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### ITEM INFORMATION

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<th>TAS01S0477</th>
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<tr>
<td>Standard Text:</td>
<td>Compare and contrast the structural, functional, and behavioral adaptations of animals or plants found in different environments.</td>
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<tr>
<td>AAT or UC Text:</td>
<td>Compare physical characteristics of animals advantageous for survival in their environments.</td>
<td>AAT or UC:</td>
<td>UC</td>
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### METADATA DEFINITIONS

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<tr>
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<td>Level:</td>
<td>Tier, on the following scale: 1 = SR item with two options, lower complexity; 2 = SR item with three options, moderate complexity; 3 = MP item includes 3 questions with two answer options each, higher complexity.</td>
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<tr>
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<td>Standard Text:</td>
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</tr>
<tr>
<td>AAT or UC Text:</td>
<td>Text of the Alternate Assessment Target or Underlying concept</td>
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## Item Information

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<tr>
<td>Standard Code</td>
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<tr>
<td>Standard Text</td>
<td>Distinguish between living and non-living things.</td>
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<td>AAT or UC Text</td>
<td>Identify living or non-living things.</td>
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<tr>
<td>Category</td>
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<td></td>
</tr>
<tr>
<td>Correct Answer</td>
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<td></td>
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</table>

This is about living and nonliving things.

There are both living and nonliving things in your daily life. Living things move and grow.

*Point to the picture of the lamp.*

*[For all students, read “This is a lamp.”]*
Is a lamp a living thing or a nonliving thing?

*Point to and read each option to the student.*

A. living thing
B. nonliving thing
This is about living and nonliving things. A student is using a data table to sort living things and nonliving things. The data table has two sections.

*Point to and read the data table to the student.*

[For all students, read “The first section is ‘Things That Need Food’ (point to the column on the left). The second section is ‘Things That Do Not Need Food’ (point to the column on the right).”]

**Living Things and Nonliving Things**

<table>
<thead>
<tr>
<th>Things That Need Food</th>
<th>Things That Do Not Need Food</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>![Paperclip]</td>
</tr>
</tbody>
</table>
The student placed a paper clip in the “Things That Do Not Need Food” section of the data table.

*Point to the paper clip.*

Which of these belongs in the “Things That Need Food” section of the data table?

*Point to and read each option to the student.*

A. pencil  
B. frog  
C. book
This is about living and nonliving things.

Point to and read the data table to the student.

[For all students, point to the parts of the data table and read “This data table shows living things and nonliving things. A person is a living thing. A person grows, moves, and produces young. A worm is a living thing. A worm grows, moves, and produces young. Paper is a nonliving thing. Paper does not grow, move, or produce young. A cloud is a nonliving thing. A cloud can grow and move, but a cloud cannot produce young.”]

<table>
<thead>
<tr>
<th>Living Things and Nonliving Things</th>
<th>Living Things</th>
<th>Nonliving Things</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Person</td>
<td>Worm</td>
</tr>
<tr>
<td>Grows</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Moves</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Produces Young</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
Is each object a living thing or a nonliving thing?

*Point to and read each option to the student.*

magnet

A. living thing  
B. nonliving thing

horse

A. living thing  
B. nonliving thing

flashlight

A. living thing  
B. nonliving thing
This is about living and nonliving things.

Point to and read the data table to the student.

[For all students, point to the parts of the data table and read “This data table shows living things and nonliving things. A rabbit is a living thing. A rabbit grows, needs water, and produces young. A tree is a living thing. A tree grows, needs water, and produces young. Glass is a nonliving thing. Glass does not grow, need water, or produce young. A snowflake is a nonliving thing. A snowflake can grow and needs water, but a snowflake cannot produce young.”]
Is each object a living thing or a nonliving thing?

Point to and read each option to the student.

[For all students, read “Is a dog a living thing or a nonliving thing?”]

dog

A. living thing  B. nonliving thing

[For all students, read “Is a rock a living thing or a nonliving thing?”]

rock

A. living thing  B. nonliving thing

[For all students, read “Is a flower a living thing or a nonliving thing?”]

flower

A. living thing  B. nonliving thing
This is about living and nonliving things.

Which of these is a nonliving thing?

*Point to and read each option to the student.*

A. a rock
B. a plant
This is about living and nonliving things.

Which pair of cards correctly shows a living and a nonliving thing?

Point to and read each option to the student.

[For all students, read “The card on the left shows the sun (point to the sun). It is labeled ‘Living.’ The card on the right shows a cactus plant (point to the cactus). It is labeled ‘Nonliving.’”]

A.

Living

Nonliving
[For all students, read “The card on the left shows a rock (point to the rock). It is labeled ‘Living.’ The card on the right shows a boat (point to the boat). It is labeled ’Nonliving.’”]

B. Living Nonliving

[For all students, read “The card on the left shows a fish (point to the fish). It is labeled ‘Living.’ The card on the right shows a cloud (point to the cloud). It is labeled ‘Nonliving.’”]

C. Living Nonliving
This is about living and nonliving things.

Living things grow, need food, and need water.

*Point to and read each question to the student.*

Is a flower classified as a living thing?  
A. YES  B. NO

Is a beetle classified as a living thing?  
A. YES  B. NO

Is a car classified as a living thing?  
A. YES  B. NO
This is about living and nonliving things.

Living things need food and water to stay alive. Nonliving things do not need food and water.

*Point to and read each question to the student.*

Is a butterfly classified as a nonliving thing?  
A. YES  
B. NO

Is a book classified as a nonliving thing?  
A. YES  
B. NO

Is a tree classified as a nonliving thing?  
A. YES  
B. NO
This is about plants and animals.

Plants and animals have different parts. Most plants have roots. Some plants have flowers. Many animals have ears.

Which of these is a part that only a plant has?

*Point to and read each option to the student.*

A. leaf

B. wing
This is about the needs of plants.

A student has a plant. The plant needs certain things to stay alive.

What will happen if the student forgets to water the plant?

*Point to and read each option to the student.*

A. The plant will make seeds.
B. The plant will grow.
C. The plant will die.
# Grade 3 Science ALT Items

## Item Information

<table>
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<th>ETS Item Code:</th>
<th>TAS01S0015</th>
<th>Content:</th>
<th>Science</th>
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<td>MP</td>
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<tr>
<td>Level:</td>
<td>3a</td>
<td>Points:</td>
<td>3</td>
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<tr>
<td>Standard Code:</td>
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<td>AAT or UC:</td>
<td>AAT</td>
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<tr>
<td>Standard Text:</td>
<td>Identify the basic needs of plants and animals.</td>
<td>AAT or UC Text:</td>
<td>Identify the basic needs of plants or animals.</td>
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<tr>
<td>Category:</td>
<td>Cells, Flow of Matter &amp; Energy, Heredity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correct Answer:</td>
<td>A,B,A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## This is about the needs of plants.

**Plants need certain things to stay alive.**

Point to and read each question to the student.

1. **Do most plants need sunlight to stay alive?**
   - A. YES
   - B. NO

2. **Do most plants need to exercise to stay alive?**
   - A. YES
   - B. NO

3. **Do most plants need soil to stay alive?**
   - A. YES
   - B. NO
This is about the needs of animals.

Animals need food and nutrients to stay alive.

*Point to and read each question to the student.*

Do animals need soil to stay alive?  
A. **YES**  
B. **NO**

Do animals need to eat to stay alive?  
A. **YES**  
B. **NO**

Do animals need to drink water to stay alive?  
A. **YES**  
B. **NO**
Grade 3 Science ALT Items

**Item Information**

ETS Item Code: TAS01S0017  
Item ID: 1021  
DOK Level: 2  
Level: 1  
Standard Code: 0307.4.1  
Standard Text: Select an illustration that shows how an organism changes as it develops.

AAT or UC: UC  
AAT or UC Text: Match juvenile organisms to adult organisms.  
Category: Cells, Flow of Matter & Energy, Heredity  
Correct Answer: A

---

This is about baby animals.

Baby animals look like their parents. Baby animals do **not** look exactly the same as their parents.

*Point to the picture of the sheep.*

*[For all students, read “This is a picture of an animal parent. The animal is covered with curly wool and has a short tail.”]*
Which of these is **most** likely the baby of this parent?

_Point to and read each option to the student._

_[For all students, read “This baby animal is covered with curly wool and has a short tail.”]_

A.  

_[For all students, read “This baby animal is covered with short hair and has a long nose.”]_
This is about how an animal changes as it grows.

Chickens hatch from eggs. Over time, baby chickens grow to be adult chickens.

Point to the picture of the egg.

[For all students, read “This is a chicken egg.”]
Which of these will hatch from the egg?

Point to and read each option to the student.

[For all students, read “This is a picture of an adult chicken called a hen.”]

A. hen

[For all students, read “This is a picture of a chicken egg.”]

B. egg
[For all students, read “This is a picture of a young chicken called a chick.”]

C.

chick
This is about how plants and animals change as they grow.

*Point to and read each question to the student.*

[For students with visual impairment, read “This is a picture of a bean plant growing larger.”]

Does this show how a bean plant changes as it grows?  
A. YES B. NO
Does this show how a person changes as he grows?

A. YES  B. NO
[For students with visual impairment, read “This is a picture of an egg growing into a frog.”]

Does this show how a frog changes as it grows?  A. YES  B. NO
This is about how plants and animals change as they grow.

