Cards		
Small-Group Instruction		

# informed by

Standards-aligned learning goals (KUDs)

Pre-assessment and formative assessment

Interest and preference surveys and inventories

# and implemented through

Varied instructional groupings

Flexible classroom routines

Efficient management techniques and tools

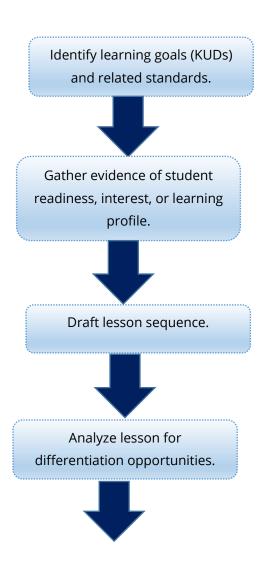
# in the context of

Supportive, growth-oriented, community-centered classroom environments.

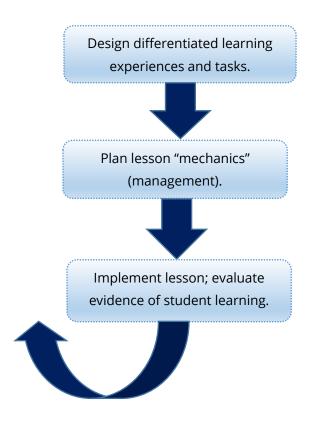
# A Process for Planning and Implementing Differentiated Lessons

There is no single process or recipe for planning and implementing differentiated lessons. In reality, a differentiated lesson involves the same elements of any quality lesson: clear learning goals, well-designed instruction, high-level questions, rich tasks, opportunities for formative assessment, strong management, etc. When a lesson is differentiated, this means that, at some point, students will be working toward the same learning goals (KUDs), but in different ways.

Although instructional planning is an iterative process, designing differentiated lessons can be viewed as a general sequence of actions, guided by key questions. This process is outlined in the graphic below. Teachers can change or add to this visual to better reflect or capture their own thinking.



- What should students know, understand, and be able to do as a result of the lesson? What knowledge, insights, and skills does it target? With what standards is it aligned?
- What is the purpose of this lesson? Where does it fit in the bigger picture?
- Where are students relative to the learning goals (i.e., readiness)? How do I know?
- How motivated are students about/by this lesson content (i.e., interest)? How do I know?
- What preferences in learning matter for this lesson (i.e., learning profile)?
- What does the ideal lesson sequence around these learning goals look like or involve?
- What do the general patterns in student readiness, interest, or learning profiles suggest would be good for all students to experience and do?
- What does the evidence suggest needs to be differentiated? What might some students struggle with? Where might some students need a push?
- Are there places in the lesson to leverage student interest? What can I adjust for differences in learning preference?



- What strategies can I use to design and deliver differentiated tasks?
- How can I ensure that all students are working with high-level tasks that are aligned with the learning goals?
- How will the lesson go and flow?
- What do I need to have in place before or during the lesson to ensure student clarity and success?
- How will I launch and orchestrate differentiated aspects of the lesson?
- How might I monitor student progress? How might I check for understanding?
- Did students make progress toward or reach the learning goals? How do I know? What's the evidence?
- What do the patterns suggest that some or all students need next? How does what happened inform upcoming lessons?

The Differentiation Lesson-Planning Menu in the Appendix aligns with the model outlined above and further scaffolds the process of planning differentiated lessons. Not all applications of differentiation are best thought of as lessons, and not all lessons need to be differentiated. The menu identifies possible components of lessons and prompts the lesson-designer to consider how a lesson might evolve, including what strategies for differentiation in this handbook might be applied. It can be used for individual or collaborative planning. The intent is to show how differentiation is connected to lesson planning in general—not to suggest that all lessons (differentiated or otherwise) should be planned with this menu.

# Standards and KUDs: Beginning with the End in Mind

The <u>Tennessee Academic Standards</u> outline expectations for what students will know and be able to do at the end of a grade for each subject area (e.g., English language arts (ELA), mathematics, science, social studies, etc.). They provide a framework for designing curricular units and lessons, as well as clarity for teachers about what students should be working toward (or beyond), at minimum, as the year progresses.

When teachers plan units and lessons with student needs in mind, the standards are a starting point for more fully articulating what students should **know (K)**, **understand (U)**, **and be able to do (D)** as a result of teaching and learning (Tomlinson, 2004). This "K-U-D" approach is a way to translate standards

into lesson and unit learning goals that should be the focus of classroom assessment, instruction, and differentiation.

# K: What Students Should KNOW

A **know goal** is the *knowledge* that students should acquire in a lesson or unit of study. This includes information that can be acquired through memorization, such as facts or categories of facts, dates, names of people or places, names and details of important events, definitions of terms or concepts, academic vocabulary, steps in a process, or rules. Additional examples derived from the Tennessee Academic Standards in grades 3–5 follow:

# **Know Goal Examples**

- Types of maps: political, physical, population, resource, polar projection, climate
- Differences between dictatorships and democratic forms of government
- Significance and outcomes of major Civil War battles
- A firsthand account is a written or oral telling/retelling of an event or experience by a person who actually experienced or observed it.
- >, =, < (greater than, equal to, less than)
- Standard units of measurement for mass and liquid volume: grams (g), kilograms (kg), milliliters (ml), and liters (l).
- A line of symmetry divides a figure into two mirror-image halves.
- Order of Operations
- Angles are geometric shapes that are formed wherever two rays share a common endpoint.
- Properties of solids, liquids, and gases
- Major cloud types (i.e., nimbus, cumulus, cirrus, stratus)
- Potential energy is the stored energy of an object. Kinetic energy is the energy of object when it is in motion.
- The apparent brightness of the sun compared to other stars is due to relative distances from the Earth.
- The central message of a story is the main point, big idea, or lesson that the author wants the reader to take away from the story.
- Temporal words and phrases: before, next, soon, afterwards, lastly, eventually, finally, meanwhile, two weeks later, for awhile
- Names and purposes of text features in an informative article (e.g., title, headings, pictures, captions)
- Stages of the writing process

The kind of information in a know goal is easy for students to forget if it is not attached to bigger ideas and understand goals.

# U: What Students Should UNDERSTAND

An **understand goal** is an insight, truth, or "a-ha" that students should gain as a result of acquiring content and skills. An understand goal represents an idea that will last beyond a single lesson or unit—

it has staying power. An understand goal often makes a statement about or connects concepts. A concept is a broad abstract idea, typically one to two words, under which various topics and facts can fit (Erickson, 2002). They can be general or discipline-specific. Examples include *needs and wants*, *change*, *system*, *pattern*, and *narrative*. Direct or implied concepts are underlined in the understand goal examples that follow, which are derived from the Tennessee Academic Standards:

# **Understand Goal Examples**

- Different maps provide different perspectives about a place. (Grade 3 geography)
- Historians use a variety of primary and secondary sources to tell what happened in the past. (Grade 4 history)
- Conflict over independence can lead to revolution. (Grade 5 history)
- Fractions are equivalent (equal) if they are the same size or same point on the number line. (Grade 3 math)
- Lines and angles can be classified by their properties. (Grade 4 math)
- Units in a given measurement system can be converted from larger units to smaller units (and vice versa). (Grade 5 math)
- Adaptation aids plant and animal survival in naturally-changing environments. (Grade 3 science)
- Human activity (e.g., farming, mining, building) can change or affect the Earth in positive and/or negative ways. (Grade 4 science)
- In science and engineering, failure provides valuable information toward finding a solution. (Grade 5 science)
- Narratives come from real and imagined experiences that people can relate to or find believable. (Grades 3–5 ELA)
- Writing is an ongoing process that takes time, practice, and purpose. (Grades 3–5 ELA)
- Relationships between words can clarify the meaning of the words. (Grades 3–5 ELA)

Understanding is distinct from knowledge in that a teacher ca not be certain that a student grasps an understanding simply because the student says it. Understanding needs to be unpacked. Students do this by using what they **know** and can **do** to show what they **understand**. For example, if students really understand that uman activity can change or affect the Earth in positive and/or negative ways, then they can give examples of human activities that change or affect the Earth; describe how activities like farming, mining, and building impact land and water; distinguish between positive and negative consequences of human activity, etc.

# D: What Students Should DO

A **do goal** articulates skills that students should master. These can be thinking skills, organizational skills, habits of mind, procedural skills, or skills associated with a discipline (e.g., science, cartography, mathematics). Despite their name, do goals do *not* describe activities that students will do or complete (e.g., do a worksheet on characters, do addition problems, complete a learning menu). Instead, a do goal focuses on a transferable action that takes place first in the learner's *mind*. For example, *decoding grade-level text* or *analyzing and interpreting data from observations* are both do goals. Neither of these

skills refers to a specific activity, and different activities could be used to exercise or carry out these skills. Example do goals from the Tennessee Academic Standards follow:

# **Do Goal Examples**

- Use different types of maps and globe skills to interpret information from a graph or chart. (Geography 2.6)
- Interpret different texts and primary sources to describe major components of culture. (Culture, History 3.14)
- Analyze the influences of key leaders during the American Revolutionary period. (Politics, 4.29)
- Evaluate and debate the rationales for the Emancipation Proclamation. (History, Politics 5.16)
- Apply properties of operations as strategies to multiple and divide. (3.OA.A.3)
- Generate a number or shape pattern that follows a given rule. (4.OA.B.4)
- Classify two-dimensional figures in a hierarchy based on properties. (5.G.B.3)
- Fluently multiply multi-digit whole numbers using appropriate strategies and algorithms. (5.NBT.B.5)
- Explain the cause and effect relationship of magnets. (3.PS2.1)
- Identify and demonstrate how technology can be used for different purposes. (3.ETS2.1)
- Investigate how lenses and digital devices use waves to enhance human senses. (4.PS4.3)
- Compare and contrast instinctual animal responses with those gathered through the senses. (5.LS1.)
- Write legibly in manuscript and cursive. (4-5.FL.WC.4b)
- Produce simple, compound, and complex sentences. (3.FL.SC.6.i)
- Develop an opinion with reasons that are supported by facts and details. (4.W.TTP.1b)
- Determine a theme or central idea of a story from details in the text. (5.RL.KID.2)

# State Standards and KUDs

Although the Tennessee Academic Standards are not written specifically as know, understand, and do goals, teachers can derive KUDs from the standards. An example using Tennessee Academic Standards in geography (grade 3) illustrates this well.

# **Geography (Grade 3)**

- 3.1. Process and report information identifying, locating, comparing, and contrasting the major continents and oceans: North America, South America, Europe, Africa, Australia, Asia, Antarctica, Arctic, Atlantic, Indian, Pacific, and Southern using maps, globes, and other technologies.
- 3.2. Interpret maps and globes using common terms, including country, region, mountain, hemisphere, latitude, longitude, north pole, south pole, equator, time zones, elevation, approximate distances in miles, isthmus, and strait.
- 3.3. Use cardinal directions, map scales, legends, titles, and longitude and latitude to locate major cities and countries in the world.
- 3.4. Examine major physical and political features on globes and maps, including mountains, plains, plateaus, mesas, buttes deserts, deltas, islands, peninsulas, basins, canyons, valleys, bays, streams, gulfs, straits, canals, seas, boundaries, cities, highways, roads, and railroads.
- 3.5. Explain the difference between relative and absolute location.
- 3.6. Use different types of maps (political, physical, population, resource, polar projection, and climate) and globe skills to interpret geographic information from a graph or chart.
- 3.7. Explain how specific images contribute to and clarify geographical information (diagrams, landforms, satellite photos, GPS system, maps, and charts).
- 3.8. Interpret digital sources and informational text to describe how humans interact with their environment.

These standards are written as **do** (**skill**) **goals:** each one begins with a thinking verb and can be demonstrated in more than one way.

There are also numerous **know goals** embedded within each standard—among them key terms and concepts about maps, globes, and geography—that need to be instructed at a level that third graders can grasp. This means that the teacher has to decide how to define and contextualize this knowledge.

**Understand goals** are not explicit in these standards but can be teased out. This might begin with identifying the most important concept(s) that cut across the standards and can be used to organize the standards. *Location* and *interaction* stand out. *Globes* and *maps* are more topical than conceptual; however, thinking about the purpose of globes and maps suggests concepts such as *orientation*, *navigation*, and *perspective*. Bringing these concepts and topics together in various statements that can logically complete the stem "students will understand that…" results in potential understand goals.

Below is a set of KUD learning goals for geography, with an emphasis on using globes and maps. These are derived from the standards but are only one possibility. Teachers may generate a set of KUDs that is different from this example, in their own efforts to translate the standards.

# **KUD Learning Goals for Geography: Globes and Maps (Grade 3)**

Derived from the Tennessee Academic Standards in Geography

# **Know Goals**

- **K1:** *Names and locations of major continents and oceans:* North America, South America, Europe, Africa, Australia, Asia, Antarctica, Arctic, Atlantic, Indian, Pacific, and Southern
- **K2:** *Common terms for places on maps:* country, region, mountain, hemisphere, latitude, longitude, north pole, south pole, equator, time zones, elevation, isthmus, and strait.
- **K3**: *Map features:* scale, legend, title, and longitude and latitude, compass, cardinal directions (north, south, east, west)
- **K4:** *Major physical and political features on globes and maps*: including mountains, plains, plateaus, mesas, buttes deserts, deltas, islands, peninsulas, basins, canyons, valleys, bays, streams, gulfs, straits, canals, seas, boundaries, cities, highways, roads, and railroads
- **K5**: *Types of maps:* political, physical, population, resource, polar projection and climate
- **K6:** Absolute location is a place's exact location on the Earth. Relative location is where a place is in relationship to another place.

# **Understand Goals**

- **U1:** Globes and maps show the <u>location</u> of places.
- **U2:** Globes and maps help people <u>orient</u> themselves in and <u>navigate</u> their world.
- **U3:** We can use globes and maps to understand <u>interactions</u> between *where* people live and *how* people live.
- **U4:** Different globes and maps provide different <u>perspectives</u>. (No one map can show everything about a place.)

#### **Do Goals**

- **D1:** Process and report information identifying, locating, comparing, and contrasting the major continents and oceans using maps, globes, and other technologies.
- **D2:** Interpret maps and globes using common terms.
- **D3:** Use cardinal directions, map scales, legends, titles, and longitude and latitude to locate major cities and countries in the world.
- **D4:** Examine major physical and political features on globes and maps.
- **D5:** Explain the difference between relative and absolute location.
- **D6:** Use different types of maps and globe skills to interpret geographic information from a graph or chart.

 D7: Explain how specific images contribute to and clarify geographical information.

**D8:** Interpret digital sources and informational text to describe how humans interact with their environment.

# **KUDs and Differentiation**

What do KUDs have to do with differentiation? One way of thinking about differentiation is providing different routes to the same destination. In planning differentiated lessons and tasks, teachers must focus all learning experiences on the same goals. Otherwise, students are likely to be engaged with work that is *different*, but not *differentiated*. KUDs provide a clear direction for the teacher as he or she considers various pathways to common goals that students might take. In other words, KUDs are the starting point for planning tasks that are differentiated for readiness, interest, and learning profile.

Many examples featured in the next sections of this handbook show KUD goals aligned to differentiated tasks.

# Differentiating for Student Readiness

# **Uncovering Student Readiness**

#### What is readiness?

Readiness is a student's proximity to the learning goals at a specific point in time (Tomlinson, 2014); it is where the student is relative to where the learning goals say the student should be.

A student's readiness can vary from lesson to lesson, skill to skill, and concept to concept. Readiness is <u>not</u> the same thing as *ability*. Ability implies something more fixed that is used to talk about a student's overall capacity as a learner or in a subject; whereas, readiness is more fluid and progress oriented. Readiness is also more consistent with research on the relationship between a person's beliefs about the nature of intelligence and his/her motivation to learn and persist in the face of challenge. Teachers (and students) who believe that intelligence is subject to change and development are more likely to have a growth mindset than those who do not (Dweck, 2006).

Readiness is one of three sets of student characteristics for which teachers can differentiate content, process, and/or product. The other two—interest and learning profile—are addressed in other parts of this handbook. However, a student's interest and learning profile can influence his or her readiness. That is, when tasks have been differentiated for interest or learning profile, a student may seem more ready than he or she would otherwise.

**Note**: In the primary grades, readiness sometimes denotes an activity that can be used to get students ready for an upcoming concept or skill. Differentiation for student readiness may do much to get students ready but that use of readiness is not the same use as in this handbook.

# How do teachers gauge student readiness?

There are several sources that teachers can use to gauge student readiness:

- Classroom-based informative assessments. These are assessments that teachers give at the classroom level to inform their instructional planning and decision making. They are aligned with current or upcoming learning goals and require oral, written, or performance-based responses from students. The teacher knows what the assessment items are and is able to see and make sense of how students responded. Such assessments can be designed by the classroom teacher or can come from other sources (e.g., district curricula). Specifically, preassessments (given before a unit of study or series of lessons around a specific topic, concept, or set of skills begins) and formative assessments (given during the instructional cycle, to check whether students are grasping the learning goals) are a teacher's most powerful tools for tapping into students' understanding, knowledge, and skill if assessment items are goal-aligned and thoughtfully designed. Summative assessments (given at or toward the end of period of study to judge or certify what the student has learned) also yield evidence of student readiness that can be used to inform planning in subsequent lessons or units. These informative assessments are described in further detail with specific strategies and examples in the following sections of this handbook.
- Results from standardized assessments. Standardized assessments such as state-level tests and universal screening tools can also provide evidence of student readiness. In Tennessee, the state standardized assessments, called TNReady, are fully aligned to the Tennessee Academic Standards. Students and their families receive detailed individualized reports that show students' strengths, opportunities for growth, and suggested next steps. Teachers receive class roster reports that identify areas where their students exceeded, met, or were below expectations when compared to other students in Tennessee. Teachers also receive standards analysis reports that outline how their students performed on each tested standard. The results from these standardized assessments can give teachers a starting point for discerning student readiness and help them determine what they should informatively assess at the classroom level. You can learn more at TNReady.gov.
- **Prior performance.** A student's performance in a prior grade level, on a prior classroom assessment, or even in a prior unit of study *can* be an indicator of student readiness, but like standardized assessment results and IEP/504 plans, they should point the teacher toward using pre- and formative assessment to uncover *where* the student is relative to learning goals *now*. Because development can follow a bumpy, uneven trajectory (versus a straight and predictable line), prior performance should be interpreted cautiously as evidence of a student's current readiness.
- **IEPs and 504 plans.** IEPs and 504 plans outline instructional accommodations and/or curricular modifications that a teacher makes in response to specific student needs that have implications for how or what the student learns. IEP and 504 plans provide general guidance for responding to specific aspects of student readiness, but they are not a substitute for informatively

assessing students against actual lesson and unit learning goals. A student having an IEP or 504 plan does not mean that he or she will necessarily have high or low readiness with certain content or skills.

• Other student characteristics. Characteristics such as a student's proficiency with the English language, stability of home life, cultural background, and ability to sustain attention may influence his or her readiness—or how the teacher interprets his or her readiness—but should not be used to characterize or make assumptions about student readiness in the absence of assessment evidence.

# Pre-assessment: Gauging Readiness Before Instruction

# **Summary**

Pre-assessment is the process of gathering evidence of students' readiness and interests *prior* to beginning a unit or series of related lessons and then using that evidence to plan instruction that will better meet learners' needs (Doubet & Hockett, 2017). Pre-assessment gives teachers both a big picture view of where a group of students is relative to goals as well as insights about individual students' thinking, skills, and preferences.

#### **Differentiation Connection**

Pre-assessment results can reveal what all students have or have not yet learned or grasped, and point the teacher to which area of the pool is best for students to jump in (Tomlinson & Moon, 2013)—which may be in the same place or in different places. The results of a pre-assessment can also give teachers a sense of what lessons in the unit might need to be differentiated for readiness, interest, or learning preference. Pre-assessment should not be used to put students into static readiness groups for the duration of a unit. As a unit progresses, teachers should use formative assessment to inform instructional decisions, including whether and how to differentiate.

# **Design Guidelines**

- 1. Identify the learning goals for the unit or series of lessons. What should students understand, know, and be able to do? Also, consider pre-requisite goals that students at the grade level *should* already know, understand, and be able to do, but might not.
- **2. Select goals for pre-assessment.** Select unit learning goals or prerequisite goals for which there is little existing or recent evidence of student readiness. Avoid trying to pre-assess every goal in the unit.
- **3. Design pre-assessment items that align with the selected goals.** Use open-ended prompts that aim to capture what students *do* know, understand, and can do (versus what they do not). Use natural, grade-appropriate language and aim for quality over quantity. The idea is not to scare students about upcoming content—or to make them feel badly about not knowing something. Rather, the best items invite students to connect with the content and skills and give them a taste

of what they will be learning. Strategies such as those described on the pages that follow can also be helpful in deciding how to frame pre-assessment prompts or questions.

- **4. Optional: Pre-assess interest and learning preference.** In addition to items that gauge readiness, pre-assessment can also include items that gauge student interest or learning preferences. Asking students about previous experience with a topic or skill, asking students to rate their interest in particular topics in an upcoming unit, or asking students to express a preference for how they might like to learn unit content are examples of potential items that could be included on a pre-assessment. When students are surveyed *only* for their interest and/or learning preferences, the term survey or inventory is a better descriptor than pre-assessment.
- **5. Articulate desired and/or expected responses.** With all assessments, pre-assessment included, be clear and specific about what the correct responses are, as well as what responses are predictable, given the age and characteristics of the students.
- **6. Choose delivery, response, and documentation formats.** Pre-assessment can be delivered orally or by reading or displaying prompts, alone or in combination with images and pictures, on paper, with physical materials/manipulatives, or via technology. Delivery can be whole-group, small-group, or individual. Students can respond by speaking, drawing, completing a task, performing, selecting from a set of choices, writing, or using cards, clickers, or other signals. The teacher can gather and document responses using sticky notes, audio-recording responses, taking pictures, or saving responses electronically.

# **Implementation Guidelines**

- When to give a pre-assessment. Pre-assessment is most useful when administered in time to analyze the results and make up-front adjustments to unit or lesson plans. Usually, this means several days before a unit begins.
- What to tell students. Students of all ages can understand the idea of getting a check-up at the doctor. Consider using this or a similar analogy when first engaging students in preassessment, with an emphasis on you trying to find out as much as possible about what students have already learned and experienced so that you can be a better teacher. Having students revisit and rethink their pre-assessment responses is also a way to frame the process around students' growth, versus on their performance.

•	Alluly	ting the results. Neview/read through student responses and note the general
	theme	s and patterns for the class as a whole. Questions to consider include the following:
		What do all or many students seem to grasp well, or better than expected?
		What do all or many students seem to not yet understand, know, or be able to do?
		What do students' responses reveal about their misconceptions or gaps?

Analyzing the results Review/read through student responses and note the general

Planning from the results. Use the themes and patterns to inform or make revisions to
the unit plan or specific lesson plans and tasks. Student responses can provide ideas for
lesson hooks or activities (this includes using unidentified student responses in lessons),
evidence for which lessons or tasks need to be differentiated for readiness (or interest or
learning preference) and which ones do not, and the basis for documenting individual or
class growth.

# **Pre-Assessment Strategy Examples**

# K-W-L

(Ogle, 1986)

Developed as an active reading strategy, K-W-L builds on students' prior knowledge and current interest in a concept or topic to provide a framework for acquiring information via text or other sources, or their own practice, application, and learning experiences. Students revisit their ideas and questions to consider what they found out. The teacher begins by having students brainstorm what they already **know**, **or think they know**, **(K)** about a topic, as well as what they **want to learn (W)** about it. After reading about the topic, students return to the K and the W to discuss what they have **learned (L)** and still want to learn. K-W-L is a pre-assessment of individual students only when used as such. For example, a whole-class K-W-L discussion may give the teacher clues about some students' thinking, but is less helpful for determining how each student is approaching a topic. Individual or small-group interviews, or having students write or draw items in the K and W columns on their own charts, can help capture each child's thinking.

# Interviews (Small-Group/Individual)

Small-group and individual interviews are ideal approaches to pre-assessing students. Teacher can pose initial and follow-up questions to probe student understanding and knowledge, as well as the why behind their thinking. Prompts and questions can be more open (e.g., Tell me what you know about fractions.) or more closed (e.g., How is a fraction different from a whole number?), more simple (e.g., Name the parts of a plant.) or more complex (e.g., How do humans and animals depend on plants?). Documentation is a key component of interviews, whether written, recorded, or photographed.

# **Coming Soon**

The coming soon strategy builds on students' familiarity with movie or television show previews or trailers. Showing a brief real-life preview from an animated film can help provide context for the strategy. The teacher shares a series of statements with which students can agree or disagree with, based on their current understanding or experiences (e.g., The heavier an object is, the faster it falls.). The statements can be displayed and read aloud for student response via color cards, hand signals, numbers, and/or printed on paper. This approach can also include display images related to unit content or skills for students to consider or apply. For example, a teacher shares images taken in different parts of the word, on different continents, and asks students to identify where the phots might have been taken.

# Performance-Based Task

A performance-based task is any task that a student completes that requires a constructed response. Used as pre-assessment, a performance-based task can help teachers better see how a student makes sense of content and ideas, and/or how they apply skills. The task might involve creating, selecting, sorting, comparing, solving, and interpreting. For example, a teacher asks students to write a short persuasive letter to principal about changing a school rule, or has students classify shapes by given attributes. Typically, performance-based tasks also create an opportunity for students to explain their thinking. For example, students write two fractions, use the symbols <, >, or = to compare them, and explain the reasoning behind their choice.

# **Pre-Assessment Item Examples**

What Do you KNOW about Magnets?	What do you WANT to know?	What have you LEARNED?
know that	I want to know	I learned that

# Informational Text

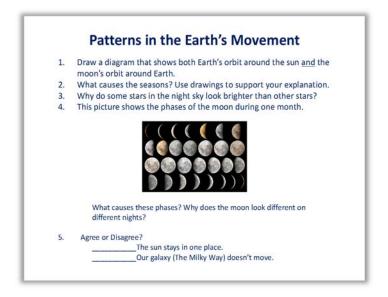
- Go to the article bookmarked at Newsela.com
   Read the article at the MAX (original) level. Take the online quiz that follows.
- Then, read the article AGAIN, but at a different level of your choice. Again, take the online quiz that follows.
- Reflect on your experience by answering these questions:
  - Which article did you find easier to read? What made it easier?
  - Which article do you feel like you learned more from? Why?

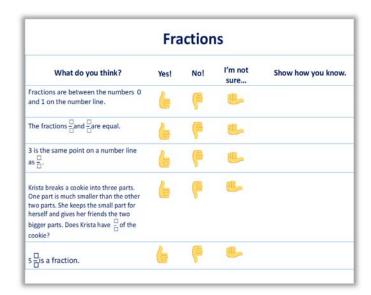
# Literal Language vs. Non-Literal Language

- In this Google Doc, there is a list of descriptive phrases & sentences taken from stories and poems.
- Use cut and paste to put these into two groups: Literal Language and Non-Literal Language.
- When you're finished, explain the difference between literal and non-literal language, using examples from the two groups.
- Finally, write and label two one-sentence descriptions of something in this classroom: one that uses literal language and one that uses non-literal language.

# **Map Skills**

- Use the world map provided to answer the following questions:
  - · Label all the continents on the map. (Hint: There are seven.)
  - · Approximately how far is New York City from London?
  - Describe where the Indian Ocean is in two different ways.
- Use the physical map of our state to answer the following questions:
  - · Approximately how far is Knoxville from Nashville?
  - · Label where YOU live on this map.
  - Describe where you live in Tennessee in four sentence. Use one cardinal direction (north, south, east, west) in each sentence.
- 3. What can a globe show or "do" that a map cannot?
- 4. What can a map show or "do" that a globe cannot?
- Where people live affects how people live. Give TWO
  examples of how this is true. Use or refer to the world map
  for Example 1. Use or refer to the state map for Example 2.





# The Civil War

- 1. What does it mean to be "united" with something or someone?
- 2. Give one example of UNITY **and** one example of DISUNITY from your own life, current events, or American history.
- 3. What were the "sides" in The Civil War? (Who fought against whom?)
- 4. Which side was Tennessee on?
- 5. Why was The Civil War fought? Include the word "united" in your response, if you can.
- 6. What people and events do you think of when you hear "The Civil War"? List them below.

- 7. This picture was printed on the front page of a newspaper in the 1860s.
- What does the picture show? Be specific, and go beyond the title of the picture.
- Do you think this is from before, during, or after The Civil War? Why do you think so?



"The First Vote". Engraving by A.R. Waud. Harper's Weekly

# Formative Assessment: Gauging Readiness During Instruction

#### **Summary**

Formative assessment (sometimes called *ongoing assessment*) is the ongoing process of taking regular and varied snapshots of students' learning during or after a lesson (or series of lessons) to inform next steps in instructional planning (Doubet & Hockett, 2017). Formative assessment can be formal or informal. Formal formative assessment usually involves more planning on the teacher's part, a set time and process for implementation, and formalized documentation of student thinking and skill. Informal formative assessment may involve less teacher preparation, be administered on the go (Tomlinson & Moon, 2013), and invite less formalized documentation.

# **Differentiation Connection**

Formative assessment is the fuel for readiness-based differentiation. Through formative assessment, teachers can see what kind of impact their teaching is having on student learning. At its best, formative assessment captures and reveals the nuances of what students are and are not grasping. By studying the results of formative assessment, teachers are able to better detect patterns in student readiness

and decide whether to differentiate a lesson or task in response. For example, a teacher may notice a single overall pattern in student responses. That pattern may align well with the teacher's existing instructional plan, or it might call for adjustments to upcoming lessons. The results may also reveal multiple patterns in student thinking and skill, some of which are significant enough to compel differentiation of content, process, and/or product for student readiness.

# **Design Guidelines**

The process of designing formative assessments is much like designing pre-assessments. A key difference between formative assessment and pre-assessment is <u>when</u> in the instructional cycle the assessment is given and what it assumes that students have learned. Formative assessments are also usually limited in scope, focusing on gauging student learning after one or several lessons.

- 1. Decide at which points in the unit of study or series of lessons to formatively assess students. Plan formative assessments by considering the points in a unit or lesson sequence when it is important and necessary to check if students are grasping key ideas and skills. At what points is it most critical to identify misconceptions? Where will students have had practice with skills that are building blocks for next steps? What ideas should be sticking before moving forward? Potentially, every lesson and task can generate evidence of student learning for formatively assessing students. Decide at what points formative assessment should be conducted more formally or intentionally, with analysis of individual students' responses.
- **2. Design formative assessment items that align with critical learning goals.** The best formative assessment items have certain characteristics; namely, they:
  - are aligned with important learning goals (KUDs);
  - invite application and transfer (versus only memorization);
  - require responses that can be evaluated efficiently; and
  - reveal both what students are grasping and how well they are grasping it.