Point to and read each question to the student.

[For students with visual impairment, read “This is a picture of three young birds.”]

Does this show how a bird changes as it grows? A. YES B. NO
[For students with visual impairment, read “This is a picture of a corn plant growing larger.”]

Does this show how a corn plant changes as it grows?  

A. YES  
B. NO
Does this show how an insect changes as it grows?  

A. YES  

B. NO
This is about how an animal uses its body to move around in the place where it lives.

*Point to the picture of the horse.*

*[For all students, read “This is a horse. It has long legs (point to the legs).”]*
Where does a horse most likely live?

*Point to and read each option to the student.*

A. on land
B. in water
**Item Information**

ETS Item Code: TAS01S0022  
Content: Science  
Item ID: 1030  
Grade: 03  
DOK Level: 2  
Item Type: SR  
Level: 2  
Points: 1  
Standard Code: 0307.5.1  
AAT or UC: AAT  
Standard Text: Investigate an organism’s characteristics and evaluate how these features enable it to survive in a particular environment.  
AAT or UC Text: Identify features and characteristics that enable an organism to survive in a particular environment.  
Category: Interdependence, Biodiversity & Change  
Correct Answer: B
This is about how animals survive in the places where they live.

Animals have features that help them stay alive in the places where they live.

Point to the picture of the fish.

[For all students, read “This is a fish. It lives in water. The fish has gills (point to the gills). The fish uses gills to breathe under water. The fish has fins (point to the fins). The fish also has eyes (point to the eye).”]

Which feature helps the fish move in the water?

Point to and read each option to the student.

A. gills
B. fins
C. eyes
Grade 3 Science ALT Items

Item Information

ETS Item Code: TAS01S0023  
Item ID: 1031  
DOK Level: 4  
Level: 3a  
Standard Code: 0307.5.1  
Standard Text: Investigate an organism’s characteristics and evaluate how these features enable it to survive in a particular environment.

AAT or UC: AAT  
AAT or UC Text: Identify features and characteristics that enable an organism to survive in a particular environment.

Category: Interdependence, Biodiversity & Change  
Correct Answer: A,A,B
This is about how animals survive in the places where they live.

Animals have features that help them stay alive in the places where they live.

Birds have similar features like wings. Some birds live near water. Water birds have some different features than birds that live on land.

Point to the pictures of the duck and the flamingo.

[For all students, read “This is a duck (point to the duck). Ducks live near water. Ducks swim on the water. This is a flamingo (point to the flamingo). Flamingos live near water. Flamingos walk through the water looking for food.”]
Point to and read each question to the student.

Does having webbed feet help the duck swim?  
A. YES  
B. NO

Does having long legs help the flamingo walk through the water?  
A. YES  
B. NO

Does having a strong beak help the flamingo walk through the water?  
A. YES  
B. NO
This is about how animals survive in the places where they live.

Animals have features that help them stay alive in the places where they live. Some animals live in hot, dry deserts.
Point to and read each question to the student.

[For all students, read “This is an ostrich (point to the ostrich). Ostriches live in hot, sandy deserts. An ostrich has long eyelashes that keep sand out of its eyes (point to the ostrich’s eyelashes).”]

Does having wings help the ostrich eat seeds in the desert?  
A. YES  
B. NO

Does having long eyelashes help the ostrich live in the desert?  
A. YES  
B. NO
Does having a nose that can close help the camel live in the desert? A. YES B. NO
**Item Information**

ETS Item Code: TAS01S0025  
Item ID: 1037  
DOK Level: 2  
Level: 1  
Standard Code: 0307.7.4  
Standard Text: Determine methods for conserving natural resources.  
AAT or UC Text: Identify natural resources (i.e., natural vs. man-made).  
Category: The Universe, The Earth, The Atmosphere  
Correct Answer: A

This is about natural resources and man-made objects.

Natural resources are objects found in nature. Man-made objects are made by people using resources that come from nature.

*Point to the pictures of the cotton plant and the T-shirt.*

*[For all students, read “This is a picture of a cotton plant (point to the cotton plant). Cotton plants are found in nature. This is a picture of a T-shirt (point to the T-shirt). This T-shirt is made of cotton that came from a cotton plant.”]*
Which object is a natural resource?

Point to and read each option to the student.

A. cotton plant
B. T-shirt
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<td>Determine methods for conserving natural resources.</td>
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<tr>
<td>AAT or UC Text:</td>
<td>Identify activities that conserve natural resources.</td>
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<td>The Universe, The Earth, The Atmosphere</td>
</tr>
<tr>
<td>Correct Answer:</td>
<td>C</td>
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</table>
This is about saving natural resources.

Natural resources are things in nature that people use every day.

In school, we use paper. Paper is made from trees. Trees are natural resources that must be cared for.

Point to the picture.

[For all students, read “We can take care of natural resources. We can reduce how much we use by using less of something (point to ‘Reduce’). We can reuse things by using them more than one time (point to ‘Reuse’). We can also recycle things (point to ‘Recycle’).”]
We can save the natural resource, trees, by recycling paper.

Which of these is another example of saving natural resources?

*Point to and read each option to the student.*

A. digging for worms  
B. burning newspapers  
C. reusing empty glass jars
Grade 3 Science ALT Items

Item Information

ETS Item Code: TAS01S0027  Content: Science
Item ID: 1039  Grade: 03
DOK Level: 4  Item Type: MP
Level: 3a  Points: 3
Standard Code: 0307.7.4  AAT or UC: AAT
Standard Text: Determine methods for conserving natural resources.
AAT or UC Text: Identify activities that conserve natural resources.
Category: The Universe, The Earth, The Atmosphere
Correct Answer: A,A,B
This is about saving natural resources.

Natural resources are things in nature that people use every day.

Minerals are natural resources. Minerals can be used to make cans, bikes, cars, and glass.

Point to the picture.

[For all students, read “We can take care of natural resources. We can reduce how much we use by using less of something (point to ‘Reduce’). We can reuse things by using them more than one time (point to ‘Reuse’). We can also recycle things (point to ‘Recycle’).”]
Point to and read each question to the student.

Will recycling cans help save natural resources?  
A. YES  
B. NO

Will riding a bike instead of driving a car help save natural resources?  
A. YES  
B. NO

Will throwing away a glass jar help save natural resources?  
A. YES  
B. NO
This is about saving natural resources.

Natural resources are things in nature that people use every day.

Water is an important natural resource.

Point to and read each question to the student.

Will taking a long shower help save water? A. YES B. NO

Will turning off the faucet while brushing your teeth help save water? A. YES B. NO

Will leaving a water hose on in a garden help save water? A. YES B. NO
This is about natural resources and man-made objects.

Which of these is a man-made object?

*Point to and read each option to the student.*

A. a chair
B. a tree
This is about saving natural resources.

People use natural resources every day.

Which activity helps save a natural resource?

*Point to and read each option to the student.*

*[For all students, read “This picture shows a person driving a car.”]*

A.
[For all students, read “This picture shows a person recycling a plastic bottle.”]

B.

[For all students, read “This picture shows a person mowing grass.”]

C.
This is about saving natural resources.

Soil is a natural resource.

Point to and read each question to the student.

Will cutting down trees help save soil?
A. YES  B. NO

Will planting grass help save soil?
A. YES  B. NO

Will building roads help save soil?
A. YES  B. NO
This is about saving natural resources.

Trees are a natural resource.

*Point to and read each question to the student.*

Trees are used to make paper. Will recycling paper help save trees?  
A. YES  
B. NO

Trees are used to build houses. Will building more houses help save trees?  
A. YES  
B. NO

Trees are used to make grocery bags. Will reusing grocery bags help save trees?  
A. YES  
B. NO
This is about weather.

Point to the picture of the girl.

[For all students, read “This is a picture of a girl holding an umbrella so she can stay dry. It is wet outside, and there are large clouds in the sky.”]
What type of weather is shown?

*Point to and read each option to the student.*

A. sunny weather
B. rainy weather
This is about clouds.

A cloud is a collection of tiny drops of water or ice crystals. Clouds can float in the air. There are many types of clouds.

Point to the pictures of the clouds.

[For all students, read “Cloud 1 is flat and gray. Cloud 2 is puffy and white.”]
Which statement is true about the clouds?

Point to and read each option to the student.

A. Cloud 2 is flatter than Cloud 1.
B. Cloud 2 is bigger than Cloud 1.
C. Cloud 2 is darker than Cloud 1.
### Item Information

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<thead>
<tr>
<th>ETS Item Code:</th>
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<th>Science</th>
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<tr>
<td>Standard Text:</td>
<td>Match major cloud types with specific atmospheric conditions.</td>
<td></td>
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<tr>
<td>AAT or UC Text:</td>
<td>Recognize that there are a variety of clouds (shapes/sizes).</td>
<td></td>
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<tr>
<td>Category:</td>
<td>The Universe, The Earth, The Atmosphere</td>
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</tr>
<tr>
<td>Correct Answer:</td>
<td>B,A,B</td>
<td></td>
<td></td>
</tr>
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</table>
This is about clouds.

Point to and read the data table to the student.

[For all students, point to the picture of the cirrus clouds and read “Cirrus clouds are in the sky when there is sunny weather.” Point to the picture of the cumulonimbus cloud and read “Cumulonimbus clouds are in the sky when there is stormy weather.”]