Frameworks like *Bloom's Revised Taxonomy* or the *Six Facets of Understanding* (Wiggins & McTighe, 1998) can be useful for generating ideas for prompts that represent various levels of cognition. Strategies such as those described in the Formative Assessment Strategy Examples can also be helpful in deciding how to frame formative assessment prompts or questions. Use a variety of formative assessment items and strategies over the course of a unit to enhance student engagement and offer different ways for students to show what they are learning.

**3. Articulate desired and/or expected responses.** Be clear and specific about what correct responses might look or sound like, as well as what responses are predictable, given how students tend to make sense of and apply the ideas and skills being assessed. Consider, too, what implications the responses might have for instruction. In general, formative assessments that are narrowly focused on single correct answers are not likely to provide information that can drive instruction, including differentiation for readiness.

4. Choose delivery, response, and documentation formats. Like pre-assessment, formative assessment can be delivered orally or by reading or displaying prompts, alone or in combination with images and pictures, on paper, with physical materials/manipulatives, or via technology. Delivery can be whole-group, small-group, or individual. Students can respond by speaking, drawing, completing a tasks, performing, selecting from a set of choices, writing, or using cards, clickers, or other signals. The teacher can gather and document responses using sticky notes, audio-recording responses, taking pictures, or saving responses electronically.

# **Implementation Guidelines**

- When to formatively assess. Administer formative assessment throughout a unit of study or across a series of lessons at the key points identified in advance, as well as at times that it seems important to check in with students to see if they are getting it. Frequent formative assessment checks keep assumptions at bay by confirming or challenging the teacher's thinking about what and how individual students are learning.
- What to tell students. Formative assessment opportunities do not need to be announced
  or labeled as such. In general, it is advisable to make students feel comfortable about
  showing what they know, with advance preparation or notice for more formalized wholegroup or individual formative assessments. Use phrases like check-up or the name of the
  specific strategy or tool being used to acclimate students to the act and purpose of
  formative assessment without using the term itself.
- Analyzing the results. Review student responses and note the general themes and patterns for the class as a whole. Questions to consider include the following:

   What do all, many, some, or few students seem to grasp well, or better than expected?
   What do all, many, some, or few students seem to not yet understand, know, or be able to do?
   What do groups of or individual students' responses reveal about their misconceptions or gaps?
   What do the misconceptions or gaps imply or suggest that these students need, instructionally? How can the misconception(s) be corrected and the gap(s) closed?
- Planning from the results. When formative assessment points to the need for readiness
  differentiation, consider using strategies such as those described in the <u>Differentiating for</u>
  <u>Student Readiness</u> section of this handbook.

# **Formative Assessment Strategy Examples**

# Frayer Models

The traditional Frayer Model (sometimes called *Frayer Diagram*) is a four-quadrant table centered on a term, concept, idea, or topic for which students construct a definition characteristics or attributes, and

examples and non-examples. Responses in the non-examples category should be things that could be easily confused as examples (versus simply anything that is not an example). The Frayer Model can also be used as a pre-assessment strategy and as a whole-group instructional activity. Example topics include Fractions, Polygons, Adaptation, System, Cycle, Revolution, and Figurative Language. The categories in each section can be modified to suit the focus.

Concept:				
Definition	Characteristics			
Examples	Non-Examples			

# Entry/Exit Tickets

An entry or exit ticket is a response to stop prompts or questions that students complete at the beginning or at the end of a lesson. Students can write or draw responses on index cards, sticky notes, or full-sized paper, or they can share or record their answers orally.

# Quick Quizzes/Check-Ups

In upper-elementary and secondary classrooms, a *quiz* typically refers to a series of assessment items (i.e., prompts, questions) that students respond to on-demand in a single sitting. The terms quiz, quick *quiz*, or *check-up* can be used to refer to less formal formative assessment opportunities with fewer items in which students respond orally, in writing, or through a task.

# White Boards

White boards can be used anytime during a whole-class or small-group lesson—or in individual conferences—to assess students using one or more prompts, without having to collect paper-based responses. They work best when each student has his/her own board and with prompts that require depictions, representations, and/or simple written responses. Students can hold up their boards facing the teacher (or peers) when finished, or keep their boards flat for the teacher (or peers) to see and take note of. The teacher can document responses or respond in the moment with feedback or next-steps.

# Sticky Notes (as described in Doubet & Hockett, 2017)

There are two general kinds of sticky notes that can be used in formative assessment: those that the teacher generates and those that students generate.

- 1. **Teachers** can use sticky notes to make observations during whole class instruction, group work, or as students work individually. These can be notes that track student progress with a skill, where a student is having "a-ha" moments or getting stuck, a strategy or way of learning that seems helpful (or unhelpful) for a student, or peer with whom the student works well (or does not work well). These can be placed and analyzed in file folders for each student, or in class file folders for a particular skill.
- 2. **Students** can use sticky notes in response to a simple question, prompt, or task, such as, "Show whether the first letter in your name has symmetry" or "Write a question that you still have about how plants make their own food." Students put their sticky notes in designated place (e.g., on the door as they leave, whiteboard, etc.) for the teacher and/or peers to analyze.

# Stoplight Method (based on description in Doubet & Hockett, 2017)

This strategy also uses sticky notes. The teacher posts a paper stoplight (or displays a virtual stoplight on screen/interactive whiteboard). The red, yellow, and green signals represent different signals. Two versions suitable for primary grades classrooms follow:

# Version 1

Students pause before the end of an ongoing task (e.g., writing workshop block, center/stations tasks), write their name on a sticky note, and stick their name on the color that represents where they are in a process. The teacher checks in with students whose names are on the green light before proceeding to red and then yellow students.

- *Red:* I have stopped and need to confer with the teacher.
- Yellow: I have a question but can keep working.
- *Green:* I am ready to go on to the next step.

#### Version 2

The teacher poses a question to which students respond on a sticky note. Students place it on the color that best fits how sure they are about the accuracy of their response.

- Red: I am not at all sure of my answer.
- Yellow: My answer might be right, but I am not 100% sure.
- *Green:* I am 100% sure my answer is correct.

The teacher reviews the responses and plans for follow-up with the class and/or individual or groups of students.

#### **Concept Sort**

A concept sort is a simpler version of concept attainment (Bruner, 1956) that can be used to assess students' understanding of a concept or idea. Students have received instruction around a concept (e.g., metaphors) and are asked to physically or virtually sort examples and non-examples into yes and

no categories. For example, if students have been learning about metaphors, the teacher can mix examples of such metaphors with examples that seem like metaphors but are not and put them in plastic baggies for students to sort into two piles. The teacher can observe students as they sort and prompt students to explain their thinking as they sort or after they complete the sort.

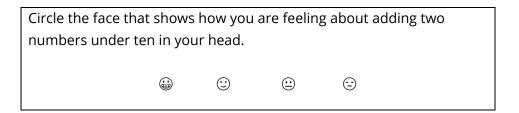
# Classroom Response Systems and Online Tools

A variety of student response systems (SRS) and online platforms that use clickers, tablets, or other devices can be used to formatively—and interactively—assess students. Web-based applications that do not require purchasing specialized systems include:

- PollEverywhere (<a href="http://www.polleverywhere.com">http://www.polleverywhere.com</a>)
- GoFormative (<a href="http://goformative.com">http://goformative.com</a>)
- Padlet (<a href="http://www.padlet.com">http://www.padlet.com</a>)
- Plickers (<a href="http://www.plickers.com">http://www.plickers.com</a>)
- Educreations (<a href="http://www.educreations.com">http://www.educreations.com</a>).

# Smiley Face Scale

A smiley face scale is a simple, visually-appealing way for young children to self-assess or express how they are feeling about a topic, concept, or skill. Of course, a student's self-report may or may not be a true reflection of his/her readiness. The goal is not to interpret the student's choice as *the* indicator of readiness, but to let the student's choice and explanation of that choice provide clues about readiness that can focus further assessment and instruction. An example follows:



# **Hand Signals**

Hand signals can be an efficient way to assess students on the fly. This strategy works best when students are explicitly taught what the signals do and do not mean, and when the teacher has built a classroom culture where students feel safe expressing their comfort level. Potential signals include:

- **Thumb Check:** Thumbs up (I get it!), thumbs sideways (I am not sure), thumbs down (I do not get it.)
- **Windshield Check** (Tomlinson & Moon, 2013): Hand up if your windshield is *clear*, *buggy*, *covered with mud*.
- **Weather Report:** Show with your finger in the air if you are experiencing sunny skies, a few clouds, fog and smog.

# **Formative Assessment Item Examples**

This section provides examples of prompts, questions, or tasks that could be used to formatively assess students. Items can be delivered on their own, alongside other items, and/or via one the formative assessment strategies described above. Note that these questions and prompts ask students to *transfer* what they have learned, versus repeat memorized facts.

#### **Can and Cannot**

We have been learning about different ways to represent data. Using the examples on the board...

- Name one thing that a bar graph can do or show that a pictograph cannot.
- Name one thing that a pictograph can do or show that a bar graph cannot
  - Explain two things that bar graphs and pictographs have in common, mathematically.

# **Important Things\***

\*derived from *The Important Book* by Margaret Wise Brown, which can be used to introduce this prompt.

Some important things about [e.g., using quotations marks, Christopher Columbus] is/are \_\_\_\_\_ and \_\_\_\_\_. But the MOST important thing about it/them is....

#### **Show and Tell**

Show (draw) and tell (explain) the difference between a primary source and a secondary source using an event from your own life. It could be a recent event (going to the movies) or an event from the past (being born).

# How do you know?

- Write your birthday here:
- Which numbers and letters in your birthday have symmetry? How do you know?
- Which numbers in your birthday do NOT have symmetry? How do you know?

# That Reminds Me....

The way that [the water cycle works] reminds me of how \_\_\_\_\_ [works]. It reminds me of this because....

# **Lunch Time**

At lunch, your friend says, "Globes are better than maps because they are round and can show everything." What would you say to her, based on what your learned today?

#### 1 'n' 1

1 thing I **learned** about minimizing the impact of natural hazards is that....

1 thing I'm still **wondering** about natural hazards is....

How do you know?

# True or False?

Is this equation true or false?

 $4,256 = 4 \times 1000 + 2 \times 100 + 5 \times 10 + 6 + 1$ 

It's \_\_\_\_\_.

How do you know?

# General Strategies for Differentiating for Student Readiness

This table summarizes some of the ways that teachers can adjust content, process, and product to differentiate for student readiness.

	Strategy	Example Teacher Talk
Content The information, ideas, and skills that students will take in or grapple with in order to reach the learning goals.	<ul> <li>Providing texts, resources, or websites at different reading levels, levels of complexity, or levels of abstraction around the same concept, theme, or topic</li> <li>Providing audio/visual supports for taking in text or other information.</li> <li>Posing situations, problems, or dilemmas that vary by complexity, skill mastery, or background knowledge required</li> <li>Pairing key academic vocabulary with native-language equivalents or visual cues</li> <li>Modeling or demonstrating</li> <li>Working with content/skills that are pre-requisite to targeted content/skills</li> <li>Varying the time allotted to take in/learn content</li> </ul>	<ul> <li>We are all going to read another text about the solar system. At the end of the week, you will be sharing what you learned with someone who read the other book. We will all compare the new information to what we read in Boy, Were We Wrong About the Solar System!</li> <li>Go to the bookmarked video to hear the poem read aloud again—this time, by the author. Pay special attention to how the figurative language in the poem affects what you see in your mind.</li> <li>Some of you will responds to a list of questions that your parents might ask you when you tell them you are learning about weather. Others of you will be looking at a list of things that a know-it-all neighbor says to you about weather and decide if she is right.</li> <li>Notice on the Reading Maps word wall that each word has an image to help you read the word and remember what it means.</li> <li>Come to the front table for a short lesson on using commas correctly.</li> <li>Before starting our research, let us go over some text features of informational books and sources.</li> <li>We will not all be doing the same things with measurement at the same time or in the same ways, but everyone will be using protractors and working with our class task of redesigning the book area.</li> </ul>
Process The activities through which students take in and make sense of key ideas in the content using essential knowledge and skills.	<ul> <li>Giving tiered questions/organizers (same idea, different phrasing or emphasis, more/less support)</li> <li>Increasing/decreasing the facets of a task</li> <li>Increasing/decreasing the degree of scaffolding for a task</li> <li>Working more/less like an expert, practitioner, or professional</li> <li>Using icons and visuals to support taking in and processing information</li> <li>Providing models of work at different levels of complexity</li> </ul>	<ul> <li>I want partner 1 to watch the video and listen for Dr. King's goals (what he wanted to do) and partner 2 to listen for Dr. King's motives (why he wanted to do things that way).</li> <li>Scan the QR code on your desk to go to the Padlet I've created for this task. There are three different versions with different steps, depending on what you're working on. I will come around to make sure you scanned the right one.</li> <li>There are more peer editing checklists in the folders by the white board.</li> </ul>

	Strategy	Example Teacher Talk
	Asking students to see content through a certain focus or lens	<ul> <li>In this article, identify the problem that is described, the cause of the problem, and the possible solution to the problem.</li> <li>Let us practice some multiplication facts before you play the dice game.</li> <li>Since you four have some experience with using the iPad to take pictures, I want you to first watch this short video on how to take pictures like a real photographer and see if you can try some of the ideas when you start.</li> <li>Your discussion duty card shows what your role is during discussion and give you some sound bites as examples of things you might say in your role.</li> <li>I am going to give you a student model of a how-to booklet that is a good fit for your writing goals.</li> <li>Use your assigned looking lens (e.g., detective, defender, matchmaker, fortune-teller) to focus your reading of the story.</li> </ul>
Product  How students demonstrate and extend what they know, understand, and can do as a result of a unit or series of lessons.	<ul> <li>Varying the audience for the product (from closer to student experience/more familiar to further from student experience/less familiar)</li> <li>Varying the demands or sophistication of the product</li> <li>Having varied arrangements for working on a product</li> <li>Giving more or fewer check-in dates and chunks in progress of completing task</li> <li>Providing more or fewer givens or knowns (models/examples, resources, guidelines)</li> </ul>	<ul> <li>I will be helping you choose an audience for your product. Everyone needs a real audience, whether it is your peers in this class, Principal Adams, or visitors to the ecology center.</li> <li>Here is the list of traits we decided a strong product should have. On your own, come up with one other trait you want your product to have. It might be something that you will need some help with!</li> <li>For this group, I want you to try to mimic the pattern in the autobiography we read as you write your own autobiography.</li> <li>We will work on our poetry collections during writer's workshop and during free choice time. You can also sign up to work on it during lunchtime this week or next week.</li> <li>Ally, Jamal, and Tina, as you write your opinion letter, try to think about what someone who disagrees with you might say. Use the phrase "Some people might say, but I say" to help.</li> <li>I will be conferencing with each of you to make a schedule for completing your geography project. We can decide together how many times you think you want me to check in with you.</li> </ul>

# **Readiness Strategy:** Graphic Organizers

# **Strategy Summary**

Graphic organizers are visual displays that show how concepts, ideas, or facts are connected or related. They are useful for helping students organize their thinking as they gather or make sense of information. Widely-used examples include t-charts, Venn diagrams, Frayer diagrams, concept maps and webs, K-W-L charts, and fishbone models. Graphic organizers can be used in whole-class instruction, small-group instruction, group or partner activities, or individual work.

# **Differentiation Connection**

Graphic organizers are scaffolds for student thinking and processing. By providing ways to visualize and classify information, graphic organizers help students see connections, explore relationships, and clarify misconceptions. In this way, the use of a graphic organizer—even if it is the same organizer with all students—might be viewed as a form of differentiation. Graphic organizers can also be tiered by altering the nature or number of facets on the organizer, making points of comparison more or less complex, or changing the content focus (Doubet & Hockett, 2017).

	Differentiation of Content		Differentiation of Process		Differentiation of Content and Process
•	Students use the same graphic organizer but access resources or information that varies by reading level, complexity, or abstraction.  Students use the same graphic organizer but the question or focus driving the organizer is differentiated for readiness (e.g., more and less complex topics).	•	Students use different graphic organizers wherein the process represented (e.g., compare/contrast, problem/solution, cause/effect, sequencing) is adjusted to be more or less complex.  Students use different graphic organizers that emphasize different processes around similar content (e.g., comparing and contrasting historical	•	Students access content differentiated for readiness using graphic organizers that are tiered for readiness.
			events vs. sequencing historical events).		

# **Design Guidelines**

- **1.** Choose or design the graphic organizer that matches the content and learning goals. The organizer should aid comprehension and make processing information more efficient than would be possible without the organizer.
- **2.** Frame the organizer with a guiding question or focus. Be mindful of the purpose of using the organizer (e.g., using a Venn diagram to compare and contrast animal structures and their functions).

**3.** Remember that completing a graphic organizer is a means to an end, not an end itself. What will students do with the information? How or to what will they transfer it? This might include or involve asking students to draw conclusions, pose questions, make predictions, or use their learning in a specific task.

# **Implementation Guidelines**

- ☑ Model how to use the organizer. In the process, emphasize the content and thinking skills being used (versus the kind of organizer being used).
- ☑ If students use graphic organizers to take in differentiated content or use different organizers that have been tiered for readiness, make sure they have a chance to come together (in groups or as a whole class) around a common question (e.g., How were Rosa Parks' and Martin Luther King's roles in the Civil Rights movement alike and different?).

# **Graphic Organizer Examples**

# Compare/Contrast

Subject: Reading

**Related Standards:** RL 5.3 (RL 3.9, 4.9, 5.9)

A Venn diagram can help students visualize what is unique and common to two or more things. In this example, students have read a story and work with a teacher model, with teacher support, with a partner, or independently to identify similarities and differences between the characters (from the same story, from different stories). Students answer the question at the bottom in discussion or in writing on the backside. The same model also works for

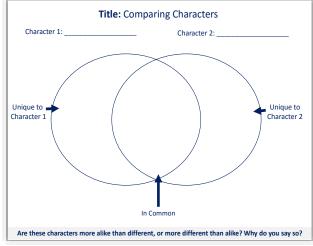
comparing and contrasting stories in the same genres, stories that address the same theme or topic, stories from different cultures that follow a similar

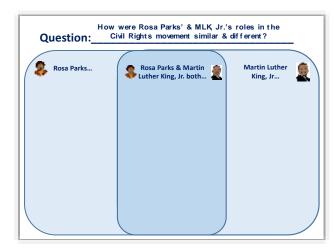
pattern, or stories by the same author.

Subject: History/ELA

Related Standards: History 5.65; RI 3.9, 4.9, 5.9

This Venn diagram is designed with shapes that allow more room for drawing or writing (by teacher or students). Shading the overlapping boxes visually reinforces to students that the ideas therein are shared by the two people (things, events, etc.) being compared.

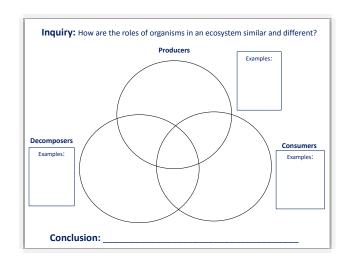




Subject: Science

**Related Standards: 4.LS2.3** 

A three-way Venn diagram, though more complex, invites students to consider the interconnected relationship between more than two things. This science example also includes a place to list examples of each organism type. Other possible topics for three-way Venn diagrams include fractions, decimals, and percentages; historical figures; types of maps; and different news articles on the same story.



Charts like these can be used in whole-class instruction,

small-group tasks, and jigsaw activities. Other standards-related topics for comparison include types of maps, organism structure and function, states of matter, and historical figures or events. Completing the organizer is not the goal; it is a stepping stone to drawing conclusions and transferring the information to a new task.

**Subject:** Reading Literature **Related Standards:** RL.1–3

Story Elements	Story 1:	Story 2:	Story 3:	Story 4:
Setting Where & when the story takes place				
Traits of Main				
Character Looks, Personality Hopes/Desires				
Problem Obstacles or troubles that the main character faces				
Solution How the problem is solved				
Theme/Central				
Message Main point, big idea, or lesson that the author				

**Subject:** Geography

**Related Standards:** 3.18, 3.28, 3.29

North American Countries	Major Landforms	Government	Economy
United States			
Canada			
Mexico			
Cuba			

These two organizers use a strategy called *The Matrix* (as described in Doubet & Hockett, 2017). Things for comparison are arranged in the same order across the top and along the left side. Where the item meets with itself, students identify something that is true for that thing but not the other three things. Where two items meet, students identify something that is true for those items only. Consider teaching the spatial orientation by starting with a blank organizer and adding each item and the corresponding information (with student input) to model.

**Subject:** Geometry

Related Standards: 3.G.A.1

All of these quadrilaterals	Square	Rectangle	Rhombus	Trapezoid
Square	Unique to this shape	Shared trait	Shared trait	Shared trait
Rectangle	Shared trait	Unique to this shape	Shared trait	Shared trait
Rhombus	Shared trait	Shared trait	Unique to this shape	Shared trait
Trapezoid	Shared trait	Shared trait	Shared trait	Unique to this shape

Subject: Science

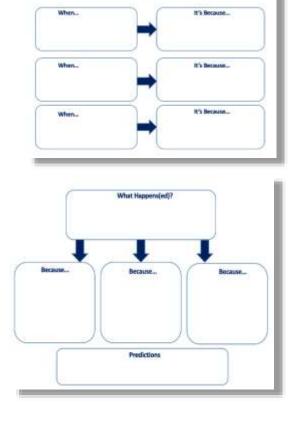
Related Standards: 3.LS4.1-2

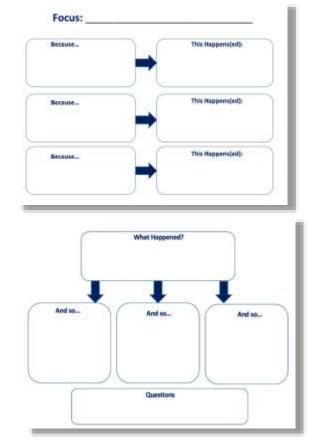
They all	Animal 1:	Animal 2:	Animal 3:	Animal 4:
Animal 1:	Unique to this animal	Shared trait	Shared trait	Shared trait
Animal 2:	Shared trait	Unique to this animal	Shared trait	Shared trait
Animal 3:	Shared trait	Shared trait	Unique to this animal	Shared trait
Animal 4:	Shared trait	Shared trait	Shared trait	Unique to this animal

# Cause/Effect

Focus:

Organizers like these can be used to teach the concepts of cause and effect in the context of events in a fictional or biographical story, consequences of following or breaking rules, a scientific process or phenomenon, or a historical event. The examples below are arranged from less complex to more complex. Teachers may choose to substitute the terms *If...Then...* or *Cause...Effect...*.

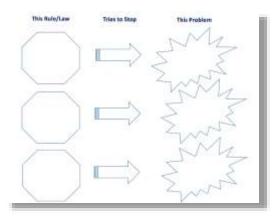




# **Problem/Solution**

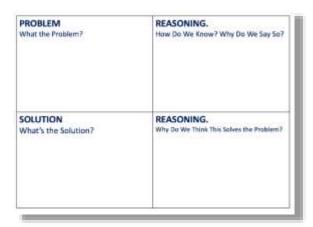
**Subject:** Social Studies

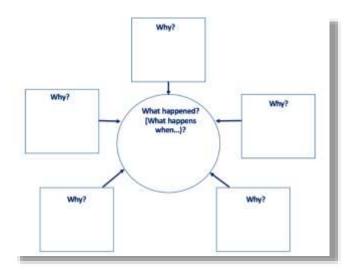
In a discussion or exploration of rules or laws (classroom, community, state, federal), this organizer uses simple graphics to help students think about purpose of rules and laws.



Subject: Various

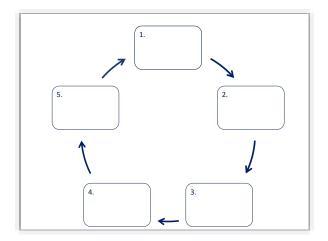
This organizer can be used to support opinion writing, story discussion, analysis of an informational text, article, or speech, science- or technology-related problem, or current issue.

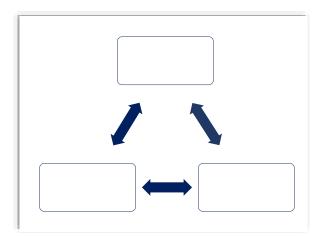




# **Systems & Cycles**

Organizers for depicting or analyzing a cycle or system are ideal for topics and concepts such as the water cycle, food chains, branches of government, and the writing process.





**Readiness Strategy:** Tiered Tasks

# Strategy Summary

Tiered tasks are activities that are aligned with the same learning goals but vary by level of complexity, abstractness, open-endedness, or degree of independence (Tomlinson, 2014). They can include tiered questions, prompts, organizers, or complex tasks. Tiered tasks give all students access to important learning goals, honor all students' need for challenging and engaging tasks, and help equalize the time it takes students to complete tasks.

# **Differentiation Connection**

Tasks that are tiered are differentiated for student *readiness* and can involve adjustments to content, process, or product. Tiered tasks can be designed around general learning progressions in a content area or skill, and/or around recent pre- or formative assessment results that are closely connected to learning goals. There is no set or ideal number of tiers; there may be two or there may be five, depending on patterns in student readiness.

# **Design Guidelines**

Creating tiered tasks is a higher-prep strategy that involves a multi-step process. In effect, the teacher uses the same ingredients to make different meals that are both nutritious (help students grow and learn) and delicious (appeal to and engage students).

- **1. Begin with a clear sense of the learning goals.** Identify the concepts, principles, insights, knowledge, and skills that should hold the tiered activities together.
- **2. Consider the range of student readiness.** This should be informed by recent assessment evidence—as well as other characteristics like reading/writing skills, language development,

strengths, learning preferences, etc. Standards and learning progressions can also provide concrete guidance for where students should be, ideally.

- **3. Design the most advanced activity first.** It should be interesting, high-level, focused on the learning goals, and involve a stretch that is just beyond what you think students might be able to do with a bit of support. The activity could be one that students complete with a partner or in a group or one that they work on independently.
- **4. Replicate and tweak the activity.** Create a version of the activity that is aligned with the same learning goals and closely approximates it. Consider ways to adjust the materials students use or access, how they process information, how they express what they are learning, and how close the experience is to a familiar experience. Match the activity to student readiness. Develop more activities as needed. Tomlinson's Equalizer (2014) is a useful visual and thinking tool for adjusting tasks.

**5. Do a respect check.** Doubet & Hockett (2017) suggest evaluating tiered activities (and all

differentiated tasks) with the key criteria to make sure they are respectfully differentiated
(Tomlinson, 2014). The activities should:
lacktriangle be aligned with the same learning goals and with one another;
lacktriangle be equally interesting, appealing, and engaging from the students' perspectives;
lacktriangle ask all students to work at high levels of thought;
lacktriangle mimic what people and professionals in the real world do or how they think;
lacktriangle represent a wise use of students' time; and
be comparable in terms of workload and time required for completion.

<u>Remember</u>: The differences between various tiered tasks are primarily *qualitative*, not quantitative. Tiering is *not* simply giving some students more and other students less (e.g., five problems to solve versus one problem to solve).

- **6. Plan for degree of independence.** Plan tiered tasks with the goal of *all* students working at some degree of independence. This means that directions (oral or written) are clear, supported by text, visuals, models, or audio recordings as appropriate. Avoid designing a task that requires a student/group of students to work with the teacher for the duration of the task. Rather, design all tasks so that students can complete components without needing the teacher. Also consider ways to make sure that all students have a chance to receive support and encouragement from the teacher.
- **7. Decide how students will come together.** Honor all tasks and/or provide closure by planning an opportunity for students who completed different tasks to come together. This might involve sharing and comparing their work or completing a new task.

#### **Implementation Guidelines**

- ☑ **Using tiered tasks in a lesson**. Think of the implementation of tiered activities like going down a ski hill. Skiers begin at the top of the hill and start to go down it together. They diverge by path and then meet up again at the bottom of the hill. In the same way, tiered activities should have a common launch before students are assigned and work on various tasks. Bring students back together to share ideas (e.g., around a common question or purpose), both to honor what each student was engaged in and bring closure to the lesson.
- ☑ **Student choice and tiered tasks.** As a general rule, tiered tasks—and tasks that are differentiated for student readiness—should be assigned by the teacher rather than left to student choice. The rationale is simple: differentiation for readiness is aimed at helping students grow (in skill, in understanding) from where they are. What it takes for one student to grow is different from what it takes for another student to grow. But, that growth should not be left to chance—which is what giving students a choice between tasks differentiated for readiness can do. There *may* be times when the teacher gives a choice between or among tiered tasks in order to see what students will choose. In those cases, the teacher should make sure that no student ends up with a task that is below his/her readiness level.

#### Tiered Tasks Examples

**Topic:** Math Reasoning (Finding Mistakes) **Grade Level:** 3–5

Related Standards: Mathematical Practices 1,2, 3

#### **Learning Goals (KUDs)** Know **Understand** Do Terms and procedures Solving problems means Make sense of problems and for specific problem making sense of persevere in solving them. Construct viable arguments and types problems. critique the reasoning of others. Discuss and articulate mathematical ideas.

**Context:** The tasks can be used with math content that requires problem solving. They can also be applied to finding errors in other kinds of examples and student work in other content areas. Tasks can presented in small-group instruction or for students to complete with a partner or independently. It is not necessary to use all three tasks. The content of each task can by differentiated by problem type or level. The word mistake can be substituted for error, if desired.

#### Task 1

- Teacher presents 1–3
   problems that have been
   solved by another
   student.
- The student has to decide whether or not there are mistakes in the work.
- The student corrects any mistakes and explains how he/she knew there were (or weren't) mistakes.

#### Task 2

- Teacher presents 1–3
   problems that have been solved by another student.
- Teacher shares how many mistakes there are.
- The student has to find and correct the mistakes independently and then explain how he/she knew what the mistakes were.

#### Task 3

- Teacher presents 1–3
   problems that have been solved by another student but that have mistakes.
- Student uses oral or written teacher-provided questions that are tailored to the problem type to guide students through the process of finding and fixing the mistakes.

**Come together:** Students work in mixed-problem set pairs or trios to come with a list of "top three errors not to make" when solving problems in the target concept/skill.