### Types of Clouds

<table>
<thead>
<tr>
<th>Cloud Types</th>
<th>Picture</th>
<th>Weather</th>
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<tbody>
<tr>
<td><strong>Cirrus</strong></td>
<td><img src="image1" alt="Cirrus Cloud Picture" /></td>
<td>Sunny Weather</td>
</tr>
<tr>
<td><strong>Cumulonimbus</strong></td>
<td><img src="image2" alt="Cumulonimbus Cloud Picture" /></td>
<td>Stormy Weather</td>
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</tbody>
</table>
Which type of cloud answers each question?

*Point to and read each question to the student.*

<table>
<thead>
<tr>
<th>Question</th>
<th>Option A</th>
<th>Option B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which cloud is tall?</td>
<td>A. cirrus cloud</td>
<td>B. cumulonimbus cloud</td>
</tr>
<tr>
<td>Which cloud is thin?</td>
<td>A. cirrus cloud</td>
<td>B. cumulonimbus cloud</td>
</tr>
<tr>
<td>Which cloud might be seen during a storm?</td>
<td>A. cirrus cloud</td>
<td>B. cumulonimbus cloud</td>
</tr>
</tbody>
</table>
### Item Information

<table>
<thead>
<tr>
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<th>TAS01S0032</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item ID:</td>
<td>1044</td>
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<tr>
<td>Grade:</td>
<td>03</td>
</tr>
<tr>
<td>DOK Level:</td>
<td>4</td>
</tr>
<tr>
<td>Item Type:</td>
<td>MP</td>
</tr>
<tr>
<td>Level:</td>
<td>3b</td>
</tr>
<tr>
<td>Points:</td>
<td>3</td>
</tr>
<tr>
<td>Standard Code:</td>
<td>0307.8.2</td>
</tr>
<tr>
<td>AAT or UC:</td>
<td>AAT</td>
</tr>
<tr>
<td>Standard Text:</td>
<td>Match major cloud types with specific atmospheric conditions.</td>
</tr>
<tr>
<td>AAT or UC Text:</td>
<td>Recognize that there are a variety of clouds (shapes/sizes).</td>
</tr>
<tr>
<td>Category:</td>
<td>The Universe, The Earth, The Atmosphere</td>
</tr>
<tr>
<td>Correct Answer:</td>
<td>B,A,B</td>
</tr>
</tbody>
</table>

Grade 3 Science ALT Items
This is about clouds.

Point to and read the data table to the student.

[For all students, point to the picture of the cumulus cloud and read “Cumulus clouds are in the sky when there is sunny weather.” Point to the picture of the stratus cloud and read “Stratus clouds are in the sky when there is rainy weather.”]

### Types of Clouds

<table>
<thead>
<tr>
<th>Cloud Types</th>
<th>Picture</th>
<th>Weather</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulus</td>
<td><img src="image" alt="Cumulus Cloud" /></td>
<td>Sunny Weather</td>
</tr>
<tr>
<td>Stratus</td>
<td><img src="image" alt="Stratus Cloud" /></td>
<td>Rainy Weather</td>
</tr>
</tbody>
</table>

SPRING 2018 TCAP Item Release
Which type of cloud answers each question?

*Point to and read each question to the student.*

Which cloud is flat?

A. cumulus cloud  
B. stratus cloud

Which cloud is white?

A. cumulus cloud  
B. stratus cloud

Which cloud will most likely be seen when it rains?

A. cumulus cloud  
B. stratus cloud
This is about heat.

Which picture shows something that is hot?

Point to and read each option to the student.

[For all students, read “This is a picture of logs on fire.”]

A.

fire
[For all students, read “This is a picture of an ice cube.”]

B. ice cube
This is about heat energy.

Objects that are hot release heat energy.

Which object is a source of heat energy?

*Point to and read each option to the student.*

*[For students with visual impairment, read “This is a picture of a wooden spoon.”]*

A. wooden spoon
B. fireplace

[For students with visual impairment, read “This is a picture of a fireplace.”]

C. empty bottle

[For students with visual impairment, read “This is a picture of an empty bottle.”]
This is about heat energy.

Objects that are hot release heat energy.

*Point to and read each question to the student.*

[For students with visual impairment, read “This is a picture of a stove.”]

Can a stove be a source of heat energy?  
A. YES  B. NO
Can a chair be a source of heat energy?

A. YES  B. NO
Can a toaster be a source of heat energy?  

A. YES  
B. NO
### Item Information

<table>
<thead>
<tr>
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<th>TAS01S0036</th>
<th>Content:</th>
<th>Science</th>
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<tbody>
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<td>Grade:</td>
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<td>Item Type:</td>
<td>MP</td>
</tr>
<tr>
<td>Level:</td>
<td>3b</td>
<td>Points:</td>
<td>3</td>
</tr>
<tr>
<td>Standard Code:</td>
<td>0307.10.1</td>
<td>AAT or UC:</td>
<td>AAT</td>
</tr>
<tr>
<td>Standard Text:</td>
<td>Use an illustration to identify various sources of heat energy.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AAT or UC Text:</td>
<td>Identify representations of various sources of heat energy.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category:</td>
<td>Matter and Energy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correct Answer:</td>
<td>B,A,A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This is about heat energy.

Objects that are hot release heat energy.

Point to the picture.

[For students with visual impairment, read "This is a picture of two children. They are cooking marshmallows over a campfire. The sun is shining. Their backpacks are beside them."]
Some of the objects in the picture are sources of heat energy.

Point to and read each question to the student.

Are the backpacks a source of heat energy?  
A. YES  B. NO

Is the sun a source of heat energy?  
A. YES  B. NO

Is the campfire a source of heat energy?  
A. YES  B. NO
This is about objects and motion.

A girl kicks a ball.

*Point to the picture of the girl kicking the ball.*

*[For all students, read “This is a picture of a girl. She is kicking a ball.”]*
Which of these describes the ball right after it is kicked?

*Point to and read each option to the student.*

A. The ball is moving.
B. The ball is at rest.
This is about objects and motion.

Different forces can change how objects move.

Which ball will move fastest when pushed with the same amount of force?

Point to and read each option to the student.

[For all students, read “This picture shows a ball that will roll across a flat table.”]

A.
[For all students, read “This picture shows a ball that will roll down a ramp.”]

B.

[For all students, read “This picture shows a ball that will roll up a ramp.”]

C.
This is about objects and motion.

Different forces can change how objects move.

*Point to the picture of the ramps and balls.*

*[For all students, read “Here are two ramps. Each ramp has one ball at the top. The balls are the same.”]*
If one ball is pushed with more force, will it roll faster than the other ball? 
A. YES  B. NO

If both balls are pushed with the same force, will one roll faster? 
A. YES  B. NO

If one ramp is raised higher, will that ball roll faster than the other ball? 
A. YES  B. NO
This is about objects and motion.

Different forces can change how objects move.

Point to the picture of the ramps and balls.

[For all students, read “Here are two ramps. Each ramp has one ball at the top. The balls are the same.”]
Point to and read each question to the student.

If one ball is pushed with less force, will it roll more slowly than the other ball? A. YES  B. NO

If both balls are pushed with the same force, will they roll at the same speed? A. YES  B. NO

If one ramp is raised higher, will that ball roll more slowly than the other ball? A. YES  B. NO
### Item Information

<table>
<thead>
<tr>
<th>ETS Item Code:</th>
<th>TAS01S0041</th>
<th>Content:</th>
<th>Science</th>
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</thead>
<tbody>
<tr>
<td>Item ID:</td>
<td>1009</td>
<td>Grade:</td>
<td>03</td>
</tr>
<tr>
<td>DOK Level:</td>
<td>2</td>
<td>Item Type:</td>
<td>SR</td>
</tr>
<tr>
<td>Level:</td>
<td>1</td>
<td>Points:</td>
<td>1</td>
</tr>
<tr>
<td>Standard Code:</td>
<td>0307.12.1</td>
<td>AAT or UC:</td>
<td>UC</td>
</tr>
<tr>
<td>Standard Text:</td>
<td>Recognize that magnets can move objects without touching them.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AAT or UC Text:</td>
<td>Match materials with similar physical properties (i.e., attracted to a magnet).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category:</td>
<td>Motion, Forces in Nature</td>
<td>Correct Answer:</td>
<td>B</td>
</tr>
</tbody>
</table>
This is about magnets.

Metal objects stick to magnets. The magnets attract the metal in the objects.

*Point to the picture of the magnet and nails.*

*[For all students, read “This is a picture of a magnet. There are three nails sticking to the magnet. The magnet is attracting the nails.”]*
Which of these is another object that will stick to a magnet?

*Point to and read each option to the student.*

A. plastic straw  
B. metal spoon
This is about magnets.

Magnets can attract objects that contain the metal iron.

*Point to the picture of the magnet and nails.*

*[For students with visual impairment, read “This is a picture of three nails and a magnet. The nails are near the magnet, but they are not touching the magnet.”]*
What will happen to the nails as the magnet is moved closer?

*Point to and read each option to the student.*

A. The nails will move away from the magnet.
B. The nails will move closer to the magnet.
C. The nails will stay where they are.
Grade 3 Science ALT Items

This is about magnets.

Magnets affect some metal objects and other magnets.

Point to and read each question to the student.

Will a wooden spoon stick to a magnet? A. YES B. NO
Point to the picture of the magnets.

[For students with visual impairment, read “This is a picture of two magnets. Each magnet has a north pole and a south pole. The first magnet’s south pole is close to the second magnet’s north pole.”]

Will these two magnets be attracted to each other?  
A. YES  
B. NO

Can a magnet move another object without touching the object?  
A. YES  
B. NO
This is about magnets.

Magnets affect some metal objects and other magnets.

*Point to and read each question to the student.*

Will a metal paper clip stick to a magnet?  
A. YES  
B. NO

If a magnet is placed near an iron nail, will the nail become hot?  
A. YES  
B. NO
Point to the picture of the magnets.

[For students with visual impairment, read “This is a picture of two magnets. Each magnet has a north pole and a south pole. The first magnet’s north pole is close to the second magnet’s north pole.”]

Will these two magnets be attracted to each other?  
A. YES  
B. NO
This is about characteristics of objects.

A student touched an object. The student told the teacher the object felt hard.

Which object was the student describing?

Point to and read each option to the student.

[For students with visual impairment, read “This is a picture of a rock.”]

A. rock
[For students with visual impairment, read “This is a picture of a pillow.”]

B. pillow
### Item Information

<table>
<thead>
<tr>
<th>ETS Item Code:</th>
<th>TAS01S0558</th>
<th>Content:</th>
<th>Science</th>
</tr>
</thead>
<tbody>
<tr>
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<td>2005</td>
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<td>DOK Level:</td>
<td>3</td>
<td>Item Type:</td>
<td>SR</td>
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<tr>
<td>Level:</td>
<td>2</td>
<td>Points:</td>
<td>1</td>
</tr>
<tr>
<td>Standard Code:</td>
<td>0307.12.2</td>
<td>AAT or UC:</td>
<td>AAT</td>
</tr>
<tr>
<td>Standard Text:</td>
<td>Identify objects that are attracted to magnets.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AAT or UC Text:</td>
<td>Identify materials attracted to magnets based on observations or measurements.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category:</td>
<td>Motion, Forces in Nature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correct Answer:</td>
<td>A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This is about magnets.

Magnets stick to some objects. Objects that magnets stick to are magnetic.

A student tested a metal file cabinet and a metal chair leg with a magnet.

*Point to the picture.*

*[For all students, read “This picture shows the objects the student tested with the magnet. This is a picture of a metal file cabinet and a magnet (point to the file cabinet and magnet). The magnet is sticking to the side of the file cabinet. This is a picture of a classroom chair and a magnet (point to the chair and the magnet). The magnet is sticking to the metal chair leg.”]
What are the results of the student’s test?

*Point to and read each option to the student.*

A. The metal file cabinet and the metal chair leg are both magnetic.

B. Only the metal file cabinet is magnetic.

C. Only the metal chair leg is magnetic.
### Item Information

<table>
<thead>
<tr>
<th>ETS Item Code</th>
<th>TAS01S0559</th>
<th>Content</th>
<th>Science</th>
</tr>
</thead>
<tbody>
<tr>
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<td>2006</td>
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<tr>
<td>Level</td>
<td>3a</td>
<td>Points</td>
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<td>0307.12.2</td>
<td>AAT or UC</td>
<td>AAT</td>
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<tr>
<td>Standard Text</td>
<td>Identify objects that are attracted to magnets.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AAT or UC Text</td>
<td>Identify materials attracted to magnets based on observations or measurements.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Motion, Forces in Nature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correct Answer</td>
<td>B,A,A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This is about magnets.

Magnets stick to some objects. Objects that magnets stick to are magnetic.

A student touched a magnet to different classroom objects to see if the magnet would stick to each object.

*Point to and read the data table to the student.*

*[For all students, read “This is a data table with two sections. The first section is ‘Sticks to Magnet.’ It shows a classroom whiteboard and a metal desk. The second category is ‘Does Not Stick to Magnet.’ It shows a glass window and a wooden bookshelf.”]*

<table>
<thead>
<tr>
<th>Sticks to Magnet</th>
<th>Does Not Stick to Magnet</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Whiteboard" /></td>
<td><img src="image2" alt="Window" /></td>
</tr>
<tr>
<td><img src="image3" alt="Desk" /></td>
<td><img src="image4" alt="Bookshelf" /></td>
</tr>
</tbody>
</table>
Use the data table to answer the questions.

*Point to and read each question to the student.*

<table>
<thead>
<tr>
<th>Question</th>
<th>A. YES</th>
<th>B. NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the glass window magnetic?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the metal desk magnetic?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the whiteboard magnetic?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Item Information

<table>
<thead>
<tr>
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<td>Science</td>
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<table>
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<tbody>
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</table>

<table>
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<tr>
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<td>4</td>
<td>MP</td>
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<table>
<thead>
<tr>
<th>Level</th>
<th>Points</th>
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<th>AAT or UC Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>3b</td>
<td>3</td>
<td>AAT</td>
<td>Identify objects that are attracted to magnets.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or UC: AAT</td>
<td>Identify materials attracted to magnets based on observations or measurements.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Correct Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motion, Forces in Nature</td>
<td>A, B, B</td>
</tr>
</tbody>
</table>
This is about magnets.

Magnets stick to some objects. Objects that magnets stick to are magnetic.

A student touched a magnet to different classroom objects to see if the magnet would stick to each object.

*Point to and read the data table to the student.*

*[For all students, read “This is a data table with two sections. The first section is ‘Sticks to Magnet.’ It shows a metal desk and a metal trashcan. The second category is ‘Does Not Stick to Magnet.’ It shows a wooden door and a wooden bookshelf.”]*

<table>
<thead>
<tr>
<th>Sticks to Magnet</th>
<th>Does Not Stick to Magnet</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Metal Desk" /></td>
<td><img src="image2" alt="Wooden Door" /></td>
</tr>
<tr>
<td><img src="image3" alt="Metal Trashcan" /></td>
<td><img src="image4" alt="Wooden Bookshelf" /></td>
</tr>
</tbody>
</table>
Use the data table to answer the questions.

*Point to and read each question to the student.*

Is the metal trashcan magnetic?  
A. YES  
B. NO

Is the wooden bookshelf magnetic?  
A. YES  
B. NO

Is the wooden door magnetic?  
A. YES  
B. NO
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  - METADATA DEFINITIONS ...................................................................................................... 4

**Grade 4 Science ALT Items** .................................................................................................... 5
### ITEM INFORMATION

<table>
<thead>
<tr>
<th>ETS Item Code:</th>
<th>TAS01S0477</th>
<th>Category:</th>
<th>Biodiversity and Change</th>
</tr>
</thead>
<tbody>
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<td>1273</td>
<td>Correct Answer:</td>
<td>B</td>
</tr>
<tr>
<td>DOK Level:</td>
<td>2</td>
<td>Content:</td>
<td>Science</td>
</tr>
<tr>
<td>Level:</td>
<td>1</td>
<td>Grade:</td>
<td>10</td>
</tr>
<tr>
<td>Standard Code:</td>
<td>3210.5.1</td>
<td>Item Type:</td>
<td>SR</td>
</tr>
<tr>
<td>Standard Text:</td>
<td>Compare and contrast the structural, functional, and behavioral adaptations of animals or plants found in different environments.</td>
<td>Points:</td>
<td>1</td>
</tr>
<tr>
<td>AAT or UC Text:</td>
<td>Compare physical characteristics of animals advantageous for survival in their environments.</td>
<td>AAT or UC:</td>
<td>UC</td>
</tr>
</tbody>
</table>

### METADATA DEFINITIONS

<table>
<thead>
<tr>
<th>ETS Item Code:</th>
<th>Unique letter/number code used to identify the item.</th>
<th>Category:</th>
<th>Text of the Reporting Category the standard assesses.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item ID:</td>
<td>Unique number code the vendor uses to identify the item internally.</td>
<td>Correct Answer:</td>
<td>Correct answer. For multi part items correct answers are listed in order, separated by a comma.</td>
</tr>
<tr>
<td>DOK Level:</td>
<td>(if listed): Depth of Knowledge (cognitive complexity) is measured on the following scale: 2 = Memorize/Recall, 3 = Performance, 4 = Comprehension.</td>
<td>Content:</td>
<td>Subject.</td>
</tr>
<tr>
<td>Level:</td>
<td>Tier, on the following scale: 1 = SR item with two options, lower complexity; 2 = SR item with three options, moderate complexity; 3 = MP item includes 3 questions with two answer options each, higher complexity.</td>
<td>Grade:</td>
<td>Grade level.</td>
</tr>
<tr>
<td>Standard Code:</td>
<td>Primary educational standard assessed.</td>
<td>Item Type:</td>
<td>SR for single response multiple choice item, MP for multiple part multiple choice items.</td>
</tr>
<tr>
<td>Standard Text:</td>
<td>Text of the educational standard assessed.</td>
<td>Points:</td>
<td>Maximum points possible for this item.</td>
</tr>
<tr>
<td>AAT or UC Text:</td>
<td>Text of the Alternate Assessment Target or Underlying concept</td>
<td>AAT or UC:</td>
<td>Alternate Assessment Target or Underlying Concept.</td>
</tr>
</tbody>
</table>
This is about cells.

All living things are made of cells.

Which diagram shows that a leaf is made of cells?