**Topic:** Patterns in Earth's Movements (Science) **Grade Level:** 5

**Related Standards:** 5.ESS1.4-6

## **Learning Goals (KUDs)**

#### Know

- Causes of the seasons, difference in day-lengths
- Effects of the sun's proximity to the Earth, the Earth's tilt, and patterns in how the moon and Earth move
- Key terms: eclipse, axis, constellation, lunar phases

#### **Understand**

- Bodies in the <u>solar system</u> move in observable <u>patterns</u>.
- The positions of the sun, Earth, and moon have a cause and effect relationship.

#### Do

- Explain the cause and effect relationship between the positions of the sun, Earth, and moon and observable patterns/phenomena.
- Relate the tilt of the Earth's axis to seasons, temperature, and day length.
- Describe how stars and constellations appear to move from the Earth's perspective throughout the seasons.

**Context:** Students can work with these tasks as a part of small-group instruction, with a partner, or independently. The same application of tiering that is illustrated here can be applied to other content (e.g., giving text-dependent claims for students to accept or reject as supported by evidence, or posing text-dependent questions to answer with a text.)

## **Know-It-All Neighbor**

This is a list of things that your know-it-all neighbor has said to you about **patterns in the movements of the Earth, moon, sun, and stars**. Is your neighbor right or wrong or both? Be sure to explain your reasoning with information from texts we have read and videos we have watched.

- The Earth's orbit around the sun is a stretched-out oval.
- The seasons are caused by how close or far the Earth is from the sun.
- The starts do not really move across the sky; they just look like they do.
- It is hotter at the equator because of the Earth's tilt.
- How long or short a day is depends on where you live.
- The moon changes shapes during the month because of where the sun is.

### **Pesky Parent**

Your mom/dad has started asking a LOT of questions about what you are learning in school. S/he knows that **patterns in the movements of the Earth, moon, sun, and stars** are the focus of science right now, so you need to be prepared! Use what you have learned to come up with answers (through words and depictions) for the questions s/he will probably ask.

- How does the Earth go around the sun?
- What causes the seasons?
- Why do the constellations move throughout the year?
- Why is it hotter at the equator than anywhere else on Earth?
- Why do some places get more daylight than other places?
- Do you have a simple explanation for the lunar phases?

**Come together:** Students convene in mixed-task pairs to share, compare, and check one another's responses for accuracy. As a class, students decide what the three biggest misconceptions about these concepts are and how best to correct them.

**Topic:** Characterization **Grade Level:** 5 **Related Standards:** RL 3.1, 3.2, 33, RL 3.3, 4.3, 5.3

## **Learning Goals (KUDs)**

#### Know

- Characters are people, things, or animals in a story that interact with the conflict and move the plot forward through their actions.
- Characters can be described in terms of their traits, motives, feelings, and actions.
- An inference is a conclusion drawn from prior knowledge and evidence or clues from text.

#### Understand

- The author's perspective can often be inferred from (one or more) characters' perspectives.
- Readers use <u>seen and</u>
   <u>unseen</u> details from the
   text and their own
   knowledge to make
   inferences (about
   characters, about what the
   author is saying).

#### Do

- Analyze characters in a story using key details.
- Refer to details and examples from a text when referring to what a text implicitly and explicitly says.

**Context:** Students can work with these tasks as a part of small-group instruction, with a partner, or independently. All students can analyze the same character from the same story, different characters from the same story, or different characters from different stories. The teacher can assign characters based on student readiness, with characters who are more difficult to analyze being assigned to students with higher-skill readiness.

## More Abstract, Harder to Infer←

## **→**More Concrete, Easier to Infer

For your assigned character, create a map that shows and explains:

- Clues the author gives about what the character is like (remember, clues are not what the author or pictures say directly...they are more hidden).
- The character's true motives.
- The **author's bottom line** about the character.

For your assigned character, create a map that shows and explains:

- Connections between what the character looks like and what the character says or does.
- How the character feels about the problem in the story.
- What the character most likely wants the reader to know about him/her.

For your assigned character, create a map that shows and explains:

- Things that the character says or does in the story.
- Three words that describe the character's personality.
- The most important thing to know about the character.

**Come together:** In mixed-task (and/or mixed character) groups, students share their annotated drawings and discuss how their characters (or their responses) are similar or different before participating in a whole-class synthesis discussion.

#### Adapted from Carol Ann Tomlinson. Used with permission.

**Topic:** Perspective on a Historical (or Contemporary) Event **Grac** 

**Related Standards:** 4.27, 5.51, 5.53 | RI 4.6, 4.6

**Grade Level:** 4-5

## Learning Goals (KUDs)

#### Know

 Terms: firsthand account, secondhand account, primary source, secondary source, corroborate

## Understand

- Different accounts of an event offer different (sometimes conflicting)
   perspectives on the event.
- Historians compare <u>sources</u> to <u>corroborate</u> facts, discern <u>perspective</u>, and figure out what happened.

#### Do

- Compare firsthand and secondhand account of an events. OR
- Compare and contrast different media accounts of an event.

**Context:** These tiered tasks can be applied to reading, analyzing, and discussing various firsthand and secondhand accounts from primary/secondary sources—including accounts from current media—

around any historical or contemporary event (e.g., ride of Paul Revere, Dust Bowl, bombing of Pearl Harbor, 9/11 terrorism attacks). As an alternative to using all three tasks, teachers can use one (or two tasks) but different content (the accounts) for readiness *within* the task.

#### More Open, Complex◆

## **→**More Closed, Simple

#### Task 1

**Read.** Read these two conflicting accounts of the event. Note their similarities and differences.

**Compare**. Come up with a way to clearly show where/how the accounts agree and where/how they disagree.

**Decide**. Why are these accounts so different from another? Which one is right? How could you find out?

#### Task 2

**Read.** Read these two slightly different accounts of the event.

**Compare**. Use the Venn Diagram to show how the accounts are similar and different.

**Decide**. How big are the differences? Do the differences matter? Why or why not?

#### Task 3

**Read.** Read the account of the event. Keep track of the "five w's" (who, what, where, etc.).

**Compare**. Use the same/different T-chart to show how this account compares to the information we read in the textbook. Remember that this is a primary source and your textbook is a secondary source.

**Decide**. Are the accounts more alike than different, or more different than alike? How so?

**Come together:** Students come together in mixed-task pairs or trios to share *new* information/facts about the event and generate two–three questions they still have. Teacher provides an additional, common source/account for whole-class study and corroboration.

#### **Readiness Strategy:** ThinkDots

#### Strategy Summary

Developed by Kay Brimijoin (as cited in Tomlinson, 2004), ThinkDots is a strategy for processing or discussing ideas, or experimenting with skills, in whole- or small-group format. The teacher designs six questions, prompts, or tasks related to a common topic, labeling each one with dots that correspond with the sides of a die.

### **Differentiation Connection**

ThinkDots can be used in a differentiated *or* undifferentiated (but still interactive) way. If all students see and use the same questions around the same content or skills, with the roll of a die deciding which question is answered (and by whom), the teacher is not necessarily using ThinkDots to differentiate for readiness; however, ThinkDots can be used to differentiate for readiness in at least three ways:

Differentiation of Content	Differentiation of Process	Differentiation of Content and Process
Students use the same ThinkDots to process/discuss different information (e.g., stories, articles, media) that varies by complexity or reading level.	Students use different sets of ThinkDots, each with questions/prompts that have been tiered for readiness but aligned with common goals.	Students use different sets of ThinkDots with tiered questions/prompts to process/discuss different information.

#### **Design Guidelines**

- **1.** Select the content, concept(s), text, or skills on which the ThinkDots will focus.
- 2. Use learning goals or standards to guide the design of ThinkDots prompts or use an existing framework to generate ideas (e.g., Bloom's Revised Taxonomy, The Six Facets of Understanding, DeBono's Six Thinking Hats). Icons or pictures can be used in place of or to scaffold text. All prompts should be goal-aligned and compel students to *think*.
- **3.** If designing sets of *tiered* ThinkDots, make sure the prompts are aligned between the sets. For example, if there is a question about the problem in the story on one set of ThinkDots, then there should also be a question about the problem in the story on the other set.

## **Implementation Guidelines**

- ☑ **How to Use ThinkDots.** There are several ways that ThinkDots can be presented and used.
  - Project the 2 x 3 ThinkDots grid on a screen. Use the prompts in a whole-class discussion with a different student coming up to roll a die (physically or virtually).
     Alternatively, put students in partners or small groups, give each group a die.
  - Copy the grid on 8 ½ x 11 paper. Use in teacher-led or independent small groups. Students use a die to take turns answering questions or roll the die to divide the questions for individual think time before convening to discuss their responses.
  - Print ThinkDots cards on cardstock. Cut into six hole-punched cards and secure on a loose leaf ring. Store each one in a plastic bag with a die. Use in teacher-led or independent groups. Students use a die to take turns answering questions or roll the die to divide the questions for individual think time before convening to discuss their responses.
- ✓ **When to Use ThinkDots.** ThinkDots can be used to hook students into a topic, structure whole-or small-group discussion or skill practice, or to review concepts.

## ThinkDots Examples

**Topic:** Problem-Solving **Grade Level:** 3–5

**Related Standards:** Standards for Mathematical Practice 1, 2, 3, 4, and 7

#### **Context**

These ThinkDots focus on engaging with mathematical practices standards. They can be modeled and used in whole-class instruction, in small-group instruction, or in partnerships or trios. Students can solve the problem before or as they engage with prompts or use the prompts to engage with a problem that they or someone else has solved (incorrectly or correctly). Problems can be differentiated for student readiness.

Think above the strategy for	How sure are you that the	Show and tell another way to
solving this problem. How	solution to the problem is	solve this problem. Which way
else could you use this	correct (e.g., very sure, kind of	is better: your first way or your
same strategy (in math, in	sure, not sure at all)? What	second way? Why?
real life)?	would make you surer?	
•		
Does the solution make	Make a diagram or picture-	How could you help someone
sense? Convince us that it	model that shows the problem	else solve this problem
does (or does not).	and solution.	without solving it for him/her?
		What hint or clue could you
		give? Why would this be
		helpful?

**Topic:** Map-Reading **Grade Level:** 3 **Related Standards:** Geo 3.2, 3.3, 3.4, 3.5, 3.13

#### **Context**

Students work in pairs or trios to practice their map reading skills. Each group can work with the same map or different maps. Maps can vary by type and/or level of complexity.

#### What It Is Location, Location **Feature Finding** What is this a map of? What Use this map and/or another How many political and does the map show? What kind one to give the absolute physical/geographical features of map is it? Why do you say *location* (latitude/longitude) of do you see on this map? Find so? a place or point on the map. and list as many as you can. Then, come up with two ways to describe relative *location* of that place or point. From Here to There Quiz 'Em **Life Change** Come up with three quiz Based only on what you can tell Choose two points on this map. Using the map scale and questions about this map for from this map, how might your compass, tell someone how to your partner/group to answer. life be different if you lived in a walk, drive, or fly from one Make each question harder place on this map? Support point to another. Include than the last one. (Answer your thinking with information distances and cardinal in the map or that you can infer them yourself, too!) directions. from it.

**Topic:** Studying an Image **Grade Level:** 3–5

## Context

These ThinkDots can be used with a photograph, painting, or drawing that depicts moments, people, and events from the past or present in a whole-class or small-group setting. Images can vary by complexity to differentiate for readiness, or students can select images based on interest.

, ,		•
People and Things	Moments and Events	Time and Place
<b>Who</b> and <b>what</b> is in the	What is <b>happening</b> in this	Where was this picture taken?
picture? What people, animals,	picture? ls it a <b>special</b>	Indoors or outdoors? In a city,
objects, buildings, parts of	event/moment or an	small town, or country? In the
nature do you see? What's	ordinary event/moment?	<i>U.S.?</i> <b>When</b> was it taken (drawn,
clear? What's not so clear?	Why do you say so?	painted)? What time of year
•		and day?
Before and After	Same and Different	Questions and Wonderings
What might have happened	What in the picture seems the	What <b>questions</b> do you have
<b>before and after</b> the picture	<b>same</b> as today—or, the same	about this picture? What does
was taken (drawn, painted)?	as where we live? What in the	this picture make you <b>wonder</b> ?
What are the clues or hints?	picture seems <b>different</b> ?	

**Topic:** Dissect-A-Document **Grade Level:** 3–5

**Related Standards:** 3.9, 4.16, 5.3

### Context

Based loosely on questions from the National Archives and Records Administration, these ThinkDots can be used with a range of historical or contemporary documents in whole-class or small-group activities. As with the Historical Image example above, documents can vary by complexity to differentiate for readiness, or students can select images based on interest.

complexity to differentiate for readiness, or stadents earriselect images based on interest.			
Meet the Document	Producer and Audience	All About	
What type of document is this	Who wrote or produced this	What is this document about?	
(e.g., letter, image, recording,	document? How do you know?	What key ideas, facts, or	
article)? Does this document	Who is the document for—who's	information does it give? Look	
look similar or different from	the audience? Why do you say	for events, people, feelings,	
how this kind of document	so?	and actions it describes or	
looks today?	•	shows.	
Purpose	Context	Evidence	
<b>Purpose</b> Why this document was	<b>Context</b> When and where was this	<b>Evidence</b> What could this document be	
<u> </u>			
Why this document was	When and where was this	What could this document be	
Why this document was created? Can you tell? Think	When and where was this document created? How can you	What could this document be used as evidence for? What	
Why this document was created? Can you tell? Think about who created it, when	When and where was this document created? How can you tell? Is that different from the	What could this document be used as evidence for? What could it help "prove" or	
Why this document was created? Can you tell? Think about who created it, when they created it, and who the	When and where was this document created? How can you tell? Is that different from the time & place the document	What could this document be used as evidence for? What could it help "prove" or demonstrate (about an event, a	

**Topic:** Scientific Concept Review **Grade Level:** 3–5

Related Standards: 3.PS1.1, 3.PS1.2

### Context

Designed with the Six Facets of Understanding (Wiggins & McTighe, 1998), these ThinkDots are designed for use in small-group discussion/review a concept they have engaged with over a series of lessons. They are transferrable to many concepts, topics, and skills (scientific or otherwise) by replacing the underlined and bracketed content.

Explanation	Interpretation	Application
Explain what [magnetic force]	How is [magnetic force] like [the	W here could someone see or
is and give as many examples	smell of a pizza]? What else are	find [magnetic force] at work in
as you can.	they like?	the real world? OR How could
		someone use [magnetic force]
		to solve a problem?
•		
Perspective	Empathy	Self-Knowledge
Describe the benefits and	What are some common	How has your understanding of
drawbacks (the pluses and	misconceptions that people	[magnetic force] changed since
the minuses) of [magnetic	have about [magnetic force]?	you started learning more
force].	How could you nicely correct	about it? What do you know
	them?	now that you didn't before?

**Topic:** Poetry Analysis **Grade Level:** 3–5

### Context

These ThinkDots are tiered for readiness, with Set 1 being more advanced than Set 2. Teachers can use the same set with all students (in whole-class or small-group discussion) or give different groups different questions. Poems can be differentiated by interest or readiness as well. In any case, the questions assume students will engage in multiple readings of a poem (e.g., independently, with a partner, read aloud by teacher or recorded actor).

Set 1 (More Concrete Focus; Simpler Phrasing)			
Who is talking in this poem? Who is "telling" about the experience? How do you know?	<ul> <li>WHAT happens in this poem?</li> <li>WHERE does it happen?</li> <li>WHEN does it happen? (What time of year?)</li> <li>WHY &amp; HOW does it happen?</li> </ul>	What do you see, understand, or believe more or better after reading this poem? Why do you say so?	
•	Can you tell?	•	
What do these phrases in the poem have in common? [Teacher inserts]	Which words or sounds in the poem are used over and over? Why? Is it on purpose or on accident?	Which of the five senses is the strongest in the poem: touch, taste, smell, sound, or sight? Which one does the poet do the best job with?	

Set 2 (More Abstract Focus; Sophisticated Phrasing)			
How many voices do you hear in this poem? If there are different voices, where and how do they change?	What story or experience is being shared in the poem? Explain using the <b>5Ws</b> —who, what, where, when, why, and how.	What does the poet hope that readers walk away with or get from reading this poem? What is his/her central message?	
What comparisons do you see in the poem? Why does the poet make these comparisons?	Where do you see repeating in the poem? (Think about sounds, words, images in your head, ideas) What repeats—and why?	Often, the most powerful writing appeals to all five senses. With that in mind, what line (or word) in the poem is the most powerful? What makes it powerful?	

**Post-Analysis**: All students sketch a picture of what they see in their mind's eye when they read/hear the poem. Students compare drawings with peers in multiple brief exchanges (e.g., standing up, walking around the room, doing gallery walk).

## **Readiness Strategy: Role Cards**

Looking/Listening Lenses & Discussion Duties (Doubet & Hockett, 2017)

#### **Strategy Summary**

Role cards give students a specific job or responsibility for reading a text, completing a task, or participating in a group. The teacher can assign each student a role or let students choose, depending on the lesson goals and purpose. Two kinds of role cards are looking/listening lenses and discussion duties, each of which can be used in either whole-class or small-group activities. Looking lenses can be used to read and discuss fiction or non-fiction text or to watch and listen to a live speaker or video content. In the primary grades, discussion duties are aimed at teaching students how to participate in a group dialogue.

## **Differentiation Connection**

Both looking lenses and discussion duties can be used to build students' thinking, reading, speaking, and listening skills. Note that each set of role cards uses role names that are student-friendly and imply that the role is substantive and important.

## **Differentiation of Content**

# Students use looking lenses or discussion duties in small groups to process and/or discuss texts, videos, ideas, etc. that differ by reading level, abstraction, complexity,

 Teacher tiers content within each looking lens such that there are two or more versions of each lens.

#### **Differentiation of Process**

 Teacher assigns looking lenses or discussion duties according to student readiness, matching students either with a role that matches an area of strength or an area of weakness.

# Differentiation of Content and Process

 Students use looking lenses or discussion duties to process and/or discuss texts, videos, ideas, etc. that are differentiated for readiness and are in a role that has been tiered for readiness and/or assigned based on readiness.

## **Design and Implementation Guidelines**

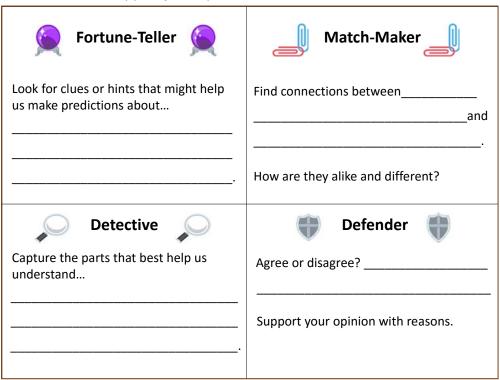
#### **Looking/Listening Lenses**

- Begin with a central idea, key question, text, or understanding goal for all students to grapple with or arrive at as a result of using the lenses.
- Derive the prompts for each lens from this idea, question, or goal. Keep in mind the fit between the content (materials) and each lens; only use the lenses that are a good fit or make sense.

- Use listening/looking lenses first in whole-class or small-group instruction and model the purpose of each one. In such lessons, all students can first apply the same lens; subsequent lessons can introduce additional lenses.
- Have students meet in similar-lens partnerships to briefly share their thoughts relative to their prompt before participating in mixed-role discussion.

## Example ("Knoxville, Tennessee" By Nikki Giovanni)

- Fortune-Teller Look for clues or hints that might help us make predictions about what the narrator would like about autumn.
- *Match-Maker* Find connections between what the narrator likes to eat in summer and where she likes to be in the summer. How are they alike and different?
- *Detective* Capture the parts that best help us understand <u>how the narrator feels in the summer</u>.
- *Defender* Agree or disagree? <u>The narrator's favorite thing about summer in Knoxville,</u> <u>TN is the food</u>. Support your opinion with the text.



Doubet & Hockett (2017) ©ASCD. Used with permission.

#### **Discussion Duties**

- Use discussion duties first in whole-group or small-group instruction and to model the purpose each one. A fishbowl model or concentric circles structure can also be used to introduce and model the duties.
- Have students come up with names, roles, and soundbites for duties.

### Orchestrator

#### **During Discussion:**

- BEGIN the discussion. Use the question(s) that have been has posted as a starting point.
- Make sure the discussion doesn't get off topic.
- Bring the discussion to a CLOSE when time is called.

#### Soundbites:

- "Let's start by..."
- "Can we get back to ...?"
- "What about ...?"
- "Let's end by..."



## Includer

#### **During Discussion:**

 Make sure that all group members contribute to the discussion and feel included.

#### Soundbites:

- "What do you think about that, \_\_\_\_?"
- "I agree/disagree with what you said, \_\_\_\_\_\_\_because..."
- "I want to hear what \_\_\_\_\_ thinks..."
- "Wait, \_\_\_\_\_, I think you might have just interrupted \_\_\_\_\_."



## **Prober**

#### **During Discussion:**

Make sure that all group members back up their opinions, ideas, feelings, and observations by giving details, examples, and explanations.

#### Soundbites:

- "Can you give an example?"
- "Do you remember where that is/was? Can you show us?"
- "How is that related to what we read?"
- "That's interesting! How did you figure that out?"
- "What part is that from (or in)?"



#### **Pacer**

#### **During Discussion:**

- Make sure that the discussion moves at a good pace.
- "Refresh" the discussion when you feel like it's lagging.

#### Soundbites:

- "We've talked a lot about \_\_\_\_\_. Can we also talk about...?"
- "We have \_\_\_\_ more minutes, so let's also talk about..."
- "I'm also wondering about..."
- · "Here's something else to think about..."
- "It sounds like we agree/disagree about..."



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### **Readiness Strategy: Stations**

## Strategy Summary

Stations are a structure for managing and organizing instruction and tasks, differentiated or not. The teacher sets up different spots in the classroom with specific learning activities, tasks, or teacher-led instruction where students work simultaneously. Stations can be temporary (for a single lesson) or ongoing (as part of a standing routine). They are useful for piquing interest in or giving students a tour of a new topic, engaging students in skill practice, providing teacher-led instruction and feedback in small groups, addressing a large amount of content in a short time, managing limited resources, *and* giving students a chance to move. Implemented well, stations provide flexibility for both the teacher and students and can support the development of student independence and ownership for learning. Stations are especially well-suited to co-taught classrooms and classrooms with push-in specialist support.

### **Differentiation Connection**

For stations to be a vehicle for differentiation, they must be used as such. If all students go to all stations and complete the same tasks (or interact with peers or the teacher in the same way), they might be interactive and purposeful but not differentiated. In other words, stations are not inherently a strategy for differentiation per se. It's how teachers use stations that *can be* differentiated. There are

several approaches to leveraging stations for readiness-based differentiation. (These adjustments also apply to using stations to support interest and learning profile differentiation, or to support a combination of common learning experiences and experiences that are differentiated for readiness, interest, and learning profile.)

# Tasks at the same or different stations have

- different stations have content elements that are differentiated for readiness.
- The content focus of instruction at teacher-led stations is differentiated for readiness.

#### **Differentiation of Process**

- Students visit only the stations on their schedule/rotation, which are matched to readiness. (Not all students need to go to the same stations.)
- Students spend different amounts of time at assigned stations.
- The task(s) at or between stations have process elements that are differentiated for readiness.
- The process focus of instruction at teacher-led stations is differentiated for readiness.

#### **Differentiation of Product**

- Students rotate into stations to work on product-oriented tasks that are differentiated for readiness.
- Teachers plan station tasks that help students complete a product that has been differentiated for readiness.
- All students are working on the same product and visit different stations to refine aspects of their product according to their progress toward completion.

## **Design Guidelines**

To plan stations, teachers consider:

The goal, focus, or driving question behind the stations.				
☐ Station tasks				
0	What students will do			
0	How they will do it			
0	With whom they will do it			
0	How they will know what to do			
0	The degree of independence with which students will work			
Station	n materials			
0	What students will need at the station in order to complete the task			
Station	n rotation/assignment			
0	Which station(s) students will go to			
0	How students will know which station(s) to go to and when			
Station	n transitions			

o How students will move between stations, including the route and length of time

#### **Implementation Guidelines**

- ☑ **Timeline.** Be sure to match station tasks with time allotments and deadlines for completion. This can be tricky at first and will involve some trial and error.
- ☑ **Introducing stations.** For stations that will be used as an ongoing routine, introduce and model each station. In primary-grades classrooms, this may involve introducing one station at a time, over the course of several weeks, and/or having all students work on a particular kind of station task at one time to get them used to the kind of work they will encounter at the station.
- ☑ **Station focus and number.** The number and focus of stations should be manageable and meaningful for both the teacher(s) and the students. Exercise caution in using a station to introduce something brand new. In general, stations that require students to work with peers or independently are more successful when students have been primed or had experience with the content and/or kind of task they will be working on. Two exceptions are stations as hooks and stations that are teacher-led.
- ☑ **Stations and choice.** The teacher can assign students to a station rotation or schedule, can allow students to choose which stations to visit (and/or when to visit them), or can orchestrate a combination of teacher-choice and student-choice options. For stations or tasks that are targeted to specific student readiness needs, exercise caution in giving students choices that might result in doing a task that is not a good fit or in opting out of a key task altogether.

## **Readiness Strategy:** Agendas

#### Strategy Summary

An agenda (Tomlinson, 2014) is a personalized list of tasks for a particular student or group of students to be completed in a set timeframe. (Two to three weeks is typical, but may be shorter in some classrooms.) Agendas mimic and model a structure for how tasks are completed in real world situations (e.g., in a workplace, in a household). The teacher determines agenda tasks, which are guided primarily by evidence of student readiness but can include interest and learning profile-based tasks or provisions. Students work on agendas during set times, such as a dedicated block during the week, as an anchor activity, or as a part of a stations rotation. The teacher decides what tasks a student will complete, and with whom (if applicable), but the student decides the order of completion for at least some tasks.

## **Differentiation Connection**

Agendas are a strategy that can be used to differentiate content, process, or product for readiness. Although student interest and learning profile can also be addressed in agendas, student readiness is the overarching driver of agenda design.

#### **Differentiation of Content**

- Content within agenda tasks is adjusted for student readiness (e.g., by complexity, abstraction, degree of independence required).
- Agendas can be designed to address content across different subject areas.

#### **Differentiation of Process**

- Process within agenda tasks is adjusted for student readiness (by complexity, abstraction, degree of independence required).
- Students decide when and in what order to complete some or all tasks, within a given timeframe.

#### **Differentiation of Product**

 Products within agenda tasks are adjusted for student readiness (by complexity, abstraction, degree of independence required).

## **Design Guidelines**

- Design two or more sets of agendas that respond to patterns among student readiness needs (versus designing 25 different agendas). Regardless of the number of agendas designed, those agendas can have elements that are the same and elements that are differentiated.
- In elementary classrooms, agendas can incorporate content and tasks from different subjects; they do not need to be limited to math, reading, science, etc.
- Unlike many other strategies for differentiation, different agendas do not necessarily need to be aligned with the same learning goals (KUDs). Students can be working on different tasks targeted toward different goals that *they* need to be working on.
- Use a student-friendly template to plan an agenda. Incorporate pictures/icons to aid memory and reinforce task type.

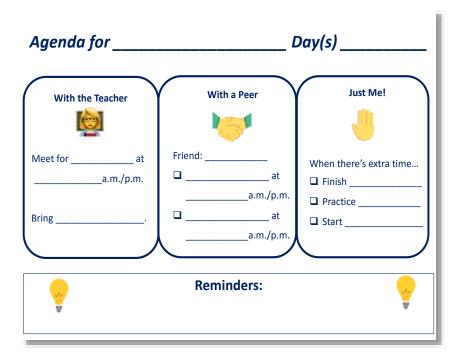
## **Implementation Guidelines**

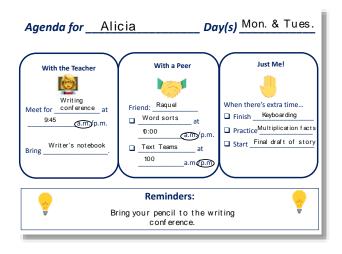
- ✓ **How to introduce/launch.** Teach the word agenda using schedule or to-do list as synonyms. Discuss with students what they think any agenda should include or do, including what happens when someone does not get through an agenda.
- ☑ **Building capacity for agenda work.** Before using agendas to differentiate, teach the structure and spirit by having all students complete the *same* agenda. Agenda tasks can be simpler at first—and require less stamina—and then build to more complex, higher-stamina tasks with each implementation.
- ☑ **When to use.** Agendas can be used at the beginning of a unit or series of lessons or after the teacher has had a chance to formatively assess students and gauge their progress. Agendas can help structure days/times when students are in different places in terms of what they need to work on. Agendas can also be used during station rotations and while the teacher is working with small groups or individual students.
- ☑ **Agendas and choice.** By design, agendas do *not* give students choice about which tasks to complete. Contracts, learning menus, and choice grids are appropriate strategies for building in student choice.

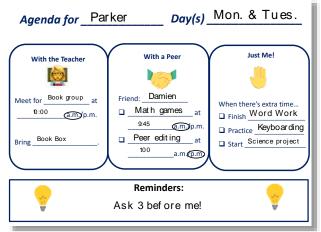
## **Agenda Examples**

#### Grade Level: 3-5

This agenda is designed to use over the course of one or more days in a week, across subjects and task types. The three sections (With the Teacher, With a Peer, Just Me!) can be adapted to other grouping arrangements, and not all sections need to apply to all students. The agenda can be filled in by the teacher, the student (based on teacher directions), or both.



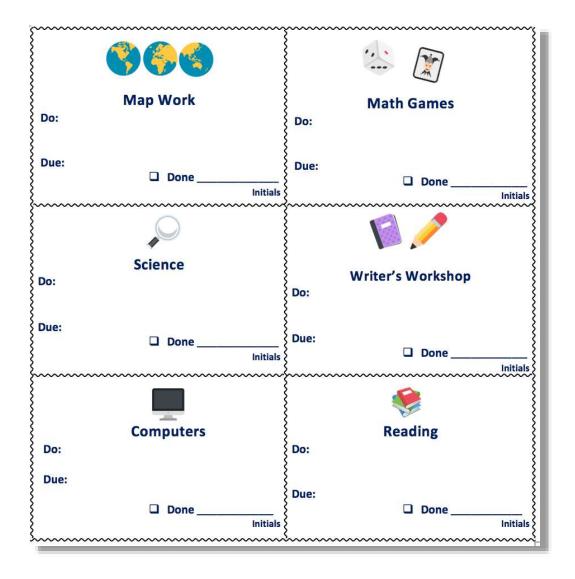




## **Agenda Cards**

#### Grade Level: 3-5

In this template, the teacher plans tasks for individual or groups of students that will be given one or two cards at a time. The cards include the general focus and reinforcing icon (both of which can be modified for classroom/student need), as well as what the task is and by when it should be completed. ("Do" and "Due" can be used to teach homophones or substituted with "Do" and "By"). Teachers can use the same agenda with the whole class by projecting it on a screen, beginning with one to two tasks and progressing to more over time. For management, students can sticky note or (with an interactive whiteboard) initial when they are done with given tasks. Cards can be laminated for re-use.



<i></i>	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Harley 1	Jada 🚺 🧪
Writer's Workshop	Writer's Workshop
Do:	Do:
Peer Editing with Liza	Confer with Mrs. Smith
Due: Monday	Due: Monday
Done	Done
Initials	Initials
cade 🚺 🧪	Miquel 1
Writer's Workshop	}
Do:	Writer's Workshop
Final Draft - Check your capital	Self-edit
letters	{
Due: Wednesday  Done	Due: Tomorrow {
Dolle	Done
<b>}</b> ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	}
Maliyah 🚺	Zach 🔞 🧪
Writer's Workshop	Writer's Workshop
Do:	Do:
First draft	Peer editing with Micah
}	Due:
Due: Wednesday	Today
Done	Done{
Initials	Initials

**Readiness Strategy:** Learning Contracts

## Strategy Summary

A learning contract is a negotiated agreement between the teacher and the student. The teacher designs the contract, but the student has freedom (within guidelines) about what tasks to complete and/or when and/or where. Contracts are a strategy for long-term work over days or weeks (versus a strategy for a single lesson). Designed well, contracts are a student-centered way of organizing content time and content in a unit of study.

#### **Differentiation Connection**

Learning contracts are a strategy that can be used to differentiate content, process, or product for readiness. Contracts can incorporate or involve interest and learning profile differentiation. In this handbook, learning menus and choice boards are viewed as "sister strategies" to learning contracts but focus primarily on interest and learning profile differentiation.

## Design Guidelines

- **1. Identify the purpose of the contract.** The purpose might be more general, or it may be aligned with specific KUD goals.
- **2. Use a template or framework to guide the structure of learning contract tasks.** See next sections for examples.
- **3. Design substantive tasks**. All learning contract tasks should require the use or transfer of knowledge and skills in meaningful context. Aim for quality over quantity. Contract tasks can be simpler at first—and require less stamina—and build to more complex, higher-stamina tasks with each implementation. If there will be tiered contracts, make sure the contracts are aligned and meet the criteria for respectfully differentiated tasks.
- **4. Consider required and choice-based elements of the contract.** What will be required and what will be left to student choice? Consider choice in what will be learned, how content will be applied, and how content will be expressed.

**5. Specify contract terms.** This includes where, when, how, and for how long students will work on the contract; criteria for quality completion of tasks; and a place for the teacher and the student to sign their names.

## **Implementation Guidelines**

- ☑ **How to introduce/launch.** Teach the word contract, with an emphasis on it being an agreement between two or more people. Discuss with students what they think any contract should include or do, including what should happen when someone does not follow through on the contract.
- ☑ **When to use.** Contracts can be used for organizing sense-making activities, partner and individual tasks, as ongoing work, or with summative tasks. Like agendas, contracts can be used during station rotations or otherwise to free the teacher to work with small groups or individual students.

## **Learning Contracts Examples**

The Math Facts Contract, Independent Reading Contract, and "Super Stars" Word Study Contract are situated in specific subjects and skills, but they can be used as templates or structures for delivering and managing tasks in any topic, skill, or content area. Teachers guide students through the contract options and terms.

Math Facts Contract				
Name:	Time frame:			
Circle the operation(s) you will be	practicing.			
+ - x ÷				
What number range will you work	k with?			
Select the games that match the	operation(s) you're practicing.			
<ul> <li>□ Beat the Calculator</li> <li>□ Top-It (Cards or Coins)</li> <li>□ Name that Number</li> <li>□ Number-Grid Difference</li> </ul>	<ul> <li>□ Credits &amp; Debits</li> <li>□ Clothespin Football</li> <li>□ Baseball Multiplication</li> <li>□ Division Dash</li> </ul>	<ul><li>□ Rugs &amp; Fences</li><li>□ Other:</li><li>□ Other:</li></ul>		
Game	Tally	Self-Assessment		
Write the name of the game you will play.	Use tally marks to show how many times you did this.	Make a face to show how helpful this game was to your learning the facts.		
		•		
		©		
Student & Teacher Initials (when   Student Signature (when complet				

## **Independent Reading Contract**

Use the paper or e-version of this contract to plan and keep track of your independent reading. (Add rows based on your goal number.) You and I will access this during each reading conference.

My Goal for Number of Books Read This Year:			
I will work ha	rd to reach this goal!	l will work hard to support you!	
	Required G	enre	
☐ Graphic Novel	☐ Mystery	☐ Adventure Story	☐ Sci-Fi/ Fantasy
Title & Author:	Title & Author:	Title & Author:	Title & Author:
My Rating:	My Rating:	My Rating:	My Rating:
☐ Biography	☐ Historical Fiction	☐ Narrative Poetry	☐ How-To
Title & Author:	Title & Author:	Title & Author:	Title & Author:
My Rating:	My Rating:	My Rating:	My Rating:
	Free C	Choice	
☐ Genre:	☐ Genre:	☐ Genre:	☐ Genre:
Title & Author:	Title & Author:	Title & Author:	Title & Author:
My Rating:	My Rating:	My Rating:	My Rating:
☐ Genre:	☐ Genre:	☐ Genre:	☐ Genre:
Title & Author:	Title & Author:	Title & Author:	Title & Author:
My Rating:	My Rating:	My Rating:	My Rating:

## **"Super Stars" Word Study Contract**

Activity Descriptions (to be kept in Word Study Notebook)

Congratulations on finishing your word sort! With your teacher's direction, identify your target words for this contract. Then, choose SIX STARS' WORTH of tasks to do. You must do at least ONE one-star and one two-star task. Note: Use the **student coupons** to make and submit your choices for the week!



- □ Write each word in your notebook using markers or colored pencils to dissect the word. Use one color of your choice to show the base word, another color for any prefix, and another color for any suffix. Optional: Next to each word, draw a picture to show what each word means.
- For each word, make a word tree to show the base ("root") word and at least four or more derived words. Circle the prefix and suffix in each derived word. Don't spend too long on the "art," but make each word a different kind of tree, if you'd like!
- □ Do the "Dice Race" activity with your words. The first time you write each word, underline the base word and circle any prefixes or suffixes. When you finish, label the 1st, 2nd, and 3rd place words. Just for fun: come up with an idea for a prize for the 1st place word. The prize should make sense with what the word means.



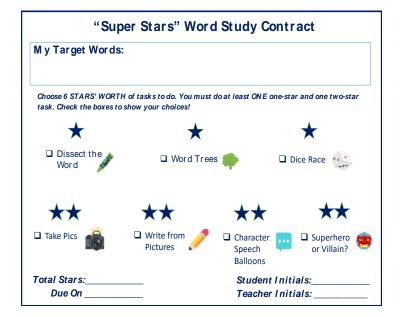


- Take pictures of each word in action or "at work" in the classroom.

  Ask permission before you take a picture of a classmate!
- Choose a picture from the "Worth a Thousand Words" folder. Use the words to write a five-senses description of what you see, OR use the words to make up a very short story inspired by this picture. (Your story can be in cartoon frames, if you'd like!)
- □ What fictional character (from a book, a movie, a show) would use these words? Use the **speech balloon** template to write what they would say. You can have the same character use all three words, or different characters for different words.
- □ Decide if each word is a superhero or a villain. Does the word do "good" or do "bad"? (Or, it depends?) Use the tablet to record your video or audio explanations.

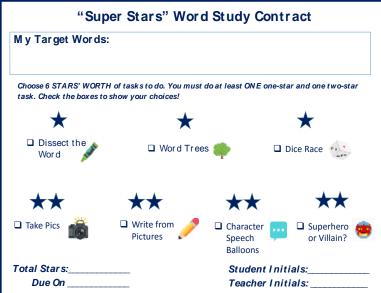
## "Super Stars" Word Study Contract

Student Coupons for copying and cutting into fours.









**Readiness Strategy:** Small-Group Instruction (SGI)

### **Strategy Summary**

**Small-Group Instruction** (SGI) is a widely-used strategy among primary-grades teachers for addressing differences in student readiness—and for giving students more individualized attention and instruction than whole-group instruction affords. With SGI, the teacher brings together groups of two to eight students at a designated place in the classroom for a specific purpose and set amount of time (e.g., from 10–20 minutes). Often (but not always) the purpose is connected to student readiness. Ideally, groups formed on the basis of readiness are driven by informal or formal assessment

evidence. Groups can be heterogeneous or homogenous. Homogeneous groups might comprise students who are struggling with content, ideas, or skills; lack pre-requisite knowledge; have misconceptions; are English language learners; or have advanced readiness. SGI can be led by a classroom teacher or a specialist.

## **Differentiation Connection**

SGI can be used for a full range of lessons and tasks that adjust content, process, or product for student readiness. If all students meet in small groups for instruction around the same lesson, that use of SGI is not *best* characterized as differentiation—although those conditions may aid student readiness and provide opportunities to formatively assess students. Within readiness-based SGI, teachers can focus on one or more of the following:

- Differentiated reading instruction and support
- Re-teaching or reviewing key concepts and skills
- Modeling
- Giving feedback
- Engaging students in focused or supervised practice
- Clarifying misunderstandings
- Providing enrichment or extension

SGI is most powerful when teachers use it with all students and for a variety of instructional purposes—not just with students who evidence lower-readiness in a skill. Note that SGI can be used for purposes other than readiness-based differentiation. For example, the teacher can form groups and design SGI lessons or tasks on the basis of shared interest (in a certain picture book, in a historical figure, in a product option) or learning preference (seeing a video, learning from additional models, being guided through a process).

#### **Design and Implementation Guidelines**

There is no one model for designing small-group instruction, but some general principles for planning SGI interactions and tasks are important in differentiated classrooms. For all small groups, high-quality SGI differentiated for student readiness:

- is aligned with standards and learning goals;
- uses formative assessment to drive flexible grouping composition;
- incorporates opportunities for students in the small group to interact with one another (not only with the teacher);
- enhances student participation, engagement, and focus; and
- builds student knowledge, understanding, and skill as well as independence.

### Opt-In Small-Group Instruction (Doubet & Hockett, 2017)

Opt-in for small-group instruction is another approach that affords flexibility in the differentiated classroom. The teacher announces or "advertises" opportunities using language such as "Everyone, I've been noticing that there is still a little confusion how to quote from a source in your informational

article. If you'd like some pointers on this, come to the table in five minutes," or "Boys and girls, some of you were asking about using Google Earth for your presentation. If you're interested in learning more about that, write your initials on the board." The teacher can also urge certain students to opt-in. Practiced well and alongside more traditional (but flexible) approaches, the opt-in strategy can help destigmatize small-group instruction and itself be a formative assessment of readiness.

# Differentiating for Student Interest

## What is interest?

**Interest** refers to the passions, kinships and affinities that can motivate a student to learn (Tomlinson, 2014). In a differentiated classroom, leveraging students' interests is one secret to making learning both more cognitively and affectively engaging and more joyful. While not every interest that students have or develop has equal potential as a basis for differentiated tasks, most interests can be connected to required content and skills in some way or at some point in the year. Educational psychologists make a distinction between two kinds of interest: personal interest and situational interest.

#### **Personal Interest**

Personal interests are interests that the student brings to the classroom. They are activated from "inside" the student, but can be initiated or stoked by the interests of parents and friends or events and experiences. Personal interests are developed over time and are largely beyond the teacher's control to steward or grow, unless the interest is directly related to content. But, teachers can design rich, authentic learning experiences and tasks that build on or connect to students' personal interests. Examples include video games, a fictional character or world, a collection of something, animals, sports, hobbies, music, etc. Note that a student's personal interests are not the same as personal tastes. For example, if a student's favorite color is red and she loves eating pizza that is not the same as the student having an interest in collecting red hair bows and having a passion for learning about and making different kinds of pizzas.

There are *patterns* in personal interests that often hold true within a particular age range. This doesn't mean that every child in a grade level holds these interests, but rather that a teacher can usually count on a good number of students having the interest, and the interest having general appeal for most students in a class. For example, many upper-elementary students are interested in video games, technology, space, robotics, sports, music, maps, famous people, movies, mysteries, weather events, and collections.

The geography, values, and context of the community or region where students live influence patterns in student interest. For instance, there are likely some predictable distinctions between children who live in rural areas and children who live in urban areas. Cultural background and socioeconomic status can also influence the interests that students develop. Although teachers should interpret patterns with these and other factors in mind, the idea is not to stereotype or pigeonhole students by interest—or to assume a student is or is not interested in something based on their age, locale, experiences, or

heritage. Rather, the spirit is to understand that all students have personal and situational interests, some of which may be very different from those the teacher might consider typical.

## How do Teachers uncover personal interest?

The tasks, prompts, and inventories below can be used to discover students' personal interests at the beginning of the year and as students develop new interests throughout the year. Understandably, some students may *not* want to divulge information to a teacher they have just met. Being asked to fill out a long inventory or respond to a question about themselves on the first day or in the first week may not yield the best responses for students who are more cautious in trusting new adults. Therefore, teachers may be wise to gather data on student interest in more or less formal ways throughout the first weeks of school—as they build trust and community—rather than trying to do so up-front or all at once.

List or read topics and	Ask students to connect an	Use all or parts of <u>If I Ran the</u>
interests. Have students circle	interest they have outside	School (linked), which asks
or select or "finish" blank	of school to a list of	students to select 10 topics that
emoji faces to show their level	topics/content they are	they would choose to learn if
of interest.	learning in school.	they ran the school. Topics can
		be reduced and/or read aloud
		for students to circle.
The <u>Interest-A-Lyzer</u> by	"Do you collect anything? If	Have students fold a large piece
Joseph Renzulli is a lengthier	so, what? If not, what's	of paper into quadrants to list,
inventory that can be	something you might like to	show, or tell about four kinds of
administered in one siting or	collect? Why?"	"favorite things": (1) favorite
in stages. Teachers can also		game to play, (2) favorite
excerpt or adapt items. See		show/movie to watch, (3) favorite
also the <u>Primary Interest-A-</u>		place to go, and (4) favorite
<u>Lyzer</u> and <u>Reading Interest-A-</u>		memory.
<u>Lyzer</u> .		
"Imagine you are going fishing	"Look at the bookshelf and	"Divide this [circle, square,
in a magic pond. There are no	make a wish. <i>I wish there</i>	triangle, puzzle piece] into as
fish, but when you put your	were a book	many pieces as you'd like to
fishing pole in, you can pull	about"	show some things that you like
out a thing that you love or		to do. You can use words and/or
want. What would you 'fish'		pictures."
for?" I would fish for		pictares.
"Imagine that it's Saturday	"Tell or show the story of	Have students capture their
morning! What are you doing?	your weekend. What are	interests as snapshots from an
Watching cartoons? (Which	some things you did?	album or movie about
ones?) Doing an activity?	Where did you go? Who did	themselves: When I was little, I
Sleeping in? Write or draw	you see? What was the	likedNow that I'm in [third grade]
Siceping in: write or draw	most fun thing that	I like
	most full tilling triat	T IIKC

about it." OR "What would be your best day EVER?"	happened? Is there anything you wish you would've done?"	
"What are some things you like to do?" Further prompt around sports, music, community activities, local sites, travel, hobbies, etc.	"What do you want to be when you grow up? Why? What do you think it's like to be a? What do you think that person does all day? What makes that sound interesting to you?"	Pretend you're having a party! It could be a birthday party or a "just because" party. Where would you like the party to be? What would the theme of the party be? (Your favorite character or movie show? A sport?) Also, what would you give as a party favor to your guests? Try to think of something that shows what YOU like.

#### Finding Patterns in Students' Personal Interests

After gathering information about students' personal interests, take time to examine both individual students' preferences and the patterns of the class as a whole. This can take pressure off of feeling like every interest warrants an individualized instructional response.

### A sample process follows:

- 1. Gather and assemble student interest data.
- **2. Read through the responses.** Do not yet categorize them in any way. Take note of any interests that are particularly unique, unexpected, or surprising.
- **3. Categorize the data.** Use sticky notes (or another method) to create categories that make sense. Aim to collapse interests, and note interests that are difficult to categorize or that fit into multiple categories. Separate the interests from individual students.
- **4. Aggregate the results**. List the categories. Which categories are similar and could be grouped together? Which categories seem similar on the surface but are nuanced enough to be divided into separate categories?
- **5. Depict the results.** Use a graph, table, or other helpful visual to see the relative number and nature of the interests. Share this depiction with the class; elicit their observations and questions.
- **6. Brainstorm connections.** Consider upcoming curricular topics. Record potential connections between those topics and the categories of students' personal interests. Note ideas for collaborative and individual tasks that build on interests.

## **Situational Interest**

*Situational interests* are interests that arise in response to or as a result of a situation. Situational interests are activated by the environment and are spontaneous or in the moment. They can develop

into personal interests over time. Teachers create situational interest when they plan and implement tasks with intriguing, choice-based elements. For example, teachers can create situational interest by letting students choose an animal to research, asking students to express an opinion about a book they enjoy, allowing students to play a role in a skit, or selecting a real-world context for solving a problem.

## How do teachers uncover (and create) situational interest?

These example prompts can be used orally or in writing, on pre-assessments, or entry/exit tickets to discover situational interest as related to upcoming or current content.

"Soon, we will be learning	"Those are the three task	"What was the most
about [weather]. Which topics	choices for tomorrow. On the	interesting thing you learned
about plants sound the most	index card, write the number	about [Martin Luther King, Jr.]?
interesting to you? Circle your	of the task you are most	What are you still wondering
two favorites." OR "What are	interested in doing."	about [him]?"
some things you hope we		
learn about or do in our unit		
on [weather]?"		
"Draw a face that shows how	"We'll be creating and acting	"We've been learning about
you're feeling feel about this	out modern versions of the	persuading people through
topic right now. Be ready to	folktales we read. Where	writing. Who is someone you
explain why you made the	would you like your tale to	would like to persuade? What
face."	take place?"in our	would you like to persuade
	classroomat a store	that person to do or think?"
	at a birthday partyin	
	a zooI have another	
	idea	

## Responding to Student Interest

There are numerous general ways to respond to student interest. For example:

□ Connect students who share interests with one another. In real life, interests are often the seeds of relationships. But even students who share the same classroom for the school year will not necessarily discover commonalities on their own. Find opportunities—during instruction or in down times (e.g., standing in line at the drinking foundation)—to tell students that they share an interest. Maybe two students take gymnastics, a handful love character-based trading cards, or several love to draw. Use small moments to draw attention to interest-based connections, using questions to encourage students to chat briefly about the interest (e.g., "Rowan and Max, did you know you are both hockey fans? Who are your favorite players?"). Sharing a depiction or graph of reported student interests can also be a launch point to foster student-to-student connections.

- □ Show how curricular content is related to general or specific personal interests. Many interests can be connected to what students are learning. While it is rarely necessary to connect *every* student interest to the topic or skill under study, one to three relevant and meaningful connections that all or many students can relate to can increase engagement and help students make better sense of what they are learning. For example, "Let us think of all the places on the playground where we can see pushes or pulls."
- □ Use interests as a basis for random and intentional grouping. Shared personal or situational interests can be a criterion for pairing or grouping students for instructional purposes. For example, a teacher might quickly pair students by a general common interest (e.g., sports, music, movies) for a nature walk, not as a way of differentiating per se, but to mix things up. A more intentional grouping linked to a task might involve giving different math problem scenarios linked to various interests and matching students with a partner and a scenario that corresponds with a self-reported interest. Or, as an example of situational interest, perhaps students have read myths that involve characters who make poor choices. Students choose one myth as the basis for a character analysis task that they complete with a partner who has selected the same myth.
- Offer choice. Learners of all ages appreciate having choices in learning. Choices based on students' personal interest or posed to create situational interest can quench students' desire for autonomy and increase engagement. Choices can be simple and limited in number and scope; 10 different complex project options are not required to provide meaningful interest-based choices. Take care not to burden the student with a choice that essentially requires inventing a choice out of the blue. This can happen with writing tasks. Yes, students should have ample opportunity to write about topics and texts and experiences (real or imagined) that are important and/or interesting to them. But, for example, a prompt to "Write about whatever you want," with no catalysts or parameters is a far less helpful form of differentiation for student interest than offering potential topics or storylines driven by personal or situational interest and allowing students flexibility in coming up with their own option.

# General Strategies for Differentiating for Student Interest

This table summarizes some ways that teachers can adjust content, process, and product to differentiate for student interest.

	Strategy	Example Teacher Talk
Content The information, ideas, and skills that students will take in or grapple with in order to reach the learning goals	<ul> <li>Providing interest-based texts or resources around a similar concept, theme, topic, or skill</li> <li>Designing tasks with situations, problems, or dilemmas that appeal to student interest</li> <li>Giving interest-based research topic options</li> <li>Discussion roles or tasks based on a choice of character or problem in the story</li> <li>Designing tasks with open-ended elements for students to fill in the blank with interest/experience-based content</li> </ul>	<ul> <li>Choose one founding father to read about. Use the questions we came up with to read two books about that person from the collection that the librarian pulled for us.</li> <li>Everyone will learn more about one technology of their choice using online resources I've put on a Padlet.</li> <li>Here are situations where kids are trying to decide if they have enough money to buy something. Use your math skills to help the boy/girl in the situation that is most interesting to you.</li> <li>Decide whether you want to talk about the problem from Charlotte's point of view, Wilbur's point of view, or Templeton's point of view.</li> <li>Compare the theme of good versus evil in two different stories: one that we studied together and one of your own choosing.</li> <li>Here are some advertisements for different goods and services during the Civil War. Choose one for our next activity based on your interest.</li> <li>Your favorite TV show,, has just been canceled. Use your persuasive writing skills to convince them to bring back the show. (Adapted from Doubet &amp; Hockett, 2016)</li> </ul>

	Strategy	Example Teacher Talk
Process The activities through which students take in and make sense of key ideas in the content using essential knowledge and skills	<ul> <li>Using interest centers (to manage time, to support the development of a product, to support understanding of content)</li> <li>Giving choice of roles in simulations, literature circle/book groups, or performance tasks</li> <li>Asking students to apply a skill or concept to an interest area</li> </ul>	<ul> <li>I have set-up an interest center for you to visit to go along with our study of folktale, myths, and legends from other cultures.</li> <li>Rank your RAFT task choices. Think carefully about which role you like best.</li> <li>Decide who in your group will take each job for the story discussion.</li> <li>If you liked the calculator game we learned today, you can play it during choice time at the math center.</li> <li>Make two different kinds of graph that show how much time you spend on four things you like to do outside of school.</li> </ul>
Product  How students demonstrate and extend what they know, understand, and can do as a result of a unit or series of lessons	<ul> <li>Giving product options that vary by interest</li> <li>Offering product audience options that vary by interest</li> <li>Using independent studies, enrichment/extended projects, and interest-driven inquiry tasks</li> <li>Choice of models for a product</li> </ul>	<ul> <li>You can write a speech, a how-to list, or a set of directions to show what you understand.</li> <li>Choose the audience that is best suited to your product. (Keep in mind whose mind you are trying to change!)</li> <li>Now that you have gathered information for your continent study, we will brainstorm product options for sharing that information.</li> <li>Here are five different examples of this project from past students. You can decide which one(s) is the best inspiration for your own project.</li> <li>Use the angles we studied today to sketch draft a design for the set of a superhero movie, a display case at a bakery, or a pet shop.</li> </ul>

**Interest Strategy:** Interest Centers

#### Strategy Summary

Centers are established or set places in the classroom where students go to focus on tasks that revolve around a central purpose or topic. Unlike stations, centers are independent and distinct from one another. A center has its own goals and purposes and can involve single or multiple visits. A teacher can set-up multiple centers in the classroom, but those centers do not need to be linked by a common purpose or focus. An *interest* center is designed to motivate students' initial or further exploration of topics they are interested in. This is different from a *learning* center, which is designed to provide practice in or extend understanding, knowledge, or skill (Tomlinson, 2014). Interest centers can provide a way of managing and using limiting materials and tools, or for activities and tasks that are related to curriculum but are difficult to fit in.

#### **Differentiation Connection**

Interest centers support differentiation in two ways. First, what students do at the center—the content, process, or products—can be differentiated for interest, with students choosing what to do and/or how to do it.

<b>Differentiation of Content</b>	Differentiation of Process	Differentiation of Product
The center includes resources	The center features tasks that	The center features tasks
and materials targeted to	use processes targeted to varied	focused on the development
varied interests and related to	interests.	of products targeted to
a similar skill, topic, theme,		varying interests.
concept, or question.		

Interest centers can also give teachers a way to manage down times so that the teacher can work with individual or small groups of students.

#### **Design Guidelines**

A high-quality interest center has the following traits:

- Clear, important goals. The center should be more than just a place to go or a place to store
  extra things for students to do. The center should be goal-oriented and connected to
  something students have learned or are learning.
- **2. Rich, accessible materials and tools.** The texts, images, and tools that students encounter and use at the center should be rich in type and scope, worthy of exploration, and include a range accessible to all students, regardless of readiness. Materials can stem from personal interest or create situational interest.
- **3. Engaging, structured tasks**. Whether students work on a task at the center itself or take a task from center to elsewhere in the classroom, interest center tasks should engage the student's

mind, not just his/her hands. While the task can be open-ended, it should be structured so that the student knows where and how to start and when the task is complete. For example, going to a center and simply reading a book—even an interesting one—is not a task and might not require an interest center. Reading a book in the service of answering a question or doing something with the information is a better fit. Consistent with the name, interest center tasks should hook and hold student interest.

- **4. Choice.** Design the interest center to invite students to make one or more choices. This might mean a choice of materials to explore, a choice of tasks to complete, or a choice about whether to work alone or with a peer. An interest center can also incorporate a choice grid.
- **5. Visual appeal.** Ideally, the interest center should *look* interesting and make students *want* to visit it.

#### **Implementation Guidelines**

- ☑ **Launching the center.** Launch the center by formally introducing it to students in an exciting way. Preview and/or model the center materials and tasks and communicate expectations for when and how students should engage with the center. Use set times on that day and/or subsequent days to schedule time for students to visit and become familiar with the center on a rotating basis. Consider implementing an interest center that is not itself differentiated before using an interest center to differentiate for content, process, or product.
- ☑ **Fostering independence at the center.** Provide directions for what to do at the center that take into account students' age and skill level. Pictures, diagrams, and recorded directions on a tablet or other easy-to-use device are ways to make sure that students understand what to do. Implement or use existing routines for giving/receiving help with center materials and tasks.
- ☑ **Keeping track of what happens at the center.** Institute one or more ways to keep track of center visits and tasks. Students can mark off their names on a chart or a list after a visit, turn in a task card with work attached (as appropriate) when they finish, or complete an audit card at the end of the week that reports their center engagement.
- ☑ **Changing the interest center.** Keep the interest center fresh and interesting by changing the focus, materials, tasks, and even the location, relatively often. This might be when students have cycled through center options, when a unit of study is beginning or ending, or at the start or conclusion of a marking period.

**Interest Strategy:** Jigsaw (Aronson & Patnoe, 1997)

#### Strategy Summary

Jigsaw is a cooperative learning strategy that involves putting students in small groups and having each member become an expert on a different piece of the puzzle (i.e., content) before sharing his or her expertise with other group members as they work together toward completing an interdependent

task. Jigsaw is ideal for conceptual topics and for addressing large amounts of information in a short timeframe. The process follows:

- **1.** Students meet in home groups of three or four students. The teacher launches the lesson with a guiding question, purpose, or goals.
- **2.** Students choose to become an expert on one of several topic/content options based on interest.
- **3.** Students meet in expert groups with peers who have chosen the same topic to learn more about. Expert groups gather their information and prepare to share their work with their home group.
- **4.** The teacher checks for individual or expert group understanding in order to catch misconceptions and close knowledge gaps.
- **5.** Students return to their home group to share their information.
- **6.** The home group puts the pieces together by completing a synthesis or transfer task.
- 7. The teacher checks for individual student understanding.

The heart of the jigsaw structure (students meeting in content- or task-alike groups or pairs before connecting with peers who did not acquire the same content or work) can also be used as a general grouping mechanism, or with other strategies such as looking lenses, RAFT, and TriMind.

#### **Differentiation Connection**

Jigsaw is a strategy that can be used to differentiate according to interest or readiness. In the table below, readiness variations are italicized.

#### **Differentiation of Content**

- Assigning expert groups texts or resources based on the topic of interest
- Forming and assigning expert groups different texts or resources based on reading skills or level of complexity/abstraction

#### **Differentiation of Process**

- Having different questions
   to answer or processes to
   follow in expert or home
   groups based on the interest
   being explored
- Using tiered questions in expert or home groups
- Providing tiered graphic organizers for gathering or synthesizing information in expert or home groups

#### **Differentiation of Product**

- Home group synthesis task allowing for choice of product based on interest
- Home group synthesis task with tiered products or criteria

#### **Design Guidelines**

1. Identify the topic, goals (KUDs), purpose, and/or driving question of the jigsaw. Jigsaw is best used with content that can be explored through varied topics without compromising important goals. For example, if students are studying Community Helpers, there may be some

jobs that all students learn about as well as jobs that can be interest-based options for students to explore further.

- 2. Plan the home group task. This task is the reason for students to divide the content and become experts. Students can receive this task at the beginning of Jigsaw or after they share their information from expert groups with their home group. In either case, the task should need or rely on the information gathered in the expert groups to be accomplished.
- **3. Plan the expert group activity.** Typically, the expert group gathers information from teacher-provided resources to gain expertise about their topic from books, videos, or online resources. Give students a way to record the information independently (e.g., a graphic organizer) so that they can bring it back to their home group. Build in a process or directions for students to work together in the expert group and corroborate their information.
- **4. Plan for formative assessment.** The two points at which it is critical to check for student understanding are after the expert group activity and following the home group task. These checks can be informal, but the idea is to catch misconceptions and to distinguish individual progress toward learning goals from the group effort.

#### **Implementation Guidelines**

- ☑ **Timeline.** Set and enforce time limits for each part of the jigsaw. This is a strategy that can be implemented in a shorter timeframe (30–45 minutes) or over several days, depending on the complexity of the content and task and the grade level of the students.
- ☑ **Group size and composition.** Keep home and expert group size small (i.e., two to three students). This might mean having more than one expert group for a topic (e.g., two expert groups who are researching animals who live in desert habitats). Home groups can be composed of students with complementary strengths and/or formed according to the expert group topics that students have selected ahead of time.