*Point to and read each option to the student.*

*[For all students, read “This diagram shows how a very small part of a leaf would look under a microscope.”]*

A.
[For all students, read “This diagram shows an insect eating a leaf.”]

B.
<table>
<thead>
<tr>
<th>Item Information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ETS Item Code: TAS01S0070</td>
<td>Content: Science</td>
</tr>
<tr>
<td>Item ID: 1062</td>
<td>Grade: 04</td>
</tr>
<tr>
<td>DOK Level: 3</td>
<td>Item Type: SR</td>
</tr>
<tr>
<td>Level: 2</td>
<td>Points: 1</td>
</tr>
<tr>
<td>Standard Code: 0407.1.1</td>
<td>AAT or UC: AAT</td>
</tr>
<tr>
<td>Standard Text: Compare basic structures of plant and animal cells.</td>
<td>AAT or UC Text: Identify basic structures of plant and animal cells.</td>
</tr>
<tr>
<td>Category: Cells, Flow of Matter &amp; Energy, Heredity</td>
<td>Correct Answer: C</td>
</tr>
</tbody>
</table>
This is about cells.

Point to the diagram.

[For all students, read “This diagram shows a plant cell. An arrow is pointing to a part of the cell. This part surrounds the cell (point to the arrow and trace the cell). This part is thick and stiff. It protects and supports the plant cell.”]
What part of the plant cell is the arrow pointing to?

Point to and read each option to the student.

A. vacuole
B. nucleus
C. cell wall
This is about cells.

Point to the diagram.

[For all students, read “This is an animal cell. It has many different parts.”]
Use the diagram to answer the questions.

Point to and read each question to the student.

[For all students, read “The letter A is pointing to a part that controls cell activities.”]

Is letter A pointing to the nucleus? A. YES  B. NO

[For all students, read “The letter B is pointing to a part that stores water.”]

Is letter B pointing to the cell membrane? A. YES  B. NO

[For all students, read “The letter C is pointing to a thin outer layer that surrounds the cell.”]

Is letter C pointing to a vacuole? A. YES  B. NO
Item Information

ETS Item Code: TAS01S0072  
Item ID: 1064  
DOK Level: 4  
Level: 3b  
Standard Code: 0407.1.1  
Standard Text: Compare basic structures of plant and animal cells.

AAT or UC: AAT  
AAT or UC Text: Identify basic structures of plant and animal cells.

Category: Cells, Flow of Matter & Energy, Heredity  
Correct Answer: A,B,A
This is about cells.

Point to the diagram.

[For all students, read “This is a plant cell. It has many different parts.”]
Use the diagram to answer the questions.

Point to and read each question to the student.

[For all students, read “The letter A is pointing to a part that controls cell activities.”]

Is letter **A** pointing to the nucleus?  
A. YES  
B. NO

[For all students, read “The letter B is pointing to a large part that stores water.”]

Is letter **B** pointing to the cell wall?  
A. YES  
B. NO

[For all students, read “The letter C is pointing to a part that makes the leaf green.”]

Is letter **C** pointing to a chloroplast?  
A. YES  
B. NO
This is about cells.

All animals are made of cells.

Which picture shows that a frog is made of cells?

Point to and read each option to the student.

[For all students, read “This picture shows a frog keeping its skin wet.”]

A.
[For all students, read “This picture shows how the skin of a frog would look under a microscope.”]
This is about cells.

Cells have different parts.

Point to the diagram.

[For all students, read “This diagram shows an animal cell. An arrow is pointing to a part of the cell (point to the organelle indicated by the arrow). This part of the cell controls cell activities.”]
Which part of the animal cell is the arrow pointing to?

*Point to and read each option to the student.*

A. nucleus  
B. vacuole  
C. cell membrane
This is about cell parts.

Animal cells and plant cells have some of the same parts. Both types of cells have a nucleus, a cell membrane, and vacuoles. Each part of a cell does a different job.

*Point to the diagram.*

*[For all students, read “This diagram shows an animal cell (point to the animal cell) and a plant cell (point to the plant cell). Three parts are labeled (point to the number 1, then the number 2, and then the number 3).”]*
Use the diagram to answer the questions.

Point to and read each question to the student.

[For all students, read “Part 1 lets water in and out of the cell. This is part 1 on the animal cell (point to and trace with your finger part 1 of the animal cell). This is part 1 on the plant cell (point to and trace with your finger part 1 on the plant cell).”]

Is part 1 a vacuole?  A. YES  B. NO

[For all students, read “Part 2 stores water for the cell. This is part 2 on the animal cell (point to part 2 on the animal cell). This is part 2 on the plant cell (point to part 2 on the plant cell).”]

Is part 2 a cell membrane?  A. YES  B. NO

[For all students, read “Part 3 controls cell activities. This is part 3 on the animal cell (point to part 3 on the animal cell). This is part 3 on the plant cell (point to part 3 on the plant cell).”]

Is part 3 a nucleus?  A. YES  B. NO
This is about cell parts.

Cells have parts that do different jobs. Animal cells have a nucleus, a cell membrane, and vacuoles.

*Point to the diagram.*

*[For all students, read “This diagram shows parts of an animal cell. Part 1 is the outer layer of the cell (point to and trace part 1 with your finger). Part 2 (point to part 2) and part 3 (point to part 3) are inside the cell.”]*
Use the diagram to answer the questions.

*Point to and read each question to the student.*

*For all students, read “Part 1 lets water move in and out of the cell (point to part 1).”*

Is part 1 a cell membrane?  
A. YES  
B. NO

*For all students, read “Part 2 controls the cell’s activities (point to part 2).”*

Is part 2 a vacuole?  
A. YES  
B. NO

*For all students, read “Part 3 stores water for the cell (point to part 3).”*

Is part 3 a nucleus?  
A. YES  
B. NO
This is about humans.

Humans get energy by eating food.

Which of these does a human eat to get energy?

*Point to and read each option to the student.*

A. orange slice
B. tree branch
This is about how living things survive.

Living things need energy to survive. Animals get energy from food.

What would a family of beavers most likely do if they found a good source of food?

*Point to and read each option to the student.*

A. grow thinner coats
B. move away from the food source
C. live longer lives
This is about how living things survive.

Living things need energy to survive. Animals get energy from food.

It is easy for animals to find food during some seasons. It is hard for animals to find food during other seasons.

*Point to the diagram.*

*[For all students, read “This is a diagram of a food chain. In this food chain, the beetle eats leaves and berries to survive (point to the leaves and berries, then to the beetle). The bird eats the beetle to survive (point to the beetle, then to the bird).”]*
Use the food chain to answer the questions.

*Point to and read each question to the student.*

There are no leaves and berries in the winter. Does this make it harder for beetles to survive in the winter?  
A. YES  
B. NO

Adult beetles come out in the summer. Does this make it harder for birds to survive in the summer?  
A. YES  
B. NO

Beetles eat leaves and berries in the spring. Does this make it harder for those plants to survive in the spring?  
A. YES  
B. NO
This is about how living things survive.

Living things need energy to survive. Animals get energy from food.

It is easy for animals to find food during some seasons. It is hard for animals to find food during other seasons.

Point to the diagram.

[For all students, read “This is a diagram of a food chain. In this food chain, the butterfly eats nectar from the flower to survive (point to the flower, then to the butterfly). The bird eats the butterfly to survive (point to the butterfly, then to the bird).”]
Use the food chain to answer the questions.

*Point to and read each question to the student.*

There are a lot of flowers in the summer. Does this make it easier for butterflies to survive in the summer?  

A. YES  
B. NO

Butterflies move away during the fall. Does this make it easier for birds to survive in the fall?  

A. YES  
B. NO

There are no flowers in the winter. Does this make it easier for birds to survive in the winter?  

A. YES  
B. NO
This is about how living things reproduce.

Birds lay eggs to reproduce. Birds must protect the eggs so that the eggs hatch safely.

*Point to the picture.*

*[For all students, read “This picture shows what some bird eggs look like.”]*

![Bird eggs](image)
How do most birds protect their eggs?

Point to and read each option to the student.

A. Most birds carry their eggs with them as they fly around to find food.

B. Most birds keep their eggs in a nest when they fly around to find food.
This is about how living things reproduce.

There will be more horses living in an area after the horses reproduce.

What will **most** likely happen if a group of horses does **not** reproduce?

*Point to and read each option to the student.*

A. The group will move to a new place.
B. The group will get larger.
C. The group will get smaller.
This is about how living things reproduce.

All plants and animals can reproduce.

*Point to and read each question to the student.*

Can a rosebush produce a new rosebush?  
A. YES  
B. NO

Does reproduction make the number of sheep in a herd get smaller?  
A. YES  
B. NO

If a fish produces many eggs, will more fish survive to become adults?  
A. YES  
B. NO
This is about how living things reproduce.

All plants and animals can reproduce.

*Point to and read each question to the student.*

Can grasshoppers produce new grasshoppers?  
A. YES  
B. NO

If elephants have more babies, will their herd get smaller?  
A. YES  
B. NO

If a sea turtle lays many eggs, will more sea turtles survive to become adults?  
A. YES  
B. NO
Grade 4 Science ALT Items

Item Information

ETS Item Code: TAS01S0001  
Item ID: 1001  
DOK Level: 2  
Level: 1  
Standard Code: 0407.5.1  
Standard Text: Determine how a physical or behavioral adaptation can enhance the chances of survival.