$\checkmark$	Mecha	anics. There are many mechanical considerations in planning a jigsaw. Questions that
	guide	this planning include the following:
		How will I move from home groups to expert groups—and back again?
		How and when will I tell students who is in their home and expert groups? Where will
		groups meet?
		Will I give the home group task early in the jigsaw or after their expert group work?
		What is the best way for me to monitor activity during the expert group and home
		group tasks?
		What should I tell students to do when they are finished with an expert group or home
		group task? What happens if some groups do not finish in the timeframe?

**Topic:** Natural Hazards **Grade Level:** 3

Related Standard: 3.ESS3.1-2

#### **Learning Goals (KUDs)**

#### **Know**

- A natural hazard is an event that occurs in nature and negatively affects humans or the environment.
- Features, causes, and impacts of natural hazards such as fires, landslides, earthquakes, volcanic eruptions, and floods.

#### Understand

- Natural hazards can have a major and minor impact on <u>human activity</u> and the <u>environment</u>.
- Humans can plan for and reduce the impact of natural hazards, but (in most cases) can't stop them from occurring.

#### Do

- Explain how natural hazards impact humans and the environment.
- Design solutions to reduce the impact of natural hazards on the environment.

#### Launch

• Show pictures or video clip examples of five *natural hazards* (naturally-caused fire, landslide, earthquake, volcanic eruption, and flood) and lead brief discussion with questions such as *If* these are examples of natural hazards, then what is a natural hazard? Which natural hazards can happen in our state? Are there ways to stop or prevent natural hazards?

#### **Home Groups**

- Put students into home groups of four. Preview the home group task
  of generating ideas for solutions to reduce the impact of natural
  hazards on the environment. Each group member will be in an expert
  group to research one natural hazard.
- Distribute organizer (right). Use landslides as a shared example to model what students will be doing in their expert group. Potential content includes this National Geographic video on landslides.

Causes	Impact (on Humans & Environment)
lays to Reduce Impact	

#### **Expert Groups**

Students meet in expert groups/pairings of two to three students. (There can be more than one
expert group for a hazard.) Students use teacher-provided resources (examples below) and a
blank organizer to research their hazard. Tip: Use <a href="Padlet.com">Padlet.com</a> to create a place for each group's
resources.

Fires	Earthquakes	<b>Volcanic Eruptions</b>	Floods
<u>Article</u>	<u>Article</u>	<u>Article</u>	<u>Article</u>
EPA Tips	EPA Tips	EPA Tips	EPA Tips
Video	Video	Video	Video

#### **Home Group Synthesis Task**

- Each expert reports causes and impact
- Home groups use expert group findings to generate a list of Top 5 Solutions for Reducing the Impact of Natural Hazards. The solutions should be general enough to apply to three to five natural hazards.

#### Closure

- Home groups present their lists of solutions, as well as their pick for the most "fascinating fact" about one of the natural hazards.
- Activity closes with discussion of the best ways that kids living in this state can plan for a natural hazard.

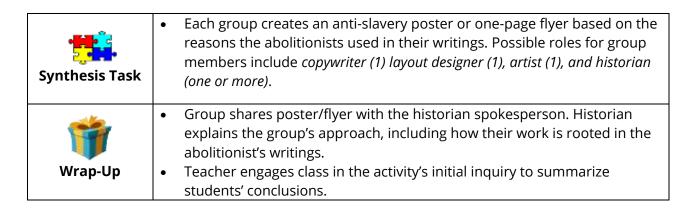
**Topic:** Historical Inquiry **Grade Level:** 3–5

**Related Standards:** Social Studies 5.3

110.0000 000.0000 00000 00000 000				
Learning Goals (KUDs)				
Know	Ur	nderstand	Do	
<ul> <li>Names of well-known abolitionists (Truth, Douglass, Grimke, Garrison)</li> <li>Key points in abolitionists' arguments against slavery</li> </ul>	•	Primary and secondary sources inform our perspective on what happened in the past. Abolitionists built their arguments against slavery	•	Use primary sources to analyze multiple samples of abolition leaders' writings and their stances on slavery.
g g		on a range of logical, emotional, and moral reasons.		

**Context**: This framework for a jigsaw activity can be used with any historical inquiry or set of written or visual documents.

Inquiries: Wh	nat did abolitionists believe about slavery? How did they argue against it?
Home Groups	<ul> <li>Receive documents authored by abolitionists Sojourner Truth, Frederick Douglass, the Grimke sisters, and William Lloyd Garrison.</li> <li>Decide who will be the expert in each abolitionist's stance. Alternatively, the teacher can form home groups based on students' situational interest in the historical figure or document type or based on student readiness.</li> <li>Preview home groups' synthesis task.</li> </ul>
Expert Groups	<ul> <li>Read and analyze document. Note: As an option, groups can start by using the Dissect-A-Document ThinkDots in this handbook.</li> <li>Students record the abolitionist's stance on slavery and reasons he/she give for that stance.</li> <li>Teacher reviews student notes for accuracy and understanding before students reconvene in home groups.</li> </ul>
Home Group Sharing	<ul> <li>Each expert shares what document he/she read and reports what his/her abolitionist's reasons are for opposing slavery.</li> <li>Home group members use a teacher-provided organizer to record information as their peers report.</li> </ul>



Interest Strategy: RAFT (Santa, 1988; Buehl, 2009)

#### Strategy Summary

RAFT is a strategy for designing differentiated performance tasks that asks students to assume a **role**, address an **audience**, in a particular **format**, about a given **topic**. Essentially, RAFTs give students a choice of situations for applying or transferring what they have learned. Students step outside the context of producing work for the teacher to solve a problem, address a challenge, address a dilemma, or put knowledge to use. RAFT can be used to design unit or lesson hooks, sense-making activities, jigsaw tasks, or assessments.

#### **Differentiation Connection**

RAFT tasks are a natural fit for interest-based differentiation but can also differentiate for readiness or learning profile. The table below emphasizes interest differentiation, with *readiness variations italicized*.

#### **Differentiation of Content**

- RAFT topics are designed to appeal to personal interest or create situational interest or vary in abstraction/complexity.
- RAFT tasks require students to use or reference content or material that varies by interest or differs by reading level or sophistication.
- Roles and audiences are closer to or further from student experience.

# Differentiation of ProcessStudents address an

- audience from the perspective of a role that appeals to personal interest or creates situational interest.
- o Addressing the situation or problem in the RAFT requires a process that appeals to varied interests or a more/less complex process.

#### **Differentiation of Product**

varied interests or are tiered for readiness (e.g., more/less complex products, more/less demanding criteria).

#### **Design Guidelines**

1. **Identify the purpose and learning goals (KUDs) of the RAFT tasks.** Decide how the RAFT will be used in instruction or assessment. Articulate what students should understand, know, and be able to do as a result of the RAFT.

- **2. Use a 4x4 grid to generate ideas for RAFT tasks.** RAFT strips are read from left to right, with each one representing the essence of the RAFT task option. Roles are in column 1, audiences in column 2, formats in column 3, and topics in column 4. Students *can* mix-and-match the elements, or come up with their own, but should check their ideas with the teacher first to ensure the new task makes sense and aligns with the learning goals. Include images in the grid to heighten interest and support students' understanding of the task.
- **3. Articulate quality criteria.** If the RAFT will be used to assess student knowledge, understanding, or skills, then articulate the qualities that students' work should have, regardless of what task they choose. These criteria should be the basis for informally or formally evaluating and providing feedback on the tasks.

#### **Implementation Guidelines**

- **Introducing tasks.** RAFT tasks require students to step outside of themselves and take on a different perspective. Acclimate students to this idea by likening it to pretending to be someone else.
- **Task description and expectations.** The RAFT template provides an at-a-glance or bird's eye view of the task options, but is not a substitute for a more complete description (oral or written). Avoid letting students figure out what the task is based on the template alone.
- **RAFT formats.** When first using a RAFT, consider using format types that students are already familiar with. Both the formats and the tasks overall should be equitable in terms of workload and time. If a format is new to students, provide instruction and guidelines around that format.
- **Task choice.** If the RAFT is differentiated for interest or learning profile, then let students choose the task that appeals most to them. Make sure that the choice is an informed one—that is, that students understand what the task involves. If the RAFT is differentiated for readiness, and it is important that students work with a specific task, consider giving students their individual strip/task and removing the choice aspect. Or, use tiered RAFTs that give students only "good-fit" choices. In any case, avoid giving some students choice but not others.
- **Task appeal.** After implementing the RAFT, evaluate how many students chose each task and whether tasks held equal appeal—and if not, why not. Use those results to adjust the RAFT for future use.

#### **RAFT Examples**

**Topic:** Angles **Grade Level:** 4–5

**Related Standards**: 4.G.A.2-3

Learning Goals (KUDs)		
Know	Understand	Do
• Types of angles: <i>right</i> , <i>obtuse</i> , <i>acute</i> .	<ul> <li>The different kinds of angles can be classified by their properties.</li> </ul>	<ul> <li>Identify types of angles in two-dimensional figures.</li> <li>Explain/show where angles are in the real world.</li> </ul>

**Context:** Students have learned about three kinds of angles and their properties. These RAFT tasks offer an opportunity to apply their knowledge to a real context. The teachers can choose for students to work independently or with a partner. Note that these tasks are intended to be brief learning activities (versus elaborate projects).

#	Role	Audience	Format	Topic
1	Writer/Actor	This Class	Skit or Cartoon	I'm the best! (A fight
			Frames	between three angles)
2	Detective	Detectives-in-	Infographic	How to detect if an
		Training		angle is acute, obtuse,
				or right
3	Designer	Self	Sketch	Angles on a Shelf
4	You	Another Student	Directions/Clues	An Angles Scavenger
				Hunt

The task cards on the following page can be displayed or distributed.

#### RAFT 1

- Write a short skit in which an obtuse angle, acute angle, and right angle are "fighting" about who's the best.
- The dialogue should show that you understand the differences between the three kinds of angles and where someone might see or use each one in the real world.
- You can perform in the skit yourself and/or ask peers to be your actors. You can use simple "costumes" and props, if you'd like.

#### RAFT 2

- You are a math detective with a specialty in "detecting" and classifying kinds of angles.
- Create a simple infographic that shows detectives-in-training what "clues" they should use to classify angles AND they might see different angles in the real world.
- Make sure your work is clear and visually appealing.

#### RAFT 3

- Sketch one or more shelves on a bookcase with books arranged to show the three different types of angles. Aim for 6-8 angles total, in different positions.
- Label the angles on your drawing.
- You can make your sketch attractive but focus first on including and labeling the angles.

#### **RAFT 4**

- Use features of our classroom to create a 8-10 clue Angles Scavenger Hunt for a fellow student to do. The hunt should include the three kinds of angles, with angles in different positions.
- Include an answer key with your explanations of where the angle is, what kind it is, and how you know.
- Be sure to choose features of the classroom that won't change between now and when the student does the Scavenger Hunt!

**Topic:** Photosynthesis **Grade Level:** 4

Related Standards: 4.LS.2.1

#### **Learning Goals (KUDs)**

#### **Know**

#### Photosynthesis is a process in which plants use carbon dioxide from the air, water, and energy from the sun to produce sugars, plant materials, and waste (oxygen).

#### **Understand**

things (e.g., plants) and the ecosystem "fuel" processes that we can and can't see.

#### Do

Support an argument with evidence that plants get the materials they need for growth and reproduction chiefly through photosynthesis.

**Context:** Students have been learning about how plants grow and reproduce in an ecosystem, with an emphasis on the process of *photosynthesis*. They choose one RAFT task through which to transfer their understanding. Students share and give feedback on one another's work prior to a more direct formative assessment that involves depicting and describing photosynthesis.

Choose one RAFT task to show what you know about how plants grow and reproduce. Your teacher will give you further directions about the format and topic.

Role	Audience	Format	Topic	Criteria
Older Plant	Younger Plant	Story	How We Survive	Your work should:
美			and Thrive	<ul> <li>Include a clear explanation of what</li> </ul>
Sun	Police	Confession	I'm only part of the process!	photosynthesis is and how it works  • Be written in a
Tour Guide	Garden Guests	Narrative	What We Do and Don't See	voice that matches your audience, format, and topic.

**Topic:** Reading Response **Grade Level:** 3–5

Related Standards: 3-5.W.PDW.4; 3-5.RL.RRTC.10; 3-5.RL.KID.1; 3-5.RL.KID.3; 3-5.EL.CS.6

Learning Goals (KUDs)		
Know	Understand	Do
<ul> <li>Story elements of selected text (e.g., characters, plot, setting, theme)</li> <li>An <i>inference</i> is a conclusion drawn from prior knowledge and evidence or clues from</li> </ul>	Skilled readers <u>process</u> a <u>text (story)</u> through what the text says explicitly and what they can <u>infer</u> .	<ul> <li>Analyze characters in a story using key details.</li> <li>Refer to details and examples from a text when referring to what a text implicitly and explicitly says.</li> </ul>
text.		Varies by prompt and text type

**Context:** In this example, the teacher uses RAFT to frame options for students' reading response/journal prompts. The text can be common or differentiated (i.e., part of the curriculum or independent choice). Students can choose a different RAFT for each response entry. The topics are intentionally broad to give students flexibility in (and responsibility for) tailoring to their text and interest.

*Directions*: For each reading response, you will write from a certain **role** and address a particular **audience** about a given **topic** in a **format** of your choice. Your response should be specific to the book/story you are reading. It should be clear to someone who is reading your response that you are reading and referring to the text. Try to use a different format for each entry.

ROLE	AUDIENCE	TOPIC	FORMAT (Choose 1.)
A Character	You, the Reader	My biggest problem right now is	□ Email □ Letter
You	A Character	My advice	☐ Secret Note
One Character	Another Character	Don't tell anyone, but	□ Apology □ Confession
Leading Character	Opposing Character	The way I see it	Dialogue/
Minor Character	Major Character	Please!	□ Conversation □ Q & A
You, the Reader	Author	Why?	
Fortune-Teller	Any Character	I predict	
Author	Reader	Here's why I did that	

**Topic:** Punctuation **Grade Level:** 3–5

Related Standards: 3-5.FL.SC.6

Learning Goals (KUDs)					
Know	Understand	Do			
<ul> <li>Selected punctuation</li> </ul>	<ul> <li><u>Standard</u> English uses</li> </ul>	<ul> <li>Recognize and use</li> </ul>			
marks and their uses	<u>punctuation</u> according to	punctuation correctly,			
(e.g., period,	certain <u>rules</u> (conventions).	according to grade-			
exclamation point,	<ul> <li>Punctuation helps writers</li> </ul>	level standards.			
quotation marks,	communicate ideas and	<ul> <li>Generate examples of</li> </ul>			
apostrophe, comma)	voice clearly.	correct and incorrect			
		punctuation use.			

**Context:** Students complete one or more of these RAFT tasks as they learn about punctuation marks. Options for implementation include the following:

- Students choose a certain number of tasks in line with their relative strengths, weaknesses, and/or interests.
- All students complete all tasks as part of a Punctuation Portfolio that includes other
  evidence such as more traditional punctuation exercises and samples of
  punctuation use in the student's writing.
- Students have the choice to mix and match the roles, audiences, formats, and topics.
- Students work with a partner on one task. Students share work in mixed-task groups, use the work to teach one another about the punctuation mark, and/or display their work for later reference and use by classmates.

Mark	Role	Audience	Format	Topic
	Period	Sentences and	Postcards	I'll stop you.
•		Abbreviations		
!?	Exclamation	Question Mark	Dialogue	The difference
	Point			between us!?
<i>""</i>	Quotation Marks	Authors Everywhere	Short How-To Guide	The Do's and
				Don'ts of Using
				Us
	Apostrophe	Words	Cartoon Frames	I belong in <i>you</i> ,
,				but not in <i>you</i> .
		Ct. days	Destrict of Control	Allaha
	Comma	Students	Bedtime Story	All the ways to
/				use me
				(correctly)

**Topic:** Inventors of the Industrial Period **Grade Level:** 5

**Related Standards**: History 5.37, 5.W.RBPK.7-9

Learning Goals (KUDs)						
Know	Understand	Do				
<ul> <li>Contributions of key</li> </ul>	The work of American	Provide information				
American inventors	inventors has had a	about important				
during the Industrial	<u>power</u> ful impact on <u>society</u> ,	inventors and their				
period (e.g., Edison,	including on how people	impact on society.				
Graham Bell, Ford,	move, communicate, and	Gather information				
Eastman)	live.	from resources about				
	Inventions can <u>change</u> over	historical figures and				
	<u>time</u> .	events.				

**Context:** With a partner, students conduct research on a chosen inventor and invention using teacher-provided resources (print and online). Students share/present their work in groups of four to five, with different inventors represented. The class decides together which invention has had the most powerful impact on society (based on what they've learned and their own experiences and perspective.)

In the ROLE of	addressing this	in this FORMAT	about the TOPIC
	AUDIENCE		
Time traveler	Industrial period	Conversation	You changed
	inventor		everything!
Industrial period	Theme park/museum	Narrative monologue	My Invention: Then
inventor	attendees	(recorded)	and Now
Descendent of an	Industrial period	Tribute	My great-great-great-
industrial inventor	inventor		great grandpa
Reader of Time for Kids	Time for Kids editor	Nomination	Best American Inventor
Special Issue: The			from the Industrial
Industrial Age			Period
Student	School board	Short presentation	Let's name the new
			school after this
			inventor

#### No matter which task you choose, your work should:

- Include accurate information about the inventor and the invention.
- Address impact of the invention on American life then and now.
- Be written in a voice and style that fits your format, audience, and topic.
- Communicate ideas clearly.

**Interest Strategy:** Choice Grid

#### **Strategy Summary**

A choice grid presents interest-based task options in a grid, similar to a Think-Tac-Toe (Tomlinson, 2014). The tasks are arranged by the goals they share; students select one task from each set to complete. Choice grids can be used to organize tasks that students will complete independently during a unit of study, tasks at an interest center, or anchor activities. Tasks can be aligned vertically or horizontally.

(Shared	(Shared	(Shared
Goals/Purpose)	Goals/Purpose)	Goals/Purpose)
Task Option 1	Task Option 1	Task Option 1
Task Option 2	Task Option 2	Task Option 2
Task Option 3	Task Option 3	Task Option 3

#### **Differentiation Connection**

Choice grids are a delivery system for tasks that differentiate content, process, or product for interest or learning profile. They can also be a strategy for readiness differentiation when the teacher uses tiered choice grids with more/less advanced options. Choice grid tasks can be designed using other strategies, such as RAFT, Tri-Mind, or multiple intelligences.

#### **Design Guidelines**

- **1. Focus the choice grid.** Use a topic, concept, text, text type, or set of skills. Examples include character study, states of matter, habitats, playing with numbers, famous Tennesseans, and conducting research.
- **2. Select learning goals for each set of tasks.** Decide what knowledge, understanding, and/or skills each task set will focus on. Alternatively, start with one or more worthy tasks, determine what the learning goals are, and place them in the corresponding row(s).
- **3. Create tasks.** All tasks should be engaging, appealing, and substantive, but also require roughly the same workload and cognitive stretch. Use a specific strategy to design tasks, select or adapt existing tasks from other resources, or create new tasks. One approach is to place any suitable preexisting tasks into the grid, discern the goals, and fill in the grid with the blank spots

that remain. An alternative to using a nine-task grid is to start with a three-or six-task grid and work up to a nine-task grid over several units.

- **4. Place tasks in the grid.** Ensure that all three tasks in a given row are aligned with the same goal(s). Choices aligned with the same goals should look equally appealing and require a similar effort. Also, consider all possible task-choice combinations to make sure that a particular combination doesn't leave a student with too much—or too little—to do.
- **5. Make the grid user-friendly.** The choice grid that students receive or see should take into account their ages, reading skills, and attention spans. Making the choice grid look fun—or even game-like—without obscuring the purpose or the tasks, can go a long way in increasing student interest and investment. Use shapes, images, or graphics to reinforce the focus of tasks, or as a way for students to select tasks.

#### **Implementation Guidelines**

- ☑ **Introducing a choice grid.** Launch the choice grid in the context of a game where students have to make choices about the best task for them in each row (or column, depending on how it is designed). Display the grid up front for review. Make sure that all students know what each task is and involves. If students have paper copies of the grid, use pennies, cubs, or another manipulative as game pieces that students place on their choices.
- ☑ **Guiding students' choices.** The placement of tasks within each set of goals is intentional, so make sure that students know that they shouldn't choose three tasks under the same goal set. It otherwise doesn't matter what students select. If a student is having trouble choosing, prompt along these lines: "Which one are you most excited about?" "I know you really like to [draw], so this task might be good for you," and "Do you have your own idea that is like one of these choices?" Let students know that if they start to work with one task choice and feel like it is not working for them, they can switch tasks.
- ☑ **Timeframe**. Choice grids are best for tasks that will be completed over the course of days or weeks rather than in a single lesson or day.
- ☑ **Task completion**. Decide whether students will turn in tasks as they complete them or turn their work when all tasks are finished. This is a decision that will likely be guided by how and for what purpose the choice grid is being used.

#### **Choice Grid Examples**

**Topic:** Researching Old and New Thinking in Science **Grade Level:** 3–5

**Related Standards:** Science and Engineering Practice 8, Reading Informational Text ELA Standards

#### Learning Goals (KUDs) Know **Understand** Do Key facts related to Scientific thinking changes Read and comprehend gradewith the discovery of new appropriate complex texts the topic under evidence. and/or other reliable media study (e.g., Scientists use many kinds of to summarize and obtain dinosaurs, weather, evidence collected over time scientific and technical ideas human body) through a variety of methods and describe how they are to form theories. supported by evidence. Describe the relationship between a series of scientific ideas or concepts in a scientific text, using language that pertains to time.

**Context:** This ELA example is rooted in science content—namely, the idea that scientific thinking changes over time as new discoveries are made. Kathleen Kudlinski's *Boy We Were Wrong About* series uses four topics (i.e., the solar system, dinosaurs, weather, and the human body) to show what scientists used to think and what they think or know now.

The teacher can use a common text with the whole class (e.g., *Boy, Were We Wrong About the Solar System*) to introduce the core ideas and model thinking processes and organizers that students will use in their interest-driven choice grid study.

Students can begin reading their text independently before convening in a teacher-led small group to gather information (by themselves or alone) from the text in terms of scientists' old thinking and new thinking (See Organizers 1a and 1b, which can be used one after the other or as tiered approaches). Students can practice information-gathering in partners, focusing on specific or assigned pages only.

#### Old Thinking vs. New Thinking

Scientists used to think that	but now they think that	

#### Why Did/Do They Think That?

because	but now they think that	because
	because	

When students engage in Step 2 of the choice board, they use Organizer 3 below.

Source:		
SAME Information that is also in Boy, Were We Wrong About	DIFFERENT Information that is NOT in Boy, Were We Wrong About	

#### Boy, were we wrong about THAT!

#### 1. Choose and read about a topic.

We have been learning about how scientific ideas change over time with the discovery of new evidence. You will read more about how that is true. Select the topic that interests you most. Begin to read the text on your own. You will meet in a teacher-led group to re-read the text using an information-gathering organizer.

Dinosaurs

☐ The Human Body

□ Weather







#### 2. Gather additional information about the topic.

What do other sources say about this topic? Choose one or more.

- □ Informational picture book(s). Select a book from the bins that are organized by topic. Use the same/different organizer as or after you read to gather information. Compare your findings with a peer who is researching the same topic.
- □ Video(s). Go to the Padlet your teacher has created and choose a video to watch. Use the same/different organizer to gather information. Watch a video a few times if you need to! Compare your findings with a peer who is researching the same topic.
- A source you found on your own. (Hint: start with the resources in the BWWWA book!)
  Okay it with your teacher first! Use the same/different organizer gather information. Compare your findings with a peer who is researching the same topic.

#### 3. Choose an application task.

Take the information you've gathered from all sources about your topic and choose one task to complete. You can work alone or with a peer.

- Book proposal. The Boy, Were We Wrong About
  Series is Kathleen
  Kudlinski's idea for science books that kids would like. Propose your
  OWN idea for another kind of book on the topic you that you researched. Write a proposal to a publisher and a few sample pages based on research you gathered about the topic.
- Next edition. Imagine that the author of the Boy, Were We Wrong About...book is publishing an updated and expanded version of it. Use your research about what scientists used to think about the topic and what they think now to craft a 2-page contribution to this next edition.
- ☐ Then, now, and the future. Use the information you gathered from different sources to create a clear and visually-appealing infographic about the topic. Include (in your own words) what scientists used to think and why, what they think now and why, and what they still don't know and why.

**Topic:** The 50 United States **Grade Level:** 3

Related Standards: 3.18-19, 3.21-3.22

# Learning Goals (KUDs) Know

- The United States is comprised of 50 states with distinct boundaries.
- Names, locations, and other selected information about the 50 states.

#### **Understand**

 Maps can show <u>location</u>, <u>boundaries</u>, and <u>physical</u> <u>features</u> of a place.

#### Do

- Locate the states that comprise the regions of the United States.
- Identify major physical features of the United States on a map.

#### Anchor Activity: The 50 United States

- This anchor activity\* is designed to help you learn more about the 50 United States, including their names, locations, capitals, and other geographical features.
- With each activity, there is something to DO and something to TURN IN.
- The symbols show if the activity involves seeing, listening, doing something "hands-on," or a combination.
- Choose based on your preference. You can do an activity multiple times!
  - □ Do: Watch the "Tour the □ Do: Watch this 50 States □ Do: Assemble one of the States Music Video". Take Sing-A-Long video for kids states puzzles on the game the quiz afterward. AND The 50 States and table. You can work alone ☐ Turn in: Your quiz score Capitals Song. or with a partner. ☐ Turn In: A 3-5 sentence ☐ Turn In: A photo of your and 3 ideas for other pictures the artist could opinion of which song you finished work and a note have drawn for our state. think is more helpful for about which states you're memorizing. having trouble remembering. □ **Do**: Play interactive labeling □ Do: Play 9 levels of an □ Do: Play 4 levels of a interactive States games to State Capitals game. Begin games to learn about and practice names & locations. with Level 1. Move to the test yourself on lakes, next level when you score rivers, and other large Begin with Level 1. Move to bodies of water in the U.S. the next level when you 90% or better. ☐ Turn In: Your completed ☐ Turn in: Your score(s) for score 90% or better. ☐ Turn In: Your completed the game(s) you plated. map. ☐ Do: Listen to "Fifty Nifty □ Do. Fill out a blank map ☐ Do: Use presentation recording United States" with a of the U.S. with state features in PowerPoint (or completed states map in front another tool) to record you names and capitals using of you. When the singer says typing and saying the names this list to help you. (It's the state names, see how fast and capitals (with correct okay to look at the list, you can point to each state. If locations) on a blank map of the but don't look at a you get really fast, try it with U.S. Include a "tip" to yourself completed map!) a blank map! for remembering each one. ☐ Turn In: A index card that ☐ Turn In: Your map ☐ Turn In: The recording says you did this! ◉

<sup>\*</sup>An anchor activity is work related to curriculum that students engage in independently or with a partner during class on an ongoing basis (e.g., throughout a unit, over a month, in a grading period, or longer).

#### **Interest Strategy:** Learning Menus

#### **Strategy Summary**

A learning menu presents interest-based task options in the framework of a restaurant menu. Like a choice grid, tasks are arranged by goals or purpose. Unlike a choice grid, the teacher can incorporate both required and choice-based elements. Learning menus can be simpler or more complex, depending on the age and readiness of the students, and be modeled after menus at a range of restaurant types (e.g., fast food/quick service, full service, fine dining).

Learning menus are ideal for organizing and delivering tasks that students complete alone or with others over the course of a unit, during dedicated menu time, when the teacher is meeting with small groups, or as an anchor activity. Learning menus are an excellent tool for marshalling and using tasks that can be hard to get to in the course of a normal day or week.

#### **Sample Learning Menu Template**

ming went remplace
Appetizers
Hooks that invite students into the menu (give them something to nibble on)
Main Dishes
Goal-aligned tasks that all students complete
Side Dishes
Choice-based, goal-aligned tasks
Desserts
Choice-based, goal-aligned tasks

#### **Differentiation Connection**

Learning menus are a delivery system for planning and implementing common tasks as well as those that differentiate content, process, or product for interest or learning profile. Menus can also be a vehicle for readiness-based differentiation when the teacher creates tiered versions (e.g., one that is more advanced and one that is less advanced). Learning menus tasks can be designed with strategies such as entry points, RAFT, TriMind, VAK, or Multiple Intelligences.

#### **Design Guidelines**

- **1. Focus the learning menu.** Use a topic, concept, text, text type, or set of skills. Examples include *making and using money, all about America, plant life, weather systems, characters on adventures, folktales and fables, word study,* and *observing like a scientist.*
- 2. Articulate learning goals (KUDs) for the menu. Overall, what should students know, understand, and be able to do as a result of engaging with menu tasks? It is okay to be general; goals for each section of the menu will be more specific.
- 3. Select/design menu framework. Real or adapted restaurant menus (handheld or menu boards) of any kind provide possible frameworks for learning menus. Decide what parts the menu will have, including which sections will feature tasks that all students will complete and which sections will feature tasks differentiated by interest.
- **4. Articulate the purpose and/or learning goal(s) for each menu section**. Regardless of which or how many sections the menu has, decide what purpose each section serves. For example, is the appetizer section (if there is one) a hook into the menu content, or is it a first step that is connected to a main dish task? If the task(s) in a section are targeted toward certain learning goals (KUDs), select those goals from the menu goals, or articulate more specific learning goals. Alternatively, start with one or more worthy tasks, determine what the learning goals are, and place the task(s) into the appropriate section of the menu.
- **5. Select/design common tasks.** Decide which tasks all students will complete. Select or design these and place them into the corresponding section(s).
- **6. Select/design differentiated tasks.** Select or design tasks for sections of the menu where students will have task choice. All tasks should be engaging, appealing, and substantive, but also require roughly the same workload and cognitive stretch. Ensure that all tasks in a sections are aligned with the same goal(s). Consider all possible task-choice combinations across the menu to make sure that a particular combination will not leave a student with too much—or too little—to do.
- 7. Make the menu user-friendly. The learning menu that students receive or see should take into account their ages, reading skills, and attention spans. Making the menu look appealing, without obscuring the purpose or the tasks, can go a long way in increasing student interest and investment. Use a realistic layout or images of food to make the menu seem real.

#### **Implementation Guidelines**

☑ **Introducing a learning menu.** Launch the learning menu in the context of being at a restaurant, going to party, or eating a meal at someone's house, where there might be a combination of things you have to eat and things you choose to eat. Display or project the menu for all students to see as the tasks are reviewed and the timeline specified. Make sure that all students understand each task and what it involves.

- ☑ **Guiding students' choices.** In the choice-based sections, students can select based on interest or preference. If a student is having trouble choosing, prompt along these lines: "Which one are you most excited about?" "I know you really like to [draw], so this task might be good for you," "Do you have your own idea that is like one of these choices?" Let students know that if they start to work with one task choice and feel like it is not working for them, they can switch tasks.
- ☑ **Task completion**. There may be aspects of the menu that the whole class does at the same time. In addition, decide whether students will turn in tasks as they complete them or turn in their work when all tasks are finished. This is a decision that will likely be guided by how and for what purpose the learning menu is being used.

#### Learning Menu Example

**Topic:** Text-inspired Research (Histories of Toys and Games) **Grade Level:** 5

Topic. Text-inspired Research (r	Grade Level. 3	
Learning Goals (KUDs)		
Know	Understand	Do
<ul> <li>Facts related to the histories of selected toys and games</li> <li>Structure and features of informational narratives</li> </ul>	<ul> <li>Research inspires         research.</li> <li>Inventions inspire         inventions.</li> <li>Some inventions happen         by accident, some on         purpose, and others over         time.</li> <li>Inventions that last or         endure share certain         characteristics.</li> </ul>	<ul> <li>Write informative/         explanatory texts to         examine a topic and         convey ideas and         information clearly.</li> <li>Integrate information         from several texts on         the same topic in order         to write or speak         knowledgeably about         the subject.</li> </ul>
		•

**Context:** This learning menu is designed to accompany a text study of *Toys! Amazing Stories About Some Great Inventions* by Don Wulffson.

- The appetizers can be completed independently, as an in-class hook activity, or in partners.
- Prior to the main dish tasks, students have read the *Toys!* text (in whole or selected chapters) and experienced lessons aligned with skills in ELA Standards RI.5.1-3 and RI.6-7.
- Side dishes are additional text features that students incorporate into their toy history.
- Desserts are anchor activities that students can work on anytime.

#### **Toys!** Learning Menu

To be used with the text *Toys! Amazing Stories About Some Great Inventions* by Don Wulffson.

	Appetizers					
	Choose one for a quick-write.					
	Tell a story or write about <b>a favorite toy</b>		Watch 3–5 old <b>toy commercials</b> <u>here</u> . Which			
	or game—now or from when you were		toys seem like toys you would want? Why?			
	younger.					
	Browse the <b>photos of children's toy</b>		Look at some <b>toys and games from around</b>			
	collections in the book <i>Toy Stories</i> [by		the world <u>here.</u> Which ones look most			
	Gabriele Galimberti] or see excerpts <u>here</u> .		interesting to you?			
	What similarities and differences do you					
	notice?					
	Main	_				
	Сотр					
	Read and compare three accounts of the					
	<i>Toys!</i> , the Wikipedia entry, and a description					
	the toys in the book lend themselves to thes					
			zer, or other tool to compare the accounts, as			
			ussion about the patterns we see in how toys			
	are invented and why some tend to endure.					
	•	•	vs! Use the skills you learned to research your			
	toy using multiple sources. Then, write an <b>informational narrative history of the toy</b> ,					
	modeled after the chapters in <i>Toys!</i> Your history should explain how the toy came to be (who,					
	what, where, when, why/how), tell about how		_			
	your research factual, and be written in an engaging, kid-friendly way.					
	Sides					
	Choose an additional text feature for your narrative.					
	Add a visual timeline. The timeline		Add creative illustrations. See <i>Toys!</i> for			
	should include important dates in the		examples of how an author uses illustrations			
	toy's history as well as pictures of how the		to entertain the reader and bring ideas in the			
	toy has looked over time.		chapter to life.			
	Dessert					
_	Choose 1 as an anchor activity that you can work on anytime for fun!					
	hand or using technology). Write or record an explanation of how it works and why you think					
	kids will like it.					
	Use Padlet.com to <b>create a holiday or birtl</b>	-				
			out. Include 1–2 sentences on each note that			
	say how you discovered that toy or game an					
	on the toy histories you've read.					

## Differentiating for Student Learning Profile

#### **Uncovering the Student Learning Profile**

#### What is a Student Learning Profile?

A learning profile refers to how students learn, how they process what they need to learn, or how they think about, remember, and prefer to use what they learn (Tomlinson & Sousa, 2011). Learning profile is best thought of as a set of preferences, not as inherent characteristics or traits of a student.

In the Tomlinson model, learning profile has several overlapping dimensions:

- Learning style: Learning style theories and models contend that people learn in different ways, and that they will learn better or more efficiently when the circumstances or demands of learning match their preferred approach. The idea is not to label a student as *x* or *y* kind of learner, and most individuals can and do learn in a variety of ways. Rather, the spirit of learning style is to help students find pathways and conditions for learning that work best for them in a given situation. Models developed by David Kolb (Learning Style Inventory), Bernice McCathy (4Mat), and Kenneth and Rita Dunn (Dunn & Dunn Learning Styles Model) are well-known examples. Teachers should note that the idea of students having particular learning styles that they need to learn or produce with is *not* well-supported by research (for a review, see *Differentiation and the Brain: How Neuroscience Supports the Learner-Friendly Classroom* by Carol Tomlinson & David Sousa).
- Intelligence preference: Intelligence preference refers to models of human intelligence and ways of thinking that are related to individual learning preferences. Specifically, the work of Howard Gardner and his Multiple Intelligences theory and Robert Sternberg's Triarchic Theory of Intelligence are particularly well-known theories. Each of these models is described further in the context of related strategies. Both theories view intelligence as multi-faceted, complex, and malleable, and these theories advocate leveraging students' intelligence preference strengths as well as growing in areas of relative weakness.
- **Culture- and gender-influenced preference**: Although a person's culture or gender does not dictate how an individual will learn, research indicates that culture and gender may influence individual preferences in learning (see Tomlinson & Sousa, 2010, for review). For example, culture or gender may shape a student's proclivity for:
  - o working independently or working collaboratively;
  - o viewing time and schedules as fixed or viewing them as flexible;
  - interpreting communication literally/directly or interpreting communication figuratively/indirectly;
  - valuing logic over feelings or valuing feelings over logic;
  - o approaching tasks in an orderly way or approaching tasks in a roundabout way;
  - spatial and number-based tasks or verbally based tasks;

- learning well in stressful situations; and
- o teacher feedback or approval.

For teachers in diverse classrooms, it is important to recognize that their own sense of how learning should happen is shaped by their own culture and gender, which is different from at least some of their students. While teachers should refrain from overgeneralizing to every student from a cultural group or gender, planning with certain patterns in mind can make a learning a better fit for many students.

#### How do teachers gauge student learning profile?

Gauging student learning profile can involve (1) asking students about their preferences and (2) observing how students work and the choices they make. In practice, it is similar to gauging student interest. There is no scientific basis for using an inventory or assessment to diagnose students as a certain kind of learner. But, students' responses to questions or prompts can reveal patterns among students in a class or preferences that are unique to individuals.

The tasks, prompts, and inventories below can be used to discover students' learning preferences at the beginning of and throughout the year. Items can be delivered orally or in writing, on preassessments or entry/exit tickets to discover specific preferences related to upcoming or current content.

#### Strategies for Differentiating for Student Learning Profile

My Way is an Expression Styles Inventory that asks students about preferences in creating certain kinds of products. The inventory can be delivered orally as an interview with spoken responses or hand signals to indicate strength of preference, or students can circle responses on paper copies.  Provide and/or read a list of learning preferences (e.g., Doing one thing at a time, Listening to music while I work of work od something). Have students rank their choices based on this list to assign them an entry points task (see Entry Points): Right now, I think I would prefer to  Tell, read, or hear a story interview with a partner?" "Would you rather work in a quiet work or work in a room where there's noise or music in the background?"  Expose students to varied techniques for a skill like memorization. Observe which saving a choice about how to do something). Have students rank their choices based on this list to assign them an entry points task (see Entry Points): Right now, I think I would prefer to  — Tell, read, or hear a story interview with a now, I think I would prefer to  — Tell, read, or hear a story interview or work in a room where there's noise or music in the background?"  Expose students to varied techniques for a skill like memorization. Observe which an upcoming task. For example, "Next week, we are going to be learning about how to use Google Docs. Would you prefer to hear	, , , , , , , , , , , , , , , , , , ,	0,1	
related to learning preference. in creating certain kinds of products. The inventory can be delivered orally as an interview with spoken responses or hand signals to indicate strength of preference, or students can circle responses on paper copies.  Provide and/or read a list of learning preferences (e.g., Doing one thing at a time, Listening to music while I work of do something). Have  related to learning preference. For example, "Would you rather work with a partner?" "Would you rather stand up or sit down while learning new?"  "Would you rather work in a partner?" "Would you rather work in a quiet work or work in a room where there's noise or music in the background?"  Expose students to varied techniques for a skill like memorization. Observe which technique seemed to work best work, Having a choice about how to do something). Have  related to learning preference. For example, "Would you rather work with a partner?" "Would you rather stask (see Entry Points): Right now, I think I would prefer to  ——Tell, read, or hear a story work in a room where there's noise or music in the background?"  ——Work with numbers work with a partner?" "Would you rather some, I think I would prefer to  ——Tell, read, or hear a story work in a room where there's noise or music in the background?"  ——Work with numbers work with a partner?" "Would you rather some, I think I would prefer to  ——Tell, read, or hear a story work in a room where there's noise or music in the background?"  ——Boarding techning a sking them an entry points task (see Entry Points): Right now, I think I would prefer to  ——Tell, read, or hear a story work in a room where there's noise or music in the background?"  ——Boarding techning a sking them an entry points task (see Entry Points): Right now, I think I would prefer to  ——Tell, read, or hear a story work in a room where there's noise or music in the background?"  ——Boarding techning a sking transfer to  ——Boarding techning the same task (see Entry Points): Ask students a sking transfer t	My Way is an Expression	Use the prompt Would you	Have students rank their
in creating certain kinds of products. The inventory can be delivered orally as an interview with spoken responses or hand signals to indicate strength of preference, or students can circle responses on paper copies.  Provide and/or read a list of learning preferences (e.g., Doing one thing at a time, Listening to music while I work of work on do something). Have  For example, "Would you rather work with a partner?" "Would you rather stand up or sit down while learning new?" "Give reasons for something and up or sit down while learning new?" "Give reasons for something "Think about big questions up and up or sit down while learning new?" "Give reasons for something "Think about big questions up and up or sit down while learning new?" "Do a hands-on activity Ask students about learning preferences (e.g., Doing one thing at a time, Listening to music while I work, Having a choice about how to do something). Have  For example, "Would you rather work with a partner?" "Would you rather work in a partner?" "Would you rather work in a partner?" "Would you rather stand up or sit down while learning new?" "Give reasons for something "Think about big questions up a partner?" "Would you rather work in a partner?" "Would you rather work in a partner?" "Would you rather work in a partner?" "Bound in the work or work in a room where there's noise or music in the background?" "Do a hands-on activity Ask students about learning preference choices related to an upcoming task. For example, "Next week, we are going to be learning about how to use Google Docs.	Styles Inventory that asks	rather? to pose questions	choices based on this list to
products. The inventory can be delivered orally as an interview with spoken responses or hand signals to indicate strength of preference, or students can circle responses on paper copies.  Provide and/or read a list of learning preferences (e.g., Doing one thing at a time, Listening to music while I work or work or work or work in a down while have do something). Have  work by yourself or work with a partner?" "Would you rather stand up or sit down while learning new?"  "Would you rather work in a room quiet work or work in a room where there's noise or music in the background?"  Expose students to varied techniques for a skill like memorization. Observe which technique seemed to work best for each student, in addition to asking students which  work by yourself or work with a partner?" "Would you rather some astory interview with a partner?" "Would you rather some and up or sit down while in a town while in a room work in a room in the background?"  Expose students to varied techniques for a skill like in upcoming task. For example, "Next week, we are going to be learning about how to use Google Docs.	students about preferences	related to learning preference.	assign them an entry points
be delivered orally as an interview with spoken responses or hand signals to indicate strength of preference, or students can circle responses on paper copies.  Provide and/or read a list of learning preferences (e.g., Doing one thing at a time, Listening to music while I work, Having a choice about how to do something). Have  partner?" "Would you rather work in a give reasons for something "Would you rather work in a quiet work or work in a room where there's noise or music in the background?"  Expose students to varied techniques for a skill like memorization. Observe which technique seemed to work best for each student, in addition to asking students which  Tell, read, or hear a story —Give reasons for something —Think about big questions —Use my senses —Work with numbers —Do a hands-on activity  Ask students about learning preference choices related to an upcoming task. For example, "Next week, we are going to be learning about how to use Google Docs.	in creating certain kinds of	For example, "Would you rather	task (see <u>Entry Points</u> ): <i>Right</i>
interview with spoken responses or hand signals to indicate strength of preference, or students can circle responses on paper copies.  Provide and/or read a list of learning preferences (e.g., Doing one thing at a time, Listening to music while I work, Having a choice about how to do something). Have  stand up or sit down while learning new?"  something	products. The inventory can	work by yourself or work with a	now, I think I would prefer to
responses or hand signals to indicate strength of preference, or students can circle responses on paper copies.  Provide and/or read a list of learning preferences (e.g., Doing one thing at a time, Listening to music while I work, Having a choice about how to do something). Have  learning something new?"  "Would you rather work in a room quiet work or work in a room where there's noise or music in the background?"  Expose students to varied techniques for a skill like preference choices related to an upcoming task. For example, "Next week, we are going to be learning about how to use Google Docs.	be delivered orally as an	partner?" "Would you rather	Tell, read, or hear a story
indicate strength of preference, or students can circle responses on paper copies.  Provide and/or read a list of learning preferences (e.g., Doing one thing at a time, Listening to music while I work, Having a choice about how to do something). Have  "Would you rather work in a room quiet work or work in a room where there's noise or music in the background?"  Do a hands-on activity  Ask students about learning preference choices related to an upcoming task. For example, "Next week, we are going to be learning about how to use Google Docs.	interview with spoken	stand up or sit down while	Give reasons for
preference, or students can circle responses on paper copies.  Provide and/or read a list of learning preferences (e.g., Doing one thing at a time, Listening to music while I work, Having a choice about how to do something). Have  quiet work or work in a room where there's noise or music in the background?"  Expose students to varied techniques for a skill like memorization. Observe which technique seemed to work best for each student, in addition to asking students which  —	responses or hand signals to	learning something new?"	something
circle responses on paper copies. The background?" The ba	indicate strength of	"Would you rather work in a	Think about big questions
copies. the background?"Do a hands-on activity  Provide and/or read a list of learning preferences (e.g., Doing one thing at a time, Listening to music while I work, Having a choice about how to do something). Have the background?"  Expose students to varied techniques for a skill like preference choices related to an upcoming task. For example, "Next week, we are going to be learning about how to use Google Docs.	preference, or students can	quiet work or work in a room	Use my senses
Provide and/or read a list of learning preferences (e.g., Doing one thing at a time, Listening to music while I work, Having a choice about how to do something). Have  Expose students to varied techniques for a skill like memorization. Observe which technique seemed to work best for each student, in addition to asking students which  Ask students about learning preference choices related to an upcoming task. For example, "Next week, we are going to be learning about how to use Google Docs.	circle responses on paper	where there's noise or music in	Work with numbers
learning preferences (e.g.,  Doing one thing at a time,  Listening to music while I  work, Having a choice about how to do something). Have  techniques for a skill like memorization. Observe which technique seemed to work best for each student, in addition to asking students which  preference choices related to an upcoming task. For example, "Next week, we are going to be learning about how to use Google Docs.	copies.	the background?"	Do a hands-on activity
Doing one thing at a time, Listening to music while I work, Having a choice about how to do something). Have  memorization. Observe which technique seemed to work best for each student, in addition to asking students which  an upcoming task. For example, "Next week, we are going to be learning about how to use Google Docs.	Provide and/or read a list of	Expose students to varied	Ask students about learning
Listening to music while I technique seemed to work best work, Having a choice about how to do something). Have technique seemed to work best going to be learning about how to use Google Docs.	learning preferences (e.g.,	techniques for a skill like	preference choices related to
work, Having a choice about how to do something). Havefor each student, in addition to asking students whichgoing to be learning about how to use Google Docs.	Doing one thing at a time,	memorization. Observe which	an upcoming task. For
how to do something). Have asking students which how to use Google Docs.	Listening to music while I	technique seemed to work best	example, "Next week, we are
	work, Having a choice about	for each student, in addition to	going to be learning about
students respond, circle, or technique they preferred. Would you prefer to hear	how to do something). Have	asking students which	how to use Google Docs.
	students respond, circle, or	technique they preferred.	Would you prefer to hear
sort each preferences into about it from the teacher, go	sort each preferences into		about it from the teacher, go

one of two categories: LIKE ME or NOT LIKE ME (idea from Tomlinson, 2004).		to the site and try to figure it out yourself, or watch a video overview of the site before trying it?"
Give students a brief survey	Use words and pictures to	When you are learning about
to guide their selection of	show and tell about what this	famous people, do you prefer
Tri-Mind tasks differentiated	classroom would look like if it	to
for Sternberg intelligence preference (see Learning	were your best place to learn.	Listen to a real person/ teacher talk
Profile Strategy: TriMind on		Watch a video about the
page 107). I like <i>figuring</i>		person
out how things workusing		Read about the person
my imagination giving practical advice to friends		Something else:

### Examples of Adjusting Content, Process, and Product for Student Learning **Profile**

#### Example Teacher Talk Strategy Content Taking in content by reading The it, listening to it, or viewing it information, Seeing models or ideas, and demonstrations that illustrate skills that a concept or skill students will Presenting content whole-totake in or part and part-to-whole Providing different entry grapple with in order to points (Gardner, 2006) into reach the content (storytelling, giving learning reasons, thinking big, goals activating senses, working with numbers, or using experience) **Process** Making sense of ideas orally, The activities visually, by acting them out, through or in writing which Competing against self or works. students take competing against others in and make Varying roles or lenses for sense of key processing information or ideas in the applying skills Offering different types content graphic organizers using essential Working in different places in knowledge the classroom and skills Processing/reflecting with others with others or processing/reflecting alone Using analytical, practical, or

creative thinking

preference

Using thinking associated with a multiple intelligence

- Go to two of the four stations to learn about Jamestown There are books at station 1,
- videos on iPads at station 2, written primary sources at station 3, and images at station 4.
- Watch the BrainPop video to better understand the states of matter.
- You can study how different land and aquatic animals use different structures to perform the same function OR study how different land and aquatic animals perform different functions with the same kind of structure.
- Choose an entry points activity to get you thinking about the water cycle. There is a storytelling task, a five senses task, a giving reasons task, and hands-on' experience task.
- *Use the multi-operation problem to show or* tell in words, pictures, or actions why an order of operations is needed and how it
- Play the clothespin football dice game to practice adding and subtracting positive and negative integers. You can play against yourself or play with a partner.
- Rank your choices for jobs in tomorrow's class discussion. Think about which one you are best at and make that #1.
- There are two kinds of organizers you can use to gather information about your found father. Choose one or come up with your own way to organize. Check with me first!
- I will be showing you three different ways to record your measurements. You will choose and use the one that makes the most sense to you.

- You can work on the rug, on the bean bag chairs, or at your desk. Choose a spot where you think you'll get the most work done.

  Deside whather you will wrent to do the
- Decide whether you will want to do the experiment I modeled alone or with a partner.
- Sort the sentences into complete and incomplete OR find the incomplete sentences and make them complete.
- Identify and show the relative importance of events in the story using a bar graph OR the journalist's inverted pyramid. Then, write your summary.
- Show the facts you learned about westward expansion by drawing a series of pictures, making a recording, or acting out a short skit. Include one fiction part to try to trick your classmates.
- Record your presentation.
- Make a list of rules with reasons, write a simple how-to guide, or deliver a monologue.
- Write a multi-entry diary about the water cycle from a water droplet's point of view, OR design and a visual that can be used with young children that answers the questions, "Where does water come from, and where does it go?"
- Create musical rhymes OR helpful diagrams with pictures that would help someone remember the different states of matter and types of each one.

Product
How
students
demonstrate
and extend
what they
know,
understand,
and can do
as a result of
a unit or
series of

lessons

- Product modes or options that vary by means of expression
- Using varied technologies in developing a product
- Developing products that emphasize analytical, practical, or creative thinking
- Developing products that are associated with a multiple intelligence preference

**Learning Profile Strategy:** Entry Points

#### Strategy Summary

Entry points is a strategy developed by Howard Gardner for inviting students in a topic, concept, or text through one of six doorways. The idea is to leverage a learning preference to pique students' interest in what they are about to study. Each entry point is derived from Gardner's multiple intelligences. The table below shows each entry point in Gardner's strategy, some student-friendly names, and a brief description. The framework can also be used to design culminating tasks, which are better characterized as "exit points."

Entry Point (Gardner, 2006)	Student Friendly Name (Doubet & Hockett, 2017)	Brief Description	Potential Task Starters
Narrational	Storytelling	Use story or narrative structure to communicate ideas or principles.	Read or listen to a story about/Tell a story about
Logical	Giving Reasons	Use reasoning, argument, or cause-and-effect relationships.	Make a case that/Prove/ Decide how/Provide a good explanation for
Quantitative	Looking at Numbers	Provide or examine data; examine numerical relationships.	What do these numbers say about?/Find the connection between
Existential	Thinking Big	Pose or think about big questions about life and the world; consider big ideas; make meaning.	Think about/Here's a big question for you:
Aesthetic	Activating Senses	Emphasize sensory or surface features; activate the five senses.	Use your five senses to/Describe howlooks, tastes, smells, feels, or sounds
Experiential	Using Experience	Use a hands-on approach, deal directly with materials (physically or virtually), experience simulations, give personal explanations.	Sort/Classify/Use/ Imagine that you're in this situation/You're a faced with the problem of

#### **Differentiation Connection**

<b>Differentiation of Content</b>	Differentiation of Process	Differentiation of Product	
The materials, text, or	Each entry point draws on	Adjusting the	
information can fit the entry	different kinds of thinking	product/output of each task	
point or task parameters. For	processes for taking in and	(e.g., written,	
example, spoken, written, or	making sense of content.	drawn/sketched, spoken,	
video narratives; various		selected).	
pictures, images, or symbols;			
and graphs or sets of			
numbers.			

#### **Design Guidelines**

- 1. Select a concept, topic, skill, or text. If using entry points at the beginning of the unit, this would be the essence of what the unit is about (e.g., the sun, moon, and stars; consumers and producers; all about Tennessee; measuring things; addition and subtraction; or telling a story). Entry points do not need to connect to shared learning goals (KUDs). The topic is sufficient to unite the tasks.
- 2. Brainstorm entry points. Use the names and descriptions of each entry point to generate task ideas. Focus on the kind of *thinking* each one calls for—not on a kind of product. Note: It's not necessary to come up with tasks for all six entry points; use only those that make sense. Several options can be enough. Consider using tasks that are similar to or sampled from tasks that all students will be exposed to or work with later in the unit.
- **3. Refine and balance the tasks.** Make sure that the entry point tasks are equalized in cognitive demand and time required. Remember that the purpose is to give previews of unit content, not to engage students in elaborate activities or product development.

#### **Implementation Guidelines**

- **Student choice.** Let students choose from entry point options, or give students an entry point task based on a simple survey derived from the task options. Students can work independently or in partners, depending on task design.
- **Labeling and reinforcing tasks.** Label the tasks with the student-friendly name or other engaging terms that elevate the status of all task options. Use icons or images (on the screen, on cards) to show the essence of each task (e.g., a book for storyteller, a head for thinking big).
- **Managing task responses.** Bring students together in same-task pairs or groups and/or mixed-task pairs or groups to share their ideas. Follow with a whole-class discussion to synthesize key ideas and generate questions for the upcoming unit.

#### **Entry Points Examples**

**Topic:** Persuasion Grade Level: 3-5

These tasks are designed to pique student interest in and get them thinking about persuasion in the context of writing opinions that are persuasive, reading and analyzing opinion writing, and/or listening to persuasive speeches.

#### **Numbers Task Storytelling Task Reasoning Task** Tell a story about a time you Read Don't Let the Pigeon Write a short list of tips called persuaded someone to do or *Drive the Bus!* and *The Pigeon* "Top 10 Ways to Persuade think something OR that Wants a Hot Dog. What makes People." Be sure to that your #1 way is your idea for the someone persuaded you. the duckling more persuasive than the pigeon? Note: Can Include what you or the best way. substitute advertisements. person did to be persuasive. **Senses Task** Think Big Task **Experience Task** What makes someone's idea Work with a friend to write Imagine that you are trying to or opinion persuasive? More and act out a situation that persuade your teacher to persuasive? Less persuasive? shows one person trying to give you an extra recess Can an opinion ever be *too* <u>persuade</u> another person. today. Write a convincing 5persuasive? Why or why not? There's one catch; you sentence paragraph. Try to Give examples. cannot talk or mouth words base your reasons on your during the skit! experiences as well as the teacher's.

Tonic: World Geography (Perspective) Grade Level: 3

Topic: World Geography (Perspective) Grade Level: 3					
Through the lens of <i>perspective</i> , these tasks introduce students to globes and maps, including					
their purpose, function, similarities, and differences.					
Storytelling Task	Reasoning Task	Numbers Task			
Read <i>Me on a Map.</i> What	Go to the online maps that	Numbers on a globe can help			
perspectives does the book	have are bookmarked for	give <u>perspective</u> . Search the			
capture or show? Which	you. From the <u>perspective</u> of	classroom globe to find all			
perspectives does the book	someone planning an	the ways numbers are used.			
NOT show? What would you	around-the-world road trip,	Make a chart or list that			
add?	decide and explain how you	shows what you find.			
	might use each one.				
Think Big Task	Senses Task	Experience Task			
Make a Venn Diagram or	Look closely at different	Use Google Earth to explore			
other visual that compares	maps of the same continent.	different <u>perspectives</u>			
and contrasts maps and	Select a winner for <i>best map</i>	starting with your house or			
globes. Be sure to include	based on which one is the	our school and zooming out			
what each one can do or	most pleasing to your eye	to the globe.			
show that the other can't do.	and gives the best				
Think especially about the	perspective.				

perspective of each oneThink	
especially about the	
perspective of each one.	

**Topic:** Order of Operations **Grade Level:** 5

These five tasks ask students to consider the mathematical concept of <i>order of operations</i>
prior to a formal introduction.

These five tasks ask students to consider the mathematical concept of <i>order of operations</i>					
prior to a formal introduction.					
Storytelling Task	Reasoning Task	Numbers Task			
Write a math story about	Look at this problem: 5(3+7) –	Create a problem with			
triplets who go shopping for	4 + 1 – 12 = Is there a	multiple operations (+ - x ÷).			
clothes at a store that is	right <u>order</u> and a wrong	Then, solve it as many ways			
having a big sale. Say what	order for solving it? Why do	( <u>orders</u> ) as you can. Circle the			
they bought, in what <u>order,</u>	you say so?	answer in the order that you			
and how much the total was.		think is right.			
Use words and numbers.					
After the story, write the					
number model(s).					
Think Big Task	Experience Task				
When does the <u>order</u> in	Let us say a room in your				
which you do something	house is very messy and your				
matter? When does it not	mom/dad is making you				
matter? Make a two-column	clean it. What would you do				
list of your ideas. Include	first? Next? After that? Would				
examples from the math	that <u>order</u> make your job				
world.	easier or harder? How so?				

**Topic:** Ecosystems **Grade Level:** 4

Students engage with these tasks at the beginning of a study ecosystems, after an introduction to what an ecosystem is, including examples of types and how they work. All students do the storytelling task (alone or with a partner) and then choose from the

stade into the free free and the free transfer and the free transf				
numbers, senses, or experience task.				
ALL STUDENTS: Storytelling Task	Numbers Task			
Read <i>The Lorax</i> . Be ready to share how you	Review the data provided about the [bee]			
think the Lorax would answer the question,	population in our area from different years.			
"What role do trees play in an ecosystem?"	Use what you know about ecosystems to			
	come up with hypothesis about why the bee			
	population has changed.			
Senses Task	Experience Task			
Write a detailed description of an ecosystem	Depict our classroom (or school) as an			
from the point of view of an organism in	ecosystem. Be ready to explain what happens			
that system. Include the organism's role,	to the system when certain parts of it aren't			
	working.			

and what he/she hears, sees, smells, tastes,	
and feels.	

**Topic:** Parts of Speech **Grade Level:** 3–5

These tasks can be used to motivate students at the beginning of a series of lessons on parts of speech. Students choose based on their learning preference but can be steered toward the tasks that rely more or less on prior knowledge of parts of speech.

Storytelling Task
Read/watch <i>The Boy Who</i>
Loved Words. Then, choose
five words from the book to
look up in the dictionary. Find
out each one's meaning and
part of speech.
l .

# Reasoning Task Look at the <u>lists</u> of most commonly-used works in English by parts of speech. Focus on the top one to two in each category. Does it make sense that these are the most used? Why or why not?

# Find a page in your favorite book or a book in your book box. Use numbers to find out what the #1, #2, and #3 part of speech is on this page.

**Numbers Task** 

#### **Senses Task**

Write a one-paragraph *Mad Lib* that takes place in a restaurant. Refer to the example as a model. Make sure different kinds of words/ parts of speech are missing in different sentences and use language that speaks to the five senses.

#### **Experience Task**

Choose three words from the jar. These are words that can be different parts of speech, depending on how they are used. Come up with at least three sentences for each word, with the word playing a different role in each sentence. Choose one set to act out for the class so that they can see the parts the word can play.

**Topic:** American Revolution **Grade Level:** 4

These entry points task are well-suited to stations designed as hooks at the beginning of a unit on the American Revolution. Students can choose a certain number of stations to visit or can rotate through all with a partner.

#### **Storytelling Task**

Watch this three-minute animated song that tells a story of the American Revolution. Your teacher will give you the lyrics. What does this cartoon tell you about *why* the American Revolution happened?

#### **Reasoning Task**

This cartoon was published in a newspaper during the time of the American Revolution and is now very famous. It depicts a snake cut into pieces, each of which is labeled with the abbreviation of a colony. What do you think it means? Think about the picture *and* the slogan "Join or Die".

Numbers Task	Think Big Task	Experience Task	
Look at this infographic on	What is a revolution? Look up	Give an example of a time in	
the American Revolution.	a definition, if you'd like!	your life when <i>you</i> revolted	
What are the most	Does a revolution have to	against someone or	
interesting or surprising	involve government? Give	something. Include an	
numbers? Which numbers do	examples of kinds of	explanation of against whom	
you have questions about?	revolutions (big or small) that	or what you revolted, <i>how</i>	
	do not involve war.	you revolted, and why.	