AAT or UC: UC  
AAT or UC Text: Identify how an animal uses a body part (e.g., to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water and air).

Category: Interdependence, Biodiversity & Change  
Correct Answer: A
This is about how animals use their body parts to do different things.

Point to the picture of the monkey.

[For all students, read “This is a spider monkey. Spider monkeys live in some tropical forests. A spider monkey has a long tail. Here is the spider monkey’s tail (point to the tail).”]

![Image of a spider monkey climbing a tree]

What does a spider monkey use its tail to do?

Point to and read each option to the student.

A. climb a tree
B. see a banana
This is about how animals adapt to survive in the places where they live.

An adaptation is a feature or behavior that helps living things survive in the places where they live.

Point to the pictures of the fish and the giraffe.

[For all students, read “This is a fish (point to the fish). It lives in the water. It is adapted to live in water because it has fins for swimming. This is a giraffe (point to the giraffe). It eats leaves from tall trees. It is adapted to reach the leaves because it has a long neck.”]
Which of these animals has eyes adapted to see well at night?

Point to and read each option to the student.

[For all students, read “This is a picture of an iguana. It sleeps at night.”]

A. Iguana

[For all students, read “This is a picture of an owl. It hunts at night.”]

B. Owl
[For all students, read “This is a picture of a squirrel. It stays in its nest at night.”]
This is about how animals adapt to survive in the places where they live.

Point to the picture of the polar bear.

[For all students, read “This is a polar bear. Polar bears live in the Arctic Circle. The climate at the Arctic Circle is very cold. Much of the area is covered with ice all year long.”]
Polar bears can live in the Arctic Circle because they have adapted features that help them survive.

*Point to and read each question to the student.*

Does having two thick layers of fur help polar bears keep warm in the Arctic Circle?  
A. YES  B. NO

Does having long, curved, and sharp claws help polar bears keep warm in the Arctic Circle?  
A. YES  B. NO

Does having a thick layer of fat under the skin help polar bears keep warm in the Arctic Circle?  
A. YES  B. NO
This is about how animals adapt to survive in the places where they live.

Point to the picture of the seal.

[For all students, read “This is a seal. Seals live in coastal waters. Seals must swim a lot to catch the fish and shellfish they eat.”]
Seals can live in the oceans near the coast because they have adapted features that help them survive.

Point to and read each question to the student.

Does having strong teeth help seals tear food into chunks to eat?  
A. YES  B. NO

Does having eyes on the front of the head help seals see the fish they want to eat?  
A. YES  B. NO

Does having short, thick hair help seals smell the fish they want to eat?  
A. YES  B. NO
This is about features of Earth’s surface.

*Point to the picture.*

*[For all students, read “The picture shows land with high areas and low areas. (Point to the arrow.) The arrow is pointing to a high area.”]*
What feature of Earth is the arrow pointing to?

*Point to and read each option to the student.*

A. valley
B. mountain
This is about changes to Earth’s surface.

Moving water and wind carry rocks and soil to different places.

Which of these **most** likely causes rocks to move to a new place?

*Point to and read each option to the student.*

A. a gentle breeze
B. a calm pond
C. a fast-flowing river
This is about changes to Earth’s surface.

Moving water and wind carry rocks and soil to other places.

_Point to and read each question to the student._
Is this canyon formed mostly by water or by wind?

A. water   B. wind

[For all students, read “This is a picture of a canyon. The canyon has a river flowing through it.”]
Is a sand dune formed mostly by water or by wind?  

A. water  
B. wind
This model shows how soil can be moved. Is the soil being moved by water or by wind?

A. water       B. wind
This is about changes to Earth’s surface.

Moving water and wind carry rocks and soil to other places.

Point to and read each question to the student.

Can a fast-flowing river move pebbles to a new place?  
A. YES  B. NO
[For all students, read “This is a picture of a fan blowing air over a small tray of soil.”]

Is this a model of how water can move soil?  
A. YES  
B. NO

Can a small puddle move a large rock to a new location?  
A. YES  
B. NO
This is about features on Earth’s surface.

Point to the picture.

[For all students, read “The picture shows two areas on Earth’s surface. This is area 1 (point to the number 1). Area 1 is a low area with a river flowing through it. This is area 2 (point to the number 2). Area 2 is a high area. The land is round and smooth.”]
Which area is a valley?

Point to and read each option to the student.

A. area 1
B. area 2
This is about changes to Earth’s surface.

Deserts are dry places. Some deserts are covered with sand.

*Point to the picture.*

*[For all students, read “The picture shows a sand dune in a desert.”]*
Which of these would **most** likely cause this desert sand dune to change size?

A. blowing wind
B. flowing water
C. moving ice
This is about changes to Earth’s surface.

Moving water can cause changes to landforms on Earth.
Does this show how water changes landforms?

A. YES  
B. NO
[For all students, read “This picture shows a river flowing through a canyon.”]

Does this show how water changes landforms?  

A. YES  
B. NO
[For all students, read “This picture shows lava erupting from a volcano.”]

Does this show how water changes landforms?  

A. YES  
B. NO
This is about changes to Earth’s surface.

Water freezing and melting can cause changes to landforms on Earth.

Point to and read each question to the student.

[For all students, read “This picture shows a valley shaped like a U.”]

Did frozen water melting cause this valley to form?  A. YES  B. NO
Did liquid water freezing cause this sand dune to form?  
A. YES B. NO

Did water freezing and melting cause this rock to crack?  
A. YES B. NO
This is about Earth materials.

Nonliving things that are found in nature are called Earth materials. Water is an example of an Earth material.

Which of these is also an Earth material?

*Point to and read each option to the student.*

A. soil

B. plastic
This is about Earth materials.

Nonliving things that are found in nature are called Earth materials.

Which Earth material do humans make buildings from?

*Point to and read each option to the student.*

A. water  
B. wind  
C. rocks
This is about Earth materials.

Nonliving things that are found in nature are called Earth materials. Water is an example of an Earth material.

Humans use Earth materials for many purposes.

Point to and read each question to the student.

Do people use water to make rocks?  
A. YES  B. NO

Do people use water in their homes?  
A. YES  B. NO

Do people use water to grow food?  
A. YES  B. NO
This is about Earth materials.

Nonliving things that are found in nature are called Earth materials. A rock is an example of an Earth material.

Humans use Earth materials for many purposes.

*Point to and read each question to the student.*

Do people use rocks as food?  
A. YES    B. NO

Do people use rocks to build roads?  
A. YES    B. NO

Do people use rocks to make water?  
A. YES    B. NO
This is about heating and cooling.

A student took two ice cubes out of the freezer and placed them on a table.

Point to the pictures of the ice cubes.

[For all students, read “This says ‘Before’ (point to the word ‘Before’). The ‘Before’ picture shows that the ice cubes were frozen solid when the student placed them on the table. This says ‘After’ (point to the word ‘After’). The ‘After’ picture shows the ice cubes after being left on the table for a few minutes. Some of the ice became liquid water.”]
Which of these caused the ice to change?

*Point to and read each option to the student.*

A. heating
B. cooling
This is about a form of energy.

People use heat to cook food on a stove. Heat is a form of energy.
Which object uses heat energy to do a job?

*Point to and read each option to the student.*

A. Battery

B. Hammer
C. Iron
This is about different forms of energy.

Point to and read the data table to the student.

[For all students, read "This data table describes types of energy. Heat energy makes objects warmer (point to the word 'Heat'). Chemical energy provides power for objects (point to the word 'Chemical'). Light energy allows objects to be seen (point to the word 'Light')."]

### Types of Energy

<table>
<thead>
<tr>
<th>Type of Energy</th>
<th>Use</th>
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<tbody>
<tr>
<td>Heat</td>
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<tr>
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<td>provides power for objects</td>
</tr>
<tr>
<td>Light</td>
<td>allows objects to be seen</td>
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</tbody>
</table>

Use the information in the data table to answer the questions.

Point to and read each question to the student.

Is burning wood for warmth a form of heat energy?

A. YES  B. NO
Is gasoline that is used in cars a form of chemical energy?  
A. YES    B. NO

Is the battery in a radio a form of light energy?  
A. YES    B. NO
This is about different forms of energy.

Point to and read the data table to the student.

[For all students, read “This data table describes types of energy. Heat energy makes objects warmer (point to the word ‘Heat’). Chemical energy provides power for objects (point to the word ‘Chemical’). Light energy allows objects to be seen (point to the word ‘Light’).”]

### Types of Energy

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</tbody>
</table>

Use the information in the data table to answer the questions.

Point to and read each question to the student.

Does a bright lamp provide light energy in a dark room?

A. YES  B. NO
Is rubbing your hands together on a cold day a form of light energy?  
A. YES  
B. NO

Does an oven use heat energy to cook food?  
A. YES  
B. NO
This is about light energy.

Light energy allows objects to be seen.

Which of these is a source of light energy?

*Point to and read each option to the student.*

A. a banana  
B. the sun
This is about light.

Point to the diagram.

[For all students, read “Student 1 shined a flashlight at a window (point to Student 1). Student 2 saw the light of the flashlight (point to Student 2).”]
Why was Student 2 able to see the light from the flashlight?

Point to and read each option to the student.