#### **Learning Profile Strategy: Tri-Mind**

#### Strategy Summary

Tri-Mind is a strategy based on Robert Sternberg's Triarchic Theory of Intelligence, which views intelligence as having three components, all three of which are necessary to be what Sternberg calls successfully intelligent.

- **Analytical (Schoolhouse) Intelligence:** Analyzing, comparing/contrasting, seeing the parts and the whole, examining cause and effect, and thinking logically or sequentially. This kind of intelligence is emphasized in traditional school instruction and on standardized tests.
- **Practical (Street-Smart) Intelligence:** Putting ideas into action, applying knowledge and skills in real situations, carrying out tasks efficiently, and engaging in on-the-spot problem-solving. This kind of intelligence is emphasized in Girl Scouts/Boy Scouts.
- **Creative (Innovative) Intelligence:** Imagining possibilities, thinking out of the box, inventing, innovating, proposing unique solutions, or generating novel insights. This kind of intelligence is emphasized in technology development and in the advertising world.

In Tri-Mind, the teacher designs tasks that emphasize the thinking represented in each of these intelligences and are aligned with the same learning goals (KUDs). Tri-Mind can also be used as a framework for planned varied tasks throughout a unit that all students will complete.

#### **Differentiation Connection**

Differentiation of Content	Differentiation of Process	Differentiation of Product	
<ul> <li>The materials, text, or information can fit the intelligence type or task demands. For example:</li> <li>Graphs, charts, bulleted text, informational narratives, and opinions for analytical intelligence</li> </ul>	Each of the intelligences draws on different kinds of thinking processes for taking in and making sense of content. For example:  • Analyzing, breaking down, and evaluating for analytical intelligence	Using products in tasks that employ or require each intelligence. For example:  Timelines, tables, flow charts, and classifications for analytical intelligence  Letter of advice, how-to list/guide, and note to	

- How-to texts or videos, demonstrations, and models for practical intelligence
- Designs, images/graphics, and synthesis of multiple sources for creative intelligence

Note: Content of any kind can be matched with tasks that emphasize each intelligence.

- Applying, adapting, and transferring for practical intelligence
- Creating, designing, and synthesizing for creative intelligence
- self for practical intelligence
- Role-play, sketch of a new idea, advertisement, and symbol for creative intelligence

#### **Design Guidelines**

- 1. **Identify the learning goals and purpose of the Tri-Mind tasks.** Articulate what students should understand, know, and be able to do as a result of Tri-Mind tasks. Tri-Mind *can* be used to design hook activities, but it is best reserved for designing sense-making tasks and summative products.
- **2. Design or choose a base task.** Design or select a rich task that aligns with the learning goals and fits the instructional or assessment purpose. Then, ask whether the task emphasizes analytical, practical, and/or creative intelligence.
- **3.** Use task frames associated with each intelligence to create other versions of the task. The frames in the table below are scaffolds for drafting analytical, practical, and creative tasks. Final versions of tasks may sound different, but the prompts are helpful brainstorming tools.

<b>Analytical Task Starters</b>		Practical Task Starters		Creative Task Starters	
•	Evaluate [this	•	Give advice to someone	•	Come up with a new
	situation] for clues		about		way to
	about	•	Apply what you learned	•	Suppose/imagine
•	Compare and		about [this topic] to help		that
	contrast		[this person/group]	•	Invent a new way
•	Give step-by-step		solve		to
	directions for	•	Teach someone how to	•	Write a skit that
•	Explain how [this]	•	In the role ofdecide		shows
	works the way it		how	•	Use words and/or
	does.	•	Decide how someone in		pictures to design
•	Describe and show		the real world could	•	Connect [this] to
	how the parts of	•	Use your own		[this] to show
•	Carefully studyto		experiences to	•	Changeso that
	decide the best	•	Think about how a real	•	Predict what might
•	Prove that		person		happen if

**4. Refine and balance the tasks.** Make sure that the Tri-Mind tasks are equalized in cognitive demand and time required for completion.

# **Implementation Guidelines**

- **Student choice.** Let students choose from Tri-Mind options, or give students the task that matches their preferences on a simple survey. As a general rule, students should work with their preferred intelligence task when content or skills are new or when the task is an assessment. When content or skills are more familiar, the teacher might ask students to work with a task outside their comfort zone.
- ☑ Labeling the tasks. Using the terms analytical, practical, and creative with students is not necessary, but doing so can work in the context of teaching them different ways to think about strengths and differences. Label the tasks with the student-friendly name or other engaging terms that elevate the status of all task options, or simply number the tasks.
- Management. Bring students together in same-task pairs or groups and/or mixed-task pairs or groups to share their work. Follow with a whole-class discussion to synthesize key ideas.

# **Tri-Mind Examples**

**Topic:** Multiplication and Division Situations **Grade Level:** 3–5

**Related Standards:** Operations and Algebraic Thinking; Standards for Mathematical Practice

Learning Goals (KUDs)		
Know	Understand	Do
<ul> <li>Add to, take from, put together, take apart, compare</li> </ul>	<ul> <li>Solving problems means making sense of problems.</li> </ul>	<ul> <li>Solve contextual problems involving addition and subtraction.</li> </ul>
<ul><li>1-10 (20, 30) addition/ subtraction facts</li><li>Strategies for solving</li></ul>	<ul> <li>Skilled mathematicians can solve problems, explain how to solve</li> </ul>	<ul> <li>Make sense of problems and persevere in solving them.</li> </ul>
contextual addition/ subtraction problems	problems, and model problems.	<ul> <li>Articulate mathematical ideas.</li> </ul>

**Context:** These tasks provide three ways to extend addition/subtraction problem-solving within the 3–5 standards related to operations and algebraic thinking and to engage with the standards for mathematical practice. The KUDs above are broadly written, not grade-level specific. Students can solve the same problem or different problems that are tiered for readiness.

Analytical Task	Practical Task	Creative Task
Solve the problem. Then, give	Solve the problem. Then,	Solve the problem. Then,
someone else step-by-step	come up with a list of	come up with another
directions for how to solve it.	practical tips (do's and don'ts)	problem like it for someone

Include how the person can tell if they're right.

for solving this *kind* of problem.

else to solve. Use different numbers and a different situation.

**Topic:** Symmetry **Grade Level:** 4

Related Standards: 4.G.A.3

Learning Goals (KUDs)		
Know	Understand	Do
<ul> <li>A shape has symmetry if a line of symmetry divides the shape into two identical halves.</li> <li>A shape can have more than one line of symmetry.</li> </ul>	<ul> <li>Symmetry is everywhere         (e.g., in the natural world,         the human-made world).</li> <li>Symmetry is a property of         shape.</li> <li>Symmetry creates         <u>balance</u> and contributes         to <u>structure</u> and <u>function</u>.</li> </ul>	<ul> <li>Recognize and draw lines of symmetry for two- dimensional figures.</li> </ul>

**Context:** These three tasks are designed to give students a sense-making experience around the concept of symmetry. Students can choose from the tasks or do all three individually, with a partner, or in a station rotation. Alternatively, all students can complete the analytical task as a formative assessment check and then choose the practical or creative tasks as a next step. The environment from which students are selected shapes can be changed to the playground, nature, or selected art work.

-	
Find three shapes in our	Choos
classroom that DO have	symm
symmetry, and three shapes	classr
that do NOT have symmetry.	symm
Use what you know about	list of
lines of symmetry to PROVE	object
that your classifications are	do its
true.	

**Analytical Task** 

# Choose your favorite symmetrical shape in the classroom. Show its symmetry. Then, make a list of all the ways that this object's symmetry helps it do its job.

**Practical Task** 

# Option 1: Choose a shape in the room that *doesn't* have symmetry. Draw a picture of what this object would look like if it *did* have symmetry. (What you draw should have lines of symmetry.) Option 2: Choose your favorite symmetrical shape in the classroom. Show the lines of symmetry. Then, write/tell a funny story about what would happen if this object *didn't* have symmetry.

**Creative Task** 

**Topic:** Summarizing a Text **Grade Level:** 4–5

Related Standards: 4.RL.2-4.RI.2/5.RL.2-5.RI.2

# **Learning Goals (KUDs)**

# **Know**

- Summarizing is retelling the most important events from a text in your own words.
- The details in a text make the story or information clearer or more interesting, but they don't belong in a summary.

# **Understand**

- Summarizing a text involves understanding the <u>essence</u> or <u>core</u> of the text.
- Summarizing gives a reader the <u>power</u> to persuade, inform, or entertain others with ideas or events from a text.

## Do

- Summarize a text.
- Distinguish the most important parts of a text (e.g., theme, plot, central message, main idea) from the details in a text.

**Context:** Students have been learning about how to summarize a text via direct instruction, modeling, and examples of well-written and poorly-written summaries. With these tasks, they are transferring what they have learned to a new fictional or informational text. The text can be common or differentiated. Students can share, compare, and/or give feedback on another's summaries in same- or mixed-task pairs/groups.

# **Analytical Task**

Analyze the events of [ideas in] the story [text] to determine which ones are the most important using a graph of your choice (e.g., line, pie, bar). Your graph should represent the difference between how important each event [idea] is to the story [text]. Then use your graph to write a summary. The summary should make sense with your graph.

# **Practical Task**

Imagine you are an online news reporter who has covered the story [text] we just read. Your task is to write an online news brief—or summary—that gives readers what they need to know about what happened [what it is about]. Your editor wants to see a copy of your notes on the story [text], so that he/she can see what you decided not to include.

# **Creative Task**

Draft storyboard of the text that depicts the most important events [ideas]. In between each frame, use smaller boxes to illustrate less important events [ideas]. Write a brief caption beneath each box that captures the essence of the event [idea]. Then use the most important events your storyboard to write a summary.

**Topic:** Characterization **Grade Level:** 3–5 **Related Standards:** RL 3.1, 3.2, 33; RL 3.3, 4.3, 5.3

# **Learning Goals (KUDs)**

# **Know**

- Characters are people, things, or animals in a story that interact with the conflict and move the plot forward through their actions.
- An inference is a conclusion drawn from prior knowledge and evidence or clues from text.

# **Understand**

Readers use <u>seen and</u>
 <u>unseen</u> details from the
 text and their own
 knowledge to make
 <u>inferences</u> about
 characters, about what
 the author is saying.

## Do

- Analyze characters in a story using key details.
- Refer to details and examples from a text when referring to what a text implicitly and explicitly says.

**Context:** These tasks are designed for shared or differentiated texts. Students can choose from the three tasks, or all students can complete the analytical task and choose from the practical or creative task as a part 2.

# **Analytical Task**

What misunderstandings or misconceptions could someone have about this character? The someone could be a reader of the story, or another character in the story. Generate a list. Then, correct these misconceptions using evidence from the text.

# **Practical Task**

What advice does this character need at this point in the story? Counsel him/her based on your understanding of him/her and other characters, as well as the events of the story. Your advice should be based on evidence from the text.

# **Creative Task**

What will this character do or say next? Make predictions about the character's future decisions and actions, based on what he/she has done or not done so far. Your predictions should be rooted in evidence from the text.

**Topic:** Animal Adaptation and Survival **Grade Level:** 3

Related Standards: 3.LS4.1-2

# **Learning Goals (KUDs)**

# Know

- A <u>biome</u> is a community of plants and animals that have common characteristics in the habitat they share.
- Specific animal structures and functions that aid survival

# **Understand**

- To <u>survive</u> in naturallychanging <u>environments</u>, animals must adapt.
- Animals' internal and external <u>structures</u> help them adapt and survive.

### Do

- Explain the cause and effect relationship between a naturally changing environment and an organism's ability to survive.
- Infer that animal adaptations help them

- survive in land and aquatic biomes.
- Analyze the internal and external structures that animals have to support survival.

**Context:** Students have been studying how plants and animals adapt and survive in their environments. They choose one animal to research further in the context of one of these three tasks.

# Analytical Task What it Takes to Survive.

Biomes are dangerous places! Does your animal have what it takes to survive? Make your case by annotating pictures of the animal and its biome. Show the characteristics of the biome and how the internal and external structures of the animal help it survive and adapt there--even through changes.

# **Practical Task**

Survival Lesson. You are a teacher of young animals. (Think Mr. Ray in Finding Nemo!) Plan a how to survive lesson that teaches your students about the characteristics of the biome in which they live and how their internal and external structures help it adapt to survive in it when it changes. Your lesson can use words and pictures.

# **Creative Task**

Dear Diary...Imagine that you are an animal who has lived in your biome for many years.
Write a diary entry from your point-of-view that tells about how you have survived in your biome through all the changes.
Be clear about the characteristics of your biome and how your internal and external structures have helped you adapt and survive. You can draw pictures to show your thinking too!

**Topic:** Innovations of the Industrial Revolution Grade Level: 4

Related Standards: 4.57, 4.58

# **Learning Goals (KUDs)**

# **Know**

- Innovations of the Industrial Revolution (e.g., cotton gin, steam power, factory system, watermills)
- Facts about how innovations
   changed American life
- Timeframe, causes, and effects of the Industrial Revolution

# **Understand**

- In American history, <u>innovation</u> has sometimes led to <u>revolution</u> (big and small).
  - Innovation can motivate change.

# Do

 Analyze and describe the motivators of the Industrial Revolution.
 Evaluate how an innovation changed life in
 America/Tennessee.

**Context:** These three tasks can be presented as choice-based options for students to show what they have learned about how one or more innovations changed life in America or

Tennessee. The changes could be positive or negative, big or small, but should be historically accurate.

Analytical Task	Practical Task	Creative Task
Make a flow chart or diagram	Someone says to you, "The	Plan and act out a skit that
that shows how an innovation	[cotton gin] didn't really	shows what you have
developed during the Industrial	change life too much in	learned about how an
Revolution changed life in	America/Tennessee." Apply	innovation during the
America/Tennessee for some or	what you know about the	Industrial Revolution
many people. Use specific	development of innovation	changed life in
examples to show what life was	during the Industrial	America/Tennessee. Be
like before and after the	Revolution to come up with a	creative but make sure that
innovation.	clear, detailed explanation	your skit is based on
	that teaches the person the	examples of things that
	truth. Use examples that are	really happened (they are
	historically accurate.	historically accurate).

**Learning Profile Strategy:** Thinking Caps

# Strategy Summary

Thinking caps (Tomlinson & Sousa, 2014) is a variation of Edward DeBono's *Six Thinking Hats*, a strategy developed for problem-solving discussions in the business world. Students use various thinking caps to discuss an issue, question, or problem. For example, ideas for a new classroom rule or routine, the best design for a class experiment on plant growth, or which character from recently read stories would be the ideal friend. The goal of thinking caps is to arrive at a set of agreed-upon solutions or conclusions related to the topic at hand. Students participate in the discussion wearing one of five caps.

Blue Cap	Yellow Cap	Green Cap	Orange Cap	Red Cap
Values facts,	Intuitive; trusts	Imagines	Thinks	Looks for
information, and	his/ her feelings	possibilities;	practically;	problems and
data	or gut;	thinks creatively;	brings people	flaws (red flags)
	concerned with	looks for	together to solve	in suggestions;
	the feelings of	innovative	the problem	cautious
	others	solutions		

# **Differentiation of Content**

- Students take in (i.e., watch, read, hear) different information and ideas prior to the discussion.
- Teachers conduct different small-group thinking caps discussions focused on various topics or issues.

# **Differentiation of Process**

- Students volunteer for the thinking caps that they want to wear. They stay in the cap for the duration of the discussion or switch caps middiscussion.
- Teacher pairs or groups students heterogeneously or homogeneously by thinking cap strength to come up with a solution or complete a task.

# **Design Guidelines**

- **1.** Begin with a central idea, key question, or understanding goal for all students to discuss or problem solve.
- 2. Decide which thinking caps to use. Use only the caps that fit the topic and purpose.
- **3.** Have students meet in similar-cap partnerships for brief discussion before participating in mixed-cap discussion.

# **Implementation Guidelines**

- ☑ **Introducing thinking caps.** Give context for thinking caps by discussing the meaning of the phrase "put on your thinking cap," including the idea that there are different kinds of thinking that people can do, especially when it comes to solving a problem. Provide a brief overview of each thinking cap and have students brainstorm friends, family members, and characters or figures who best show each kind of thinking.
- ☑ **Managing thinking caps.** Strategies for managing thinking caps include the following:
  - Have students make caps from colored paper to wear during discussion to help remember their roles.
  - Use thinking caps first in whole-class discussion, with all students wearing the same cap, to model the purpose of each one. A fishbowl model or concentric circles structure can also be used to introduce and model the thinking caps working together.
  - The sound bites below can also be copied on colored paper and used to train or remind students about what each role involves.

Blue Cap	One fact we know is
	The numbers show that
	The information says
	According to [the story, the author, the article]

Yellow Cap	I'm feeling like		
	I feel that		
	I wonder how would feel about		
	My gut says		
Green Cap	<b>W</b> hat about this idea?		
	Here's a new thought		
	I can imagine		
	One possibility is		
Orange Cap	In real life		
	I see a connection between		
	That would work because		
	What is saying makes sense with		
Red Cap	Red flag!		
	That's a good idea, but what about?		
	One problem I see is		
	We should be careful about		

# Thinking Cap Examples

Thinking caps inquiries and discussions are applicable across disciplines for goals such as:

- ☐ Investigating or probing a current issue
- ☐ Exploring an essential question
- ☐ Generating a solution to a problem
- ☐ Interpreting data, findings, or results
- ☐ Analyzing causes and effects
- ☐ Designing an experiment
- ☐ Making the case for or against an idea
- ☐ Debating the merits or themes of a text

This chart features questions and question stems that can be tailored for use in a Thinking Caps discussion.

EL	A	So	cial Studies
•	What would/should this character do	•	How can we (e.g., our class, our school, our
	if?		community) solve the problem of?
•	What is <i>really</i> the theme or central	•	Which map(s) best shows?
	message?	•	What do this picture/image tell about?
•	What is the author trying to say about?	•	Is this person from the past a hero?
•	What are the takeaways of this book/	•	In the real world, what are some solutions to
	article?		the problem of?
•	Which text does the best job of?	•	Do these documents support the conclusion
•	Do these ideas work in real life?		that?
		•	What might have happened to [this people
			group, that civilization, that settlement]?

### Science

- What are our best guesses about why...?
- How can we find out/discover...?
- How should we design an experiment to find out...?
- How can we use what we found out to solve the problem of...?
- Is this idea supported by our evidence?
- What would the next version of this design look like?
- If it is scientifically possible to...? Should it be done?

### Math

- What is the best strategy for...?
- What are all the ways this problem can be solved? Is there a best way?
- Does this answer makes sense?
- How can we best show...?
- How can we use the math we've learned to solve the problem of...?
- When would that strategy not work? How do we know?
- To what real-life situations would this apply?

**<u>Learning Profile Strategy</u>**: Visual/Auditory/Kinesthetic-Tactile (VAK)

# Strategy Summary

VAK describes three modes for taking in, processing, and absorbing information. Input associated with each one follows:

- **Visual:** text, numbers, images, graphics, models, videos, flowcharts, diagrams, tables, reenactments
- Auditory: voice, audio and video recordings, speeches, lectures, interviews, music, rhymes/chants
- **Kinesthetic-Tactile:** skits, mimes, games, experiences, demonstrations, manipulatives, hand-on models/materials, movement

In the absence of disability or impairment, all people take in information and ideas in these ways.

# **Differentiation Connection**

# **Differentiation of Content**

Content is adjusted for VAK preferences (e.g., presented with visuals, through voice [teacher's, someone else's], and/or through a hands-on activity).

# **Differentiation of Process**

Instructional delivery or tasks incorporate materials or questions that ask students to evaluate through looking, through listening, or through doing, feeling, or experiencing.

# **Differentiation of Product**

Tasks provide product options that are associated with VAK preferences. For example, students are asked to express what they have learned through visuals, audio recording, or acting it out.

# **Design Guidelines**

There are three main ways to use VAK in planning:

- VAK (multi-modal) lessons. In this approach, teachers consider the ways they might
  incorporate visual, auditory, and kinesthetic-tactile models and experiences through
  instruction. A lesson on the equal sign might start with a tactile experience like putting counting
  cubes on a balance scale, saying and hearing the equations they model out loud, and then
  seeing or writing those equations.
- VAK (multi-modal) tasks. A task that all students do and incorporates some combination of visual, auditory, or kinesthetic means of taking in or expressing ideas is best thought of as a multi-modal task, rather than a differentiated task. For example, if students are asked to make a list of important facts about a famous person after reading a picture book and watching a short video on the person, the task infuses visual and auditory learning, but it is not differentiated.
- **VAK (differentiated) tasks.** Using VAK to create differentiated tasks involves planning three versions of the task that are united by common learning goals (KUDs): one visual, one auditory, and one kinesthetic.

The chart below shows examples of how students can acquire, make sense of, and express content in visual, auditory, or kinesthetic-tactile ways.

Examples	Visual	Auditory	Kinesthetic Tactile
Acquiring and making sense of content or skills	<ul> <li>Reading or seeing text, numbers, or images</li> <li>Watching a video</li> <li>Examining a graph, table, flowchart, or diagram</li> <li>Writing words down/taking notes</li> <li>Using pictures/logos to see key ideas</li> <li>Analyzing before and after examples</li> </ul>	<ul> <li>Hearing explanations, stories, narratives</li> <li>Hearing/watching audio/video recordings</li> <li>Listening to a speech or interview</li> <li>Hearing key ideas and vocabulary repeated</li> </ul>	<ul> <li>Playing a game</li> <li>Manipulating or exploring a physical or virtual model</li> <li>Enacting a skit</li> <li>Participating in a simulation</li> <li>Seeing/using props</li> <li>Sorting and classifying (physically or virtually)</li> <li>Moving during learning</li> </ul>
Expressing/ Producing	<ul> <li>Creating or selecting visual images or products to depict/explain ideas</li> <li>Making a timeline</li> </ul>	<ul> <li>Writing rhyme, song, chant, spoken word</li> <li>Delivering an explanation, speech, presentation (live, via recording)</li> </ul>	<ul> <li>Creating a game</li> <li>Making a model</li> <li>Writing and delivering a skit</li> <li>Giving a hands-on demonstration</li> </ul>

# **Implementation Guidelines**

- ☑ **Labeling students.** Research does not support the idea of diagnosing learners as visual, auditory, or kinesthetic, or that students must be taught in a certain style to maximize their achievement. All teachers should consider various ways that content might be presented in visual, auditory, or kinesthetic-tactile modes.
- ☑ **Learning goals and VAK.** When giving visual, auditory, and kinesthetic options for acquiring or making sense of content, take care that students are targeting the same KUDs. If it seems like students who engage with a visual option, for example, are getting more, less, or something different, consider whether the lesson or task should be differentiated.

# **VAK Examples**

Clothespin Football: A Multi-Modal Game				
	Created by Jessica Hockett and Chris Short			
Skill	Adding and subtracting numbers with fluency			
Object	To score goals at either end of a number line by adding and subtracting			
	numbers			
Materials and	In each plastic bag:			
Assembly	One die and one stack of played cards (face cards removed).			
	Two clothespins (Option: teacher or students decorate with team			
	colors or logos)			
	<ul> <li>One laminated number line (0–20), folded at 10.</li> </ul>			
	Set of directions and referee card			
Number of	One to five students. Options:			
Players	☐ One player: Play against self with one or two clothespins; aim to reach			
	goal and score			
	☐ Two players: Play against each other, first to reach goal wins OR play for a certain length of time			
	☐ Two players + referee: Third student is referee.			
	☐ Two teams of two players + referee: Students on a team take turns rolling			
	and reason together to check accuracy of operation; can be played with			
	or without a referee.			
VAK Connection	This game has visual, auditory, and kinesthetic elements. The die, face cards,			
	and number line provide visual reinforcements and representations of			
	number and place value. The requirement for students to say the operation			
	aloud is an auditory element. Using the die, place cards, and clothespin			
	movement are kinesthetic components that make the minds-on aspect the			
	skill hands-on.			
	The variations also offer different ways for the teacher or students to adjust			
	the game for interest, learning preference, or readiness.			

# Are you ready for some football???

## Clothespin Football Directions

- 1. Place each clothespin on 10 to start.
- 2. Choose to play with a die or playing cards.
- Player 1 says "add" or "subtract" to choose an operation.
   Player rolls die or draws a card and moves that number of places on the number line. Turn ends with Player saying the operation out loud.
- 4. Player 2 does the same thing for his or her turn.
- 5. Winner is the first player to get to or pass 0 or 20 "scores". This person can be the winner, or you can play "football style," for a set amount of time with points for each "touchdown."

# **VARIATIONS**

(backside of directions card)

If you choose to use any of these variations, decide BEFORE you start to play. Make sure all players and the Ref (if there is one) know and agree!

- $\begin{tabular}{ll} \blacksquare \\ \end{tabular}$  Players choose their goal (0 or 20) and score only when reaching their goal.
- ☐ Players choose to add or subtract AFTER rolling.
- Player rolls two dice or draws two cards, chooses to add or subtract those numbers, and then chooses to add or subtract the sum or difference to the number where the clothespin in placed.
- $\Box$  Use a -10 to 10 or -20 to 20 number line.
- ☐ Super Challenge! Use a -10 to 10 or -20 to 20 number line with a red die & green die to represent a negative number (red) and a positive number (green). Add numbers for the operation sum. Then, add the sum to the number where the clothespin is placed.

# The Ref

Are you The Referee? Here's your job:

- ✓ Make sure each player says the operations out loud before moving a clothespin.
- ✓ Check the accuracy of each operation.
- ✓ Make sure that each player moves the correct number of places.
- ✓ Confirm that a goal has been scored.
- ✓ Be the scorekeeper.



**Topic:** Poetry **Grade Level**: 3–5

Related Standards: 3-5.RL.KID.2, 3-5.RL.CS.5, 3-5.RR.TC.10

**Context**: This is a set of visual, auditory, and kinesthetic experiences for analyzing or making sense of a poem. The example is "Eating While Reading," by Gary Soto, but the prompts are transferable to many poems. Teachers can incorporate these ideas alongside sets of text-dependent questions, assign or have students select prompts for partner-/small-group discussions, offer prompts for journal responses, or set-up stations at which students take in and express their thinking about the poem in a variety of ways.

Poom: "Eating While Ponding" by Gary Soto

Poem: "Eating While Reading" by Gary Soto		
Visual Experiences	Taking it In	
	<ul> <li>Watch a video of the poem. Are the images similar to what you see in your mind? What would you change or do differently based on your interpretation of the poem?</li> <li>Watch a peer act out the poem. Tell him/her what you noticed and wondered about the interpretation, based on the text of the poem.</li> <li>Look at the poem without reading every word. What do you notice about the poem's shape? About what letters, letter combinations, or words appear most often in the poem? About what or how punctuation is used in the poem? Think about how those things affect the meaning of the poem.</li> </ul>	
	<ul> <li>Expressing/Producing</li> <li>What is the most visually powerful line in (or part of) the poem? Why do you say so?</li> <li>Select images (from a teacher-provided folder, from print or online sources) to accompany or help convey the story/experience in this poem.</li> <li>Draw what you see in your mind's eye when you read this poem. Then, explain your drawing (orally or in writing) using the poem itself. Compare your drawing with someone else's.</li> </ul>	
Auditory	Taking it In	
Experiences	<ul> <li>Whose or what voice(s) do you hear narrating the poem? Who is the person (e.g., adult/child, male/female, older/younger)?</li> <li>Record and listen to yourself read the poem. What sounds or ideas do you hear? Note the rhythm and any repetition (of sounds, of ideas).</li> <li>Listen to a recording of someone else read the poem. What sounds different or new to you? What are you hearing (or seeing) now that you did not before?</li> </ul>	

Expressing/Producing
Set this poem to music (your own melody or one from another
song). Be ready to explain your choice.
☐ Use sounds that you record or capture and/or sound files online to
create a sound backdrop for the poem. These can be sounds
played in the background for a dramatic reading of the poem or
sounds that convey the story or experience in the poem without
the words.
Taking it In
☐ Cut out the lines in the poem. Try rearranging them in different
ways. What do you notice about the kinds of words the poet uses?
Switch the order of the stanzas in the poem. Does the meaning of
the poem change? What do you now see or understand about the
poem?
Expressing/Producing
Create a new version of the poem with rearranged lines and words
or phrases. Compare your version to the original. How are they
similar and different? Share your version with a peer to see if they
agree.
Act out the poem, either alone or with others. Use simple props if
you would like (and if they are available). Be ready to explain your
interpretation to an audience.

**<u>Learning Profile Strategy</u>**: Multiple Intelligences (MI)

# Summary

Multiple Intelligences (MI) refers to a theory developed by Howard Gardner. According to the theory, human intelligences comprise at least eight capacities:

Verbal Linguistic	Logical Mathematical	Musical Rhythmic	Visual Spatial
Ability to perceive	Ability to appreciate	Ability to create,	Ability to perceive,
and generate spoken	and use numerical,	communicate, and	modify, transform,
or written language	abstract, and logical	understand	and create visual
	reasoning to solve	meanings made out	and/or spatial
	problems	of sound	images
Bodily Kinesthetic	Interpersonal	Intrapersonal	Naturalistic
Bodily Kinesthetic Ability to use all or	Interpersonal Ability to recognize,	Intrapersonal Ability to understand	Naturalistic Ability to distinguish
,	·	·	
Ability to use all or	Ability to recognize,	Ability to understand	Ability to distinguish
Ability to use all or part of one's body to	Ability to recognize, appreciate, and	Ability to understand oneself, including	Ability to distinguish among critical

intentions of other	to use such	
people	information	
	effectively in	
	regulating one's own	
	life	

Gardner says that all normally developing people have these abilities to one extent or another and will achieve some levels of skill in each one, even though some people will accomplish more than others in each intelligence area. There are several strategies that can be used to plan classroom instruction and assessments using MI: entry points (described earlier in this handbook), **8 Ways** and **The Profiler** (described below).