A. The light passed through the window.
B. The light was absorbed by the window.
C. The light reflected off the window.
<table>
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<tr>
<td>ETS Item Code:</td>
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<td>DOK Level:</td>
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<tr>
<td>Category:</td>
</tr>
<tr>
<td>Correct Answer:</td>
</tr>
</tbody>
</table>
This is about light.

A student performed an experiment with a flashlight. She pointed the flashlight at different surfaces. The diagram shows the results.

Point to and read the diagram to the student.

[For all students, read “When the student pointed the flashlight at a mirror, the mirror reflected the light (point to the word ‘Reflected’). When the student pointed the flashlight at a black piece of paper, the paper absorbed the light (point to the word ‘Absorbed’). When the student pointed the flashlight at a window, the light passed through the window (point to the words ‘Passed Through’).”]
Use the information from the student’s experiment to answer the questions.

Point to and read each question to the student.

[For students with visual impairment, read “This picture shows a student pointing a flashlight at a clear plastic cup. There is an arrow pointing from the flashlight to the cup. There is another arrow that goes through the cup and comes out on the other side.”]

If light passes through a clear plastic cup, is the cup absorbing the light?  

A. YES  

B. NO
If light that is shined into a plastic bag can be seen on the other side of the bag, is the light passing through the bag?

A. YES        B. NO
When light reflects off a mirror, will a person on the other side of the mirror see the light?

A. YES  B. NO
**Item Information**

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<td>Standard Text:</td>
<td>Determine which surfaces reflect, refract, or absorb light.</td>
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<tr>
<td>AAT or UC Text:</td>
<td>Identify types of surfaces that reflect light, absorb light, or allow light to pass through.</td>
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<tr>
<td>Category:</td>
<td>Matter and Energy</td>
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This is about light.

A student performed an experiment with a flashlight. She pointed the flashlight at different surfaces. The diagram shows the results.

Point to and read the diagram to the student.

[For all students, read “When the student pointed the flashlight at a mirror, the mirror reflected the light (point to the word ‘Reflected’). When the student pointed the flashlight at a black piece of paper, the paper absorbed the light (point to the word ‘Absorbed’). When the student pointed the flashlight at a window, the light passed through the window (point to the words ‘Passed Through’).”]
Use the information from the student’s experiment to answer the questions.

Point to and read each question to the student.

[For students with visual impairment, read “This picture shows a student pointing a flashlight at a shiny metal surface. There is an arrow pointing from the flashlight to the metal. There is another arrow that touches the metal, then points down and away from the metal.”]

Will light be reflected if it is pointed at a shiny metal surface?  

A. YES  
B. NO
Is light able to pass through water if the light can be seen on the other side of a glass fish tank?

A. YES  B. NO
Will light be seen on the other side of a door if it is absorbed by the surface of the door?

A. YES    B. NO
This is about motion.

An object is put into motion when a force causes the object to move.

Which picture shows a force causing motion?

*Point to and read each option to the student.*

*[For all students, read “This picture shows a block at rest.”]*

A.
[For all students, read “This picture shows a hand pushing a block.”]
This is about forces that change the motion of an object.

A force can be a push or a pull.
Which picture shows an object that is being pushed?

Point to and read each option to the student.

[For all students, read “This shows a student walking. The student has the handle of a wagon in his hand. The wagon is rolling behind the student.”]

A.

[For all students, read “This shows a student walking. The student has her hands pressed against the side of a large box. The box is sliding across the floor away from the student.”]

B.
[For all students, read “This shows a toy car on a ramp. The toy car is rolling down the ramp toward the floor.”]
This is about forces that can change the motion of an object.

A force can be a push or a pull.

*Point to and read each question to the student.*
If a book is pushed from opposite directions with the same amount of force, will the book move?

A. YES  B. NO
Will making the ramp steeper make the toy car roll farther?  

A. YES  

B. NO
If the person does **not** put any force on the chair, will the chair move?

A. YES  
B. NO
This is about forces that can change the motion of an object.

A force can be a push or a pull.

_Point to and read each question to the student._
Will adding wheels to the bottom of the box make the box easier to move?  

A. YES  
B. NO
Will making the ramp steeper make the toy car roll faster?  

A. YES  
B. NO
Will pushing the box up a ramp make the box easier to move?  

A. YES  

B. NO
This is about the speed of moving objects.

*Point to the pictures of the cheetah and the human.*

*[For all students, read “This is a picture of a cheetah running (point to the cheetah). A cheetah can run up to 28 meters per second. This is a picture of a human running (point to the human). A human can run about 5 meters per second.”]*
Which of these runs faster?

*Point to and read each option to the student.*

A. cheetah
B. human
This is about forces that can change the motion and position of an object.

Students are trying to move a large, heavy box.

Which of these will be the fastest way to move the box?

Point to and read each option to the student.

[For students with visual impairment, read “This is a picture of two students standing near a large box. The students are not touching the box.”]
[For students with visual impairment, read “This is a picture of one student pushing a large box. There is another student who is looking at the box but not touching the box.”]

B. pushing only

[For students with visual impairment, read “This is a picture of one student pushing a large box while another student pulls the box. The students are moving the box in the same direction.”]

C. pushing and pulling together
This is about forces that can change the motion and position of an object.

**Point to and read each question to the student.**

Can a force cause an object to slow down? A. YES  B. NO

Can a force cause something to become older? A. YES  B. NO

Will pushing an object with a lot of force cause the object to move at the same speed as when the object is pushed with very little force? A. YES  B. NO
This is about forces that can change the motion and position of an object.

Point to and read each question to the student.

Will the wind pushing a toy sailboat forward help the sailboat move faster?  
A. YES  B. NO

Will a person pushing on a brick wall make the brick wall move?  
A. YES  B. NO

Will using a lot of force cause an object to move faster than when very little force is used?  
A. YES  B. NO
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## ITEM INFORMATION

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<td><strong>Standard Text:</strong></td>
<td>Compare and contrast the structural, functional, and behavioral adaptations of animals or plants found in different environments.</td>
<td><strong>Points:</strong></td>
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<tr>
<td><strong>AAT or UC Text:</strong></td>
<td>Compare physical characteristics of animals advantageous for survival in their environments.</td>
<td><strong>AAT or UC:</strong></td>
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## METADATA DEFINITIONS

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<th><strong>ETS Item Code:</strong></th>
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<th><strong>Category:</strong></th>
<th>Text of the Reporting Category the standard assesses.</th>
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<td>Correct answer. For multi part items correct answers are listed in order, separated by a comma.</td>
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<td>Text of the Alternate Assessment Target or Underlying concept</td>
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<td>Alternate Assessment Target or Underlying Concept.</td>
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</table>
This is about a food chain.

All plants and animals need energy. Food chains show how plants and animals get energy.

Point to the picture of the food chain.

[For all students, read “This is a diagram of a food chain. There is an arrow that points from the grass to the zebra (point to the grass, then to the zebra).”]

Food Chain

Grass  Zebra
Which statement correctly describes this food chain?

*Point to and read each option to the student.*

A. The zebra gets energy from the grass.
B. The grass gets energy from the zebra.
### Item Information

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<tr>
<td>Standard Text:</td>
<td>Describe the different types of nutritional relationships that exist among organisms.</td>
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<tr>
<td>AAT or UC Text:</td>
<td>Identify two parts of a basic food chain (i.e., producer and consumer).</td>
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<tr>
<td>Category:</td>
<td>Interdependence, Biodiversity &amp; Change</td>
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</table>
This is about organisms in a food chain.

Producers are organisms that take in the sun’s energy. Consumers are organisms that get energy from producers or other consumers.

Point to the diagram of the food chain.

[For all students, read “This is a diagram of a food chain. There is an arrow that points from the sun to the grass. An arrow points from the grass to the zebra. An arrow points from the zebra to the lion.”]
Which organism from this food chain is a producer?

*Point to and read each option to the student.*

A. Grass
B. Zebra
C. Lion
This is about organisms in a food chain.

Producers are organisms that take in the sun’s energy. Consumers are organisms that get energy from producers or other consumers.

*Point to the food chain.*

*[For all students, point to the parts of the food chain and read “This is a food chain. An arrow points from the sun to the grass. An arrow points from the grass to the grasshopper. An arrow points from the grasshopper to the snake.”]*

**Food Chain**

- Sun
- Grass
- Grasshopper
- Snake
Identify each organism as a producer or a consumer.

*Point to and read each question to the student.*

Is the grasshopper a producer or a consumer?  
A. producer  B. consumer

Is the snake a producer or a consumer?  
A. producer  B. consumer

Is the grass a producer or a consumer?  
A. producer  B. consumer
This is about organisms in a food chain.

Producers are organisms that take in the sun’s energy. Consumers are organisms that get energy from producers or other consumers.

Point to the food chain.

[For all students, read “This is a food chain. An arrow points from the sun to the leaf (point to the sun, then to the leaf). An arrow points from the leaf to the caterpillar (point to the leaf, then to the caterpillar). An arrow points from the caterpillar to the bird (point to the caterpillar, then to the bird).”]
Identify each organism as a producer or a consumer.

Point to and read each question to the student.

Is the caterpillar a producer or a consumer? A. producer B. consumer

Is the leaf a producer or a consumer? A. producer B. consumer

Is the bird a producer or a consumer? A. producer B. consumer
This is about habitats.