# **Differentiation Connection**

Differentiation of Content	Differentiation of Process	Differentiation of Product
The materials, text, or information can fit the intelligence type. For example:  • Sets of numbers/data (L/M)  • Narrative accounts (V/L)  • Written or recorded interviews (Inter)  • Diary entries (Intra)  • Photographs/Images (V/S)	Each of the intelligences draws on different kinds of thinking processes for taking in and making sense of content. For example:  • Manipulating language (V/L)  • Using body movements (B/K)  • Talking with or about others (Inter)  • Analyzing facts (L/M)  • Visualizing (V/S)	Using products in tasks that employ, require, or are associated with each intelligence. For example:  • Maps (V/S)  • Rhymes/chants (M)  • Pantomime (B/K)  • Cause-effect chart (L/M)  • Oral retelling (V/L)  • Diary entry (Intra)  • Skit (Inter)

# Design Strategy: 8 Ways (Armstrong, 2009)

This strategy is a direct translation of the MI framework. The teacher identifies the topic or goal(s) to be taught or assessed and then uses the eight intelligences as filters through which to consider different ways students might show their understanding. It isn't necessary to use all eight intelligences. Refer to the full model to brainstorm ideas, and then develop and select only those that best fit the goals, timeframe, and students.

Intelligence	Associated Verbs	Example Task Starter	ELA Example using characters in Charlotte's Webb
Verbal-Linguistic	Read about, write	In your own words,	what makes
	about, talk about,	write/talk about	Wilbur likeable?
	listen to		
Logical-	Quantify, think	Make a comparisons	Charlotte and
Mathematical	critically about,	between	Wilbur.
	analyze, compare,	On a scale of 1–10,	bad is Templeton.
	experiment with	how	Why do you say so?
Visual-Spatial	See, draw, visualize,	Draw a quick sketch	what Wilbur wants
	color, mind-map,	that shows	most.
	depict, make a		
	metaphor/analogy		
Bodily-Kinesthetic	Build, act, touch,	Pantomime how you	Fern would do at
	dance, move,	think	school if her friend
	pantomime		were being bullied.
Musical-Rhythmic	Sing, rap, listen to,	Compose a rhyme or	captures Mr.
	compose, express,	short song using a	Zuckerman's
	lyricize, make a	familiar tune that	feelings about
	musical comparison		Wilbur throughout
	about		the story.
Interpersonal	Teach, instruct,	Collaborate with a	how much
	collaborate on, interact	partner to decide	attention Fern pays
	with		to Wilbur in the
			future.
Intrapersonal	Connect to own life,	Describe in a few	times when you
	make personal choices	words your personal	act and feel like
	about, reflect, self-	feelings about	Goose.
	evaluate		
Naturalistic	Connect/compare to	Decide which animal is	Lurvey.
	living things and	most like	
	natural phenomena		

# Design Strategy: The Profiler (Doubet & Hockett, 2015)

The profiler associates each multiple intelligence with a profession or real-world endeavor. The teacher considers what a person in that job does and designs a task that puts the student in that role, using the associated skills to address a challenge or solve a problem related to the content and learning goals. The idea is to generate two to four substantive and engaging options that make sense for the grade level and topic—not to offer eight tasks. Teachers can use the names of these or other related occupations, or simply consider these occupations to generate task or prompt ideas.

Writer	Architect	Analyst	Actor
Storyteller	Designer	Engineer	Builder
Commentator	Photographer	Statistician	Choreographer
Comedian	Map Maker	Lawyer	Mime
Editor		Detective	Coach/Player
Verbal-Linguistic	Visual-Spatial	Logical-Mathematical	Bodily-Kinesthetic
Listening, speaking,	Understanding charts	Problem solving,	Dancing, physical
writing, storytelling,	and graphs, strong	classifying and	coordination, sports,
explaining, teaching,	sense of direction,	categorizing, finding	hands-on
using humor,	sketching, painting,	relationships among	experimentation,
convincing, analyzing,	creating visual	abstract concepts,	using body language,
using language,	metaphors, designing	handling long chains	crafting, acting,
grasping syntax and	objects, interpreting	of reasoning and data	miming, building,
semantics	visuals		moving
Lyricist	Poet/Songwriter	Counselor	Ranger
Composer	Artist	Mind-reader	Botanist
Performer	Blogger	Tour guide	Conservationist
Musician	Memoirist/Essayist	Host (Talk Show,	Zookeeper
		Party)	
Musical-Rhythmic	<b>I</b> ntrapersonal	Interpersonal	Naturalistic
Singing, playing	Recognizing personal	Seeing things from	Recognizing,
musical instruments,	strengths and	other perspectives,	observing, collecting,
whistling, recognizing	weaknesses,	listening,	organizing, sorting,
and remembering	reasoning, awareness	communicating,	classifying, and
tonal patterns,	of and ability to	empathizing, conflict	caring for elements
composing,	evaluate thinking and	resolution,	of nature; noticing
understanding tonal	feelings,	understanding others'	changes in
and rhythmic	understanding role	feelings, motivations,	environment
structure	with others	and intentions	

# *Implementation*

- ☑ **Student choice**. Let students choose from MI tasks or give students the task that matches their preferences on a simple survey. As a general rule, students should work with their preferred intelligence task when content or skills are new or when the task is an assessment. When content or skills are more familiar, the teacher might ask students to work with a task outside their comfort zone.
- ☑ **Labeling the tasks**. Using the formal names of each intelligence with students isn't necessary, but doing so can help students understand that abilities and strengths are varied. Label the tasks with the student-friendly name or other engaging terms that elevate the status of all task options, or simply number the tasks.
- ☑ **Management**. Bring students together in same-task pairs or groups and/or mixed task pairs or groups to share their work. Follow with a whole-class discussion to synthesize key ideas.

# The Profiler Examples

**Topic:** Political Parties (Alexander Hamilton & Thomas Jefferson) **Grade Level:** 4

**Related Standards**: 4.46

# **Learning Goals (KUDs)**

# Know

- A political party is a group of people who come together around shared beliefs to offer candidates in elections and have power in a government.
- Differences between Hamilton's and Jefferson's political beliefs
- America's first political parties were the federalists and the democratic-republicans

### **Understand**

 America's founding fathers had differing perspectives about the government's <u>structure</u> and function.

### Do

 Explain the political beliefs of Alexander Hamilton and Thomas Jefferson that led to the political parties"

**Context:** Students work with a partner to show differences in the political views of Thomas Jefferson and Alexander Hamilton that gave rise to American political parties. The emphasis is on what these men believed and why rather than on understanding the philosophies and historical context of their beliefs.

# Podcast Host & Guest (Interpersonal, Verbal-Linguistic)

You are a host and a guest on a podcast for kids called "Where Did *That* Come From?" Write and record a three-minute segment that answers the question "Where did America's Political Parties Come From?" Focus your discussion on clearly showing the differences in Alexander Hamilton's and Thomas Jefferson's political views. Include what each man believed and why. Make your segment lively and engaging for listeners your age!

# Playwright-Actors (Bodily-Kinesthetic, Verbal-Linguistic)

Write and dramatize a scene between Alexander Hamilton and Thomas Jefferson talking (or fighting?) about their political views. Make sure your scene clearly shows what each man believed and why. Note: Don not use names in the scene! You'll perform your scene for a peer audience that will guess who is who! Costumes and props optional.

# Lyricists/Poets (Musical-Rhythmic)

Write either one or two songs or poems that show the differences Alexander Hamilton's and Thomas Jefferson's political views. Include what each man believed and why, and be ready to perform/deliver your work to an audience of peers using expressive voices.



Show the differences in Alexander Hamilton's and Thomas Jefferson's beliefs about how American government should be run in two design plans. Your plans could represent their thinking as two houses (e.g., The House of Hamilton and The House of Jefferson), two machines, two pieces of furniture, or something else. Include a clear explanation of your design(s).

**Topic:** Impact of Technologies (Science, ELA) **Grade Level:** 5

Related Standards: 5.ETS2.2-3; ELA 5.W.RBPK.8-9

# **Learning Goals (KUDs)**

# Know

 Facts about the development of selected technologies

# **Understand**

- <u>Technologies</u> have given humans the <u>power</u> to observe and do things that they could not otherwise do.
- <u>Technologies</u> have increased <u>speed</u> and <u>efficiency</u>.
- Scientific <u>discoveries</u>
   often lead to new and
   improved <u>technologies</u>.

## Do

- Describe how human beings have made technologies to improve their lives and work.
- Identify how scientific discoveries lead to new and improved technologies.
- Gather relevant information from print/digital sources

**Context:** Students choose a tool or machine to research using teacher-provided and self-selected resources. The following questions guide their investigation:

- What does this technology give humans the power to do that they could not do before?
- How does this technology make something better, faster, or more efficient?
- What is the science behind this technology? What scientific findings or discoveries made this technology possible?

Options can include X-ray cameras, microscopes, telescopes, satellites, computers, etc. Students also choose one of the profiler tasks below to transfer their findings to a situation. Note: Each task requires using technology. Students share and give feedback on one another's products prior to a small-group or whole-class discussion about the similarities and differences between the development and power of the various technologies.

Profile	Situation
Audio Tour	You have just been hired to write and narrate audio segments for a kid-
Guide	friendly tour of a museum exhibit called "Technology Over Time." First, select
	examples of artifacts or pictures of your chosen technology that could be
	included in the exhibit. Then write and record a narrative of that provides
	background about the scientific discoveries that made the technology possible,
<b>39 49</b>	how the technology has developed, and what the technology has given people
	the power to do.
<i>A</i> .	You are a student historian of technology who has been asked to contribute to
	new website for kids called "Tech Times." Use technology to create a mock-up
	of visual interactive timeline that shows the development of your technology.
Historian	Include what scientific discovery/discoveries drove the technology, how the
	technology has evolved or changed over time, and what the technology gives
	humans the power to do that they could not do before.
Guest	You have been asked to be guest blogger on a tech blog called "TechTimes."
Blogger	Your job is to write an engaging and informative article that explains the
	science behind your chosen technology, shares how the technology came to
	be, and describes the power your chosen technology has had on human
	activity. Incorporate at least two visuals. If you would like, include information
	about older and newer forms of the technology.

**Topic:** Prompts for Reading Closely **Grade Level:** 3–5 **Related Standards**: Reading Literature and Informational Text

- This is six groups of prompts for reading, analyzing, and/or discussing text, framed using profiler occupations.
- Prompts can be featured on role cards, be selected and displayed on a screen, or copied for students to put in a notebook of folder. Not all roles or prompts apply to all reading selections.
- The teacher (and/or student) should choose roles and prompts that are the best fit for the text and purpose. The specific standards with which individual prompts align vary based on how the prompts are tailored.

Mind-Reader	
What is this character thinking right now	<i>y</i> ?
What would this character say about?	
■ What are the character's true motives?	
What does the author really want you to	
understand or "see" right now?	
☐ What is the author's bottom line about	?
lue Get inside the mind of the author to figur	e out
☐ How is/are feeling about?	
How might another reader [with this	
background] view?	

Courselor	
☐ What advice would you give the [au character]?	ithor,
How should the conflict/situation/l questions/issues be resolved?	key
Come up with insightful questions about	for
What would you say to [a character to motivate him/her to?	t, the author]
<ul><li>□ Make a prediction about what will I</li><li>□ Step into the shoes of</li></ul>	happen if

# Commentator



As you read, use sticky notes to make give yo	ur
own "color commentary" in the margins.	

- ☐ Give a "play-by-play" account of...
- ☐ Capture the parts that you think best show...
- ☐ Let someone inside your mind as you read by...
- ☐ Give a overview or "bird's eye view" tour of the story thus far. Bring the person who is just "tuning in" "up to speed" with the most important characters, events, etc.

# Designer



- Make a map or graph of [the events of the story, the author's thinking, a character's choices, the ideas in this article].
- ☐ Visually trace the journey/development of...
- □ Depict "where" the idea/theme of \_ "goes" in the text.
- ☐ Create and explain a visual for...
- ☐ How is this (book, article, story] "designed" or organized?
- ☐ How are the pictures/images connected to the text/ideas/story?

# Private Investigator Look for clues about... Prove [or disprove] that... Gather evidence of... Argue for or against the idea that.. Interrogate... Ask tough questions of [the author, the character, the text] about... Use reasoning to show the connection between...

☐ What words or phrases in the text best show...?

# Editor ☐ Give feedback to the author about... ☐ Tell the author what you think about... ☐ What would you "fix," change or do differently in this text/story? Why? ☐ What is the most (or least) powerful \_\_\_\_ in this text/story? ☐ How clear is...? ☐ Does the author do a "good job" of...? ☐ What do you notice about...?

# Appendix: Differentiation Strategies and Examples

# Differentiation Lesson-Planning Menu

Learning Goals			
Know Goals	<b>Understand Goals</b>		Do Goals
What facts, vocabulary, terms, concepts, and other information should students acquire?	What insights, pringle ideas, "a-has" sho to walk away with what? Start with "aunderstand that	uld students , no matter Students will	What skills should students attain (e.g., thinking skills, skills in the discipline, organizational skills)?
Pre /Formative Assessment E	Evidence		
What prompts/questions/p use to discover "where" stu relative to the learning goa	dents are	Survey Inventory K-W-L Observation Interview Conferencin notes Homework Discussion Performanc Hand Signal Sticky Notes White Board	Graphic Organizer In-class activity Notebook check Self-assessment Diagnostic assessment Quick Quiz/Check-In Test Project Pe Task Other: Other:
Lesson Sequence		Response	
How will I launch the  This can involve  Hooking students' topic, concept, or  "Setting the stage, meaningful context  Making connection knowledge and extended to the students to think and to the students to the	' interest in the lesson skill " or providing a xt for the content ns to students' prior eperiences, previous n ongoing focus lenge can pose for about e lesson purpose or	Potential DI I	pints

	How students acquire content and skills?	Potential DI Handbook Strategies
	·	☐ Graphic Organizers
	This can include:	☐ Role Cards: Looking Lenses
	Modeling	☐ Stations
	Explaining	☐ Jigsaw
	Revealing/Uncovering	☐ Learning Menu
	Directing	☐ Contract
	Demonstrating	☐ Agenda
_	Conducting shared inquiry	_
itio	Reading (shared, small-group,	
uisi	independent)	
Acquisition	Playing video/audio	
	How will students make sense of and	Potential DI Handbook Strategies
	practice the content and skills?	☐ ThinkDots
		☐ Tiered Tasks
	This can include:	☐ Graphic Organizers
	Discussing	☐ Thinking Caps
	Gathering information	☐ Role Cards: Looking Lenses and Discussion
	Guided or Independent Practice	Duties
	Exploring	☐ Stations
	Investigating	☐ Contract
	Researching	☐ Agenda
9	Problem-Solving	☐ Jigsaw
king & Practice	Role-Playing	☐ Learning Menu
Pra		□ RAFT
∞ ∞		☐ TriMind
		☐ MI: 8 Ways, The Profiler
₽		☐ Interest Center
Se-		☐ Choice Grid
Sense-Ma		☐ VAK Tasks
	How will students apply or transfer what	Potential DI Handbook Strategies
	they've learned (In this lesson or a future	☐ Tiered Tasks
	lesson)?	☐ Learning Menu
		☐ Contract
	This can include	☐ Agenda
pue	Problem-Solving	□ RAFT
Application and Transfer	Role-Playing	☐ TriMind
atic	Designing	☐ MI: 8 Ways, The Profiler
pplicat	Producing	☐ Choice Grid
App		□ VAK Tasks

Synthesis/Sharing	Will you ask students to synthesize (i.e., bring tog make new meaning from What will they do?  This can include: Partner, small-group, discussion Completing a new tase Responding to questi	gether and  i) their work?  or whole-class	Closure	How will you wrap up and bring the lesson to a satisfying close?  This can include:  Making a connection between what students have done in this lesson to real-world work, everyday life, upcoming lessons, etc.  Bringing the lesson back to the focus of or essential question driving the lesson  Giving students a chance to reflect or
				<ul> <li>summarize</li> <li>Assessing students (e.g., administering an exit ticket)</li> </ul>
• What evidence of student learning will this lesson generate? What do you anticipate learning or being able to "see" from this evidence? Why? How will drive your decisions in the next lesson or future lessons?				
	WHAT in this Lesson is	Different HOW this		
	Differentiated	Differen		
□ F	Content Process Product Combination:	<ul><li>□ Readiness</li><li>□ Interest</li><li>□ Learning Prof</li><li>□ Combination:</li></ul>		

# **Learning Goals as KUDs**

What students should  $\underline{\mathbf{k}}$ now,  $\underline{\mathbf{u}}$ nderstand, and be able to  $\underline{\mathbf{d}}$ o as a result of a task, lesson, or unit?

	Topic/Concept:	Subject:	
	Related Standards (Code	es):	
<u>K</u> now			
Students will acquir	re this knowledge:		
<u>U</u> nderstand			
Students will under	stand that		
Be able to <u>d</u> o			
Students will be abl	e to		

# **Tiered Tasks**

Topic:	Grade Level:	Related Standards:	
Learning Goals (KUDs)			
	Understand	Do	
Know	Understand	D0	
Context:			
Task 1	- 10		
Tusk I	Task 2	Task 3 (if applicab	le)
			_
Come Together:			

# **ThinkDots**

Topic:	Grade-Level: Related	d Standards:
Context		
Set 1		
Jet 1		
•	•	•
A	No.	•
	(5-3)	(
Set 2 (if applicable)		
	•	
		•
5.3		
	( <u>• * •</u> )	• •

# **Role Cards**

# **Mind-Reader**



Try to read or get inside
\_\_\_\_\_'s mind to figure out...

# **Connector**



Connect \_\_\_\_\_ to/and \_\_\_\_. How are they related?

# **Clue-Finder**



Look/listen for clues about...

# **Opinion-Giver**



Agree or disagree?

Give reasons for your opinion.

Fortune-Teller	Match-Maker
Look for clues or hints that might help us make predictions about	Find connections betweenand
	How are they alike and different?
<b>Detective</b>	Defender 🌐
Capture the parts that best help us understand	Agree or disagree?
	Support your opinion with reasons.

K.J. Doubet & J.A. Hockett (2017). *Differentiation in the Elementary Grades: Strategies to Engage & Equip All Learners*. ASCD. Used with permission.



# Philosopher



Analysis Role

### Job

Consider the "big picture"-- overall purpose, essential questions, & connections to important or lasting "truths."

_	

Connect	to this idea/
concept/question: _	



# Detective Analysis Role



### Job:

Inspect "the details" to arrive at reasonable, evidence-based conclusions.

### Lens:

Search for "clues" about _	
	in order to decide
	·







### Job:

Prove whether or not a certain allegation or assertion is true.

### Lens:

Gather "evidence" that either supports or refutes the following claim:



# Director



# Analysis Role

# Identify parts that illuminate or bring to life a certain idea or aspect of the narrative or purpose.

### Lens:

Capture or quote the "scenes," moments, parts, or ideas that you think shed the most light on



# Psychologist Analysis Role



# i

# Architect Analysis Role



# Job:

Get "inside the mind of" someone (e.g., author/ speaker, character, figure) to discern motive or purpose.

### Lens:

Determine	's purpose in or
motive for	

# Job:

Evaluate how something (e.g., a text, an argument, a speech) is designed—the structure, the word choice, the syntax--how those elements influence each other and work together to convey ideas.

Δ	n	c	

Evaluate	to figure out
	_

K.J. Doubet & J.A. Hockett (2017). *Differentiation in the Elementary Grades: Strategies to Engage & Equip All Learners*. ASCD. Used with permission.



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"One thought I had "I agree because..." "Does that relate to was..." "I disagree because..." what we are discussing?" "I think we're off topic." "I heard you say . "Another idea is..." "What do you [the That connects to what "Let's get back to our group] think about...?" point." said because \_\_\_\_ "What do you mean "On page , it says.... I "Are we lost?" think that shows..." by that?" "Does this make sense to "Could you give me "What do you think the everyone?" "What questions do we another example?" author means by...?" "This part is powerful have?" "I think I see your point. Can you say because..."

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more?"

# **Orchestrator**

# **During Discussion:**

- BEGIN the discussion. Use the question(s) that have been has posted as a starting point.
- Make sure the discussion doesn't get off topic.
- Bring the discussion to a CLOSE when time is called.

### Soundbites:

- "Let's start by..."
- "Can we get back to...?"
- "What about...?"
- "Let's end by..."



# Includer

# **During Discussion:**

 Make sure that all group members contribute to the discussion and feel included.

### Soundbites:

- "What do you think about that, \_\_\_\_?"
- "I agree/disagree with what you said, \_\_\_\_\_, because..."
  - "I want to hear what thinks..."
- "Wait, \_\_\_\_\_, I think you might have just interrupted \_\_\_\_\_."



# **Prober**

# **During Discussion:**

Make sure that all group members back up their opinions, ideas, feelings, and observations by giving details, examples, and explanations.

## Soundbites:

- "Can you give an example?"
- "Do you remember where that is/was? Can you show us?"
- "How is that related to what we read?"
- "That's interesting! How did you figure that out?"
- "What part is that from (or in)?"



# **Pacer**

# **During Discussion:**

- Make sure that the discussion moves at a good pace.
- "Refresh" the discussion when you feel like it's lagging.

# Soundbites:

- "We've talked a lot about \_\_\_\_\_. Can we also talk about...?"
- "We have \_\_\_\_ more minutes, so let's also talk about..."
- "I'm also wondering about..."
- "Here's something else to think about..."
- "It sounds like we agree/disagree about..."



Adapted from K.J. Doubet & J.A. Hockett (2017). *Differentiation in the Elementary Grades: Strategies to Engage & Equip All Learners*. ASCD. Used with permission.

# Agenda for \_\_\_\_\_\_ Day(s) \_\_\_\_\_

### With the Teacher



Meet for \_\_\_\_\_ at

\_\_\_\_\_a.m./p.m.

Bring \_\_\_\_\_\_.

### With a Friend



Friend: \_\_\_\_\_

\_\_\_\_\_a.m./p.m.

\_\_\_\_\_a.m./p.m.

### Just Me!



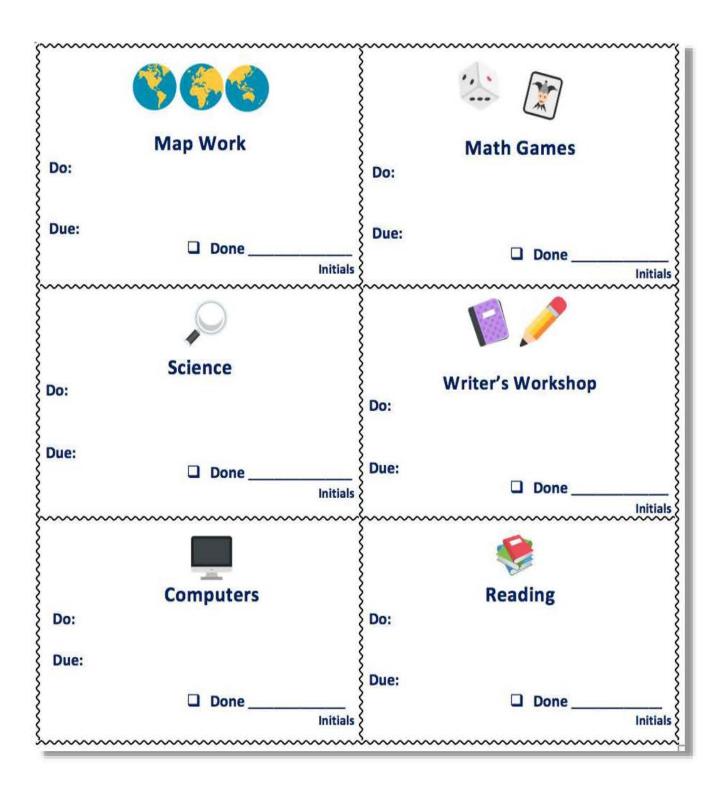
When there's extra time...

- ☐ Finish \_\_\_\_\_
- ☐ Practice \_\_\_\_\_
- ☐ Start \_\_\_\_\_

### **Reminders:**



### Agenda Cards



### This Week's Agenda

### **CONFER WITH TEACHER**

COLLABORATE
COMPLETE INDEPENDENTLY
CONSUME OR PRODUCE (DOWNTIME TASKS)

### **Task Contract**

ame:	Focus:	Date(s):	Contract for	
Directions			••••••	•••
************		***		• • • •
Task:			Task:	
···············				••••
Task:		Tas	k:	
***************************************	. Analia Lw	ill work	L will complete these to	1 <b>1 1 1</b>
will work on my  	y tasks	III WOFK	I will complete these to	asks

### **Super Stars Contract**

### **Directions:**

### **One-Star Tasks**



### Two-Star Tasks



# TOTAL STARS: \_\_\_\_\_ Due on: Monday Tuesday Wednesday Thursday Friday Student Teacher

### Super Stars Contract with Activity Descriptions

'Super Stars" Contract for Activity Descriptions				
Directions:				
		*		
	٥			
	*	*		

### **Math Facts Contract**

Name: T	ïmeframe:	
Circle the operation(s) you will be	practicing.	
+ - X ÷		
What number range will you wor	k with?	
Select the games you're practicing	g.	
Game	Tally	Self-Assessment
Write the name of the game	Use tally marks to show how	Make a face to show how
you will play.	many times you did this.	helpful this game was to
		your learning the facts.
		0
		<u></u>
		0
Student & Teacher Initials (whe	en planned):	<u> </u>
Student Signature (when comp	leted):	

### **Independent Reading Contract**

Use the paper or e-version of this contract to plan and keep track of your independent reading. (Add rows based on your goal number.) You & I will access this during each reading conference.

My Goal for Nu	mber of Books Read Th	is Year:	C
I will work hard	to reach this goal!	_I will work hard to suppo	ort you!
Requ	ired Genre		
☐ Graphic Novel	☐ Mystery	☐ Adventure Story	☐ Sci-Fi/ Fantasy
Title & Author:	Title & Author:	Title & Author:	Title & Author:
My Rating:	My Rating:	My Rating:	My Rating:
☐ Biography	☐ Historical Fiction	☐ Narrative Poetry	☐ How-To
Title & Author:	Title & Author:	Title & Author:	Title & Author:
My Rating:	My Rating:	My Rating:	My Rating:
Free Choice			
☐ Genre:	☐ Genre:	☐ Genre:	☐ Genre:
Title & Author:	Title & Author:	Title & Author:	Title & Author:
My Rating:	My Rating:	My Rating:	My Rating:
☐ Genre:	☐ Genre:	☐ Genre:	☐ Genre:
Title & Author:	Title & Author:	Title & Author:	Title & Author:
My Rating:	My Rating:	My Rating:	My Rating:

# Thumbs- Up Homework Assignment Name/Page Number(s): \_\_\_\_\_\_ Choose \_\_\_\_\_ thumbs' worth of items to do. You are required to do at least one Single Thumbs-Up item and one Double Thumbs-Up item. Section/Item #s: Section/Item #s: Total = \_\_\_\_ Total = \_\_\_\_ On the backside, explain any items you attempted but had trouble completing.

	Page Number(s):	
	' worth of items to do. You ar item and one Double Thumb	•
4	4	444
Section/Item #s:	Section/Item #s:	Section/Item #s:

### Jigsaw (Template A)

торіс:	Grade-Levei: Reia	ted Standards:
Learning Goals (KUDs)		
Know	Understand	Do
Home Group Launch		
Expert Group 1 Task	Expert Group 2 Task	Expert Group 3 Task
Home Group Synthesis Tas	k	
Closure		

### Jigsaw (Template B)

Topic: \_\_\_\_\_\_ Grade-Level: \_\_\_\_\_ Related Standards: \_\_\_\_\_

Learning Goals	s (KUDs)			
Know		Understand		Do
		I		
		Inquirie	s:	
W				
Launch				
H				
<b>■ E</b> ■				
Home				
Groups				
Expert				
Groups				
Home Group				
Sharing				
Synthesis				
Task				

### **RAFT**

Learning Goals (KUDs)		
Know	Understand	Do
Context:		

Topic: \_\_\_\_\_\_ Grade-Level: \_\_\_\_\_ Related Standards: \_\_\_\_\_

	Role	Audience	Format	Topic
1				
2				
3				
4				

### **Choice Grid**

1	l	
1	l	
1	l	
1	1	
1	1	
1	l	
1	1	
1	1	
1	1	
1	1	
1	l	
1	1	
1	l	
1	l	

### Learning Menu

Topic:	Grade Level:	Related Standards:	
Learning Goals (KUDs)			
Know	Understand	Do	
	I I	I I	
Appetizers:			
Hooks that invite students into the	e menu (give them soi	mething to nibble on)	
Main Dishes			
Goal-aligned tasks that all student	ts complete		
	·		
Sides			
Choice-based, goal-aligned tasks			
Choice-basea, goal-alighea tasks			
Dessert			
Choice-based, goal-aligned tasks			

## Learning Menu for a Central Text

arning Goals (KU	Ds)	
now	Understand	Do
ext:		
iet Your Feet Wet	ique your interest and give you some	e hackground for the text
		g. 2 j 25
Dive In!		
omplete all steps to	o read, analyze, and make sense of ti	he text itself.
wim Around		
	comparing the text with another tex	rt.
Ot		
tep Out.		lenge etc 1
t <b>ep Out.</b> Thoose <b>one</b> way to d	apply the text [to a context, to a chall	renge, etc.j

### **Entry Points**

TOPIC:	GRADE LEVEL:	Related Standards:	
Context:			
Storytelling Task	Reasoning Task	Numbers Task	
Think Big Task	Senses Task	Experience Task	

### **Tri-Mind**

opic:	Grade Level:	Related Standards:	
Learning Goals (KUDs			
		<b>D</b> .	
Know	Understand	Do	
Context:			
Analytical			
Task			
Practical Task			
Creative			
Task			

### **VAK Tasks**

	Grade Levei:Kelated Standards:		
Learning Goals			
Know	Understand	Do	
Context:			
Visual Task	Auditory Task	Kinesthetic Task	

### Multiple Intelligences: Eight Ways

Topic:	Grade Level:	Related Stand	dards:
Learning Goals (KUDs)			
Know	Understand		Do
Remember: You do not r	need to use all eight.		
Verbal-Linguistic		Logical-Mathem	natical
Visual-Spatial		Bodily-Kinesthe	tic
Musical-Rhythmic		Interpersonal	
Intrapersonal		Naturalistic	

### Multiple Intelligences: The Profiler

Topic:	
--------	--

Learning Goals (KUDs)			
Know	Understand	Do	

Remember: You do not need to use all eight.

Verbal-Linguistic Writer Storyteller Commentator Comedian Editor	Visual-Spatial Architect Designer Photographer Map Maker	Logical-Mathematical Analyst Engineer Statistician Lawyer Detective	Bodily-Kinesthetic Actor Builder Choreographer Mime Coach/Player
Musical-Rhythmic Lyricist Composer Performer Musician	Intrapersonal Poet/Songwriter Artist Blogger Memoirist/Essayist	Interpersonal Counselor Mind-reader Tour guide Host (Talk Show,	Naturalist Ranger Botanist Conservationist Zookeeper
		Party)	