Habitats are the places where organisms live. A forest is a type of habitat in Tennessee. Black bears live in the forest.

How can people help black bears survive?

Point to and read each option to the student.

A. People can cut down the trees in the forest.

B. People can take care of the trees in the forest.
This is about how people can help take care of Earth.

Earth has many resources that people use. People must use the resources wisely to help take care of Earth.

Which human activity can help protect Earth’s resources?

Point to and read each option to the student.

A. putting plastic in a recycling bin
B. throwing trash on the ground
C. cutting down trees in a forest
This is about how people can help take care of Earth.

Earth has many resources that people use. People must use the resources wisely to help take care of Earth.

Identify whether each of these activities protects or threatens Earth’s resources.

Point to and read each question to the student.

Does putting paper into a recycling bin protect or threaten Earth’s resources?

A. protects  B. threatens

Does dumping trash into a lake protect or threaten Earth’s resources?

A. protects  B. threatens

Does catching all the fish in a lake protect or threaten Earth’s resources?

A. protects  B. threatens
### Item Information

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<td>Use information about the impact of human actions or natural disasters on the environment to support a simple hypothesis, make a prediction, or draw a conclusion.</td>
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<tr>
<td>AAT or UC Text:</td>
<td>Identify how people can help protect the Earth’s resources (e.g., put paper in the recycling bin) and how a human activity would threaten Earth’s resources (e.g., pollution, damaging habitats, over hunting).</td>
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This is about how people can help take care of Earth.

Earth has many resources that people use. People must use the resources wisely to help take care of Earth.

Identify whether each of these activities protects or threatens Earth’s resources.

*Point to and read each question to the student.*

Does replacing a forest with a parking lot protect or threaten Earth’s resources?

A. protects  B. threatens

Does putting food and drink cans in a recycling bin protect or threaten Earth’s resources?

A. protects  B. threatens
Does cleaning up trash after a picnic protect or threaten Earth’s resources?

A. protects  B. threatens
<table>
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<td>Correct Answer:</td>
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</table>
This is about plants.

Plants are living things.

Point to the plants.

[For all students, read "Plant 1 is healthy (point to Plant 1). The leaves look strong and sturdy. Plant 2 is not healthy (point to Plant 2). The leaves look weak and wilted."]

Plant 2 did not get everything it needs to survive.
Which of these do plants need to survive?

*Point to and read each option to the student.*

A. healthy soil
B. exercise
This is about plants.

All living things need energy. Plants need energy to make their own food.

Where do plants get the energy they need to make their own food?

Point to and read each option to the student.

A. from the soil
B. from animals
C. from the sun
This is about plants.

All living things need energy. Plants need energy to make their own food.

*Point to and read each question to the student.*

Do plants use energy from the sun to make food?  
A. YES  
B. NO

Do most plants get energy by eating animals?  
A. YES  
B. NO

Do plants have leaves that absorb energy from the sun?  
A. YES  
B. NO
This is about plants.

All living things need energy. Plants need energy to make their own food.

*Point to and read each question to the student.*

Do plants get energy from the sun?  
A. YES  
B. NO

Does sunlight help plants grow?  
A. YES  
B. NO

Do plant roots absorb sunlight from the soil?  
A. YES  
B. NO
This is about what animals eat.

All animals need food to survive. Some animals eat plants. Some animals eat other animals.

A rabbit is an animal that eats plants.

Which of these is a food that a rabbit eats?

Point to and read each option to the student.

[For all students, read “This is a picture of an earthworm.”]

A.
[For all students, read "This is a picture of lettuce."]
This is about how living things get energy.

All living things need energy. Animals get energy by eating plants or other animals.

Point to the diagram of the food chain.

[For all students, read “This is a diagram of a food chain. In this food chain, the mouse eats the grass. The weasel eats the mouse. The fox eats the weasel.”]
Which part of the food chain shows energy moving from a plant to an animal?

Point to and read each option to the student.

[For all students, read “This shows the weasel and the fox.”]

A. Weasel → Fox

[For all students, read “This shows the mouse and the weasel.”]

B. Mouse → Weasel
[For all students, read “This shows the grass and the mouse.”]

C.

Grass → Mouse
## Item Information

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### Standard Text:
Compare how plants and animals obtain energy.

### AAT or UC Text:
Identify a model that shows the movement of energy from plants to animals (e.g. food chain/food web).

### Category:
Cells, Flow of Matter & Energy, Heredity

### Correct Answer:
A,B,A
This is about energy in a food web.

All living things need energy. Animals get energy by eating plants or other animals.

Point to the diagram of the food web.

[For all students, read “This is a diagram of a food web. The food web shows seeds at the bottom (point to the seeds). Arrow 1 shows that the squirrel eats the seeds (point to arrow 1). Arrow 2 shows that the raccoon eats the squirrel (point to arrow 2). Arrow 3 shows that the raccoon eats the seeds (point to arrow 3).”]
Use the diagram to answer the questions.

Point to and read each question to the student.

Does arrow 1 show energy moving from a plant to an animal?  
A. YES  B. NO

Does arrow 2 show energy moving from a plant to an animal?  
A. YES  B. NO

Does arrow 3 show energy moving from a plant to an animal?  
A. YES  B. NO
### Item Information

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<tr>
<td>AAT or UC:</td>
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</table>

**Standard Text:** Compare how plants and animals obtain energy.

**AAT or UC Text:** Identify a model that shows the movement of energy from plants to animals (e.g. food chain/food web).

**Category:** Cells, Flow of Matter & Energy, Heredity

**Correct Answer:** A,B,A
This is about energy in a food web.

All living things need energy. Animals get energy by eating plants or other animals.

Point to the diagram of the food web.

[For all students, read “This is a diagram of a food web. The food web shows grass at the bottom (point to the grass). Arrow 1 shows that the mouse eats the grass (point to arrow 1). Arrow 2 shows that the mouse eats the cricket (point to arrow 2). Arrow 3 shows that the cricket eats the grass (point to arrow 3).”]

Food Web

Mouse

Grass

Cricket

1

2

3

Use the diagram to answer the questions.

Point to and read each question to the student.

Does arrow 1 show energy moving from a plant to an animal? A. YES B. NO
Does arrow 2 show energy moving from a plant to an animal?  
A. YES  B. NO

Does arrow 3 show energy moving from a plant to an animal?  
A. YES  B. NO
This is about heating water.

A student placed two pans of water on a stove at the same time.

Point to the diagram.

[For all students, read “This diagram shows two glass pans of water on a stove. (Point to the pan on the left.) This pan contained a little bit of water. (Point to the pan on the right.) This pan was almost full of water.”]
Which pan of water became hot faster?

Point to and read each option to the student.

[For all students, read “This pan contained a little bit of water.”]

A. [Image of a pan with a little bit of water]

[For all students, read “This pan was almost full of water.”]

B. [Image of a pan almost full of water]
This is about land temperatures and ocean temperatures.

Point to the diagram.

[For all students, read “Water and land absorb the sun’s heat energy on a sunny day. The land heats up faster than the water in the ocean does during the day. The land cools down faster than the water in the ocean does at night.”]
Which statement is correct?

*Point to and read each option to the student.*

A. It takes more energy to heat the ocean than the land.
B. It takes less energy to heat the ocean than the land.
C. It takes the same amount of energy to heat the ocean and the land.
## Item Information

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<td>Standard Text:</td>
<td>Describe the effects of the oceans on weather and climate.</td>
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<tr>
<td>AAT or UC Text:</td>
<td>Recognize that it takes more energy to change the temperature of the ocean than of the land.</td>
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<tr>
<td>Correct Answer:</td>
<td>B,A,B</td>
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</table>
This is about land temperatures and ocean temperatures.

A student did an experiment to compare land and ocean temperatures. The student placed three cups in bright sunlight for one hour. Each cup held a different substance. The student measured the temperature of the substance in each cup before and after the cups were placed in the sunlight. All of the substances had a starting temperature of 25 degrees Celsius.

Point to the diagram.

[For all students, read “Cup 1 contained water (point to Cup 1). Cup 1 was like the ocean. The temperature of Cup 1 after one hour in bright sunlight was 33 degrees Celsius. Cup 2 contained light-colored sand (point to Cup 2). Cup 2 was like the beach. The temperature of Cup 2 after one hour in bright sunlight was 39 degrees Celsius. Cup 3 contained dark-colored soil (point to Cup 3). Cup 3 was like dirt on the land. The temperature of Cup 3 after one hour in bright sunlight was 41 degrees Celsius.”]

### Results of Experiment

<table>
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<tr>
<th></th>
<th>Cup 1</th>
<th>Cup 2</th>
<th>Cup 3</th>
</tr>
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<tbody>
<tr>
<td><strong>Cup 1</strong></td>
<td>Water</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cup 2</strong></td>
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<td></td>
<td></td>
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<tr>
<td><strong>Cup 3</strong></td>
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<td>25°C</td>
<td>25°C</td>
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<tr>
<td><strong>Temperature After 1 Hour:</strong></td>
<td>33°C</td>
<td>39°C</td>
<td>41°C</td>
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Use the information to answer the questions.

*Point to and read each question to the student.*

Did it take less energy to raise the temperature of Cup 1 or Cup 2?  
A. Cup 1  B. Cup 2

Did it take more energy to raise the temperature of Cup 1 or Cup 3?  
A. Cup 1  B. Cup 3

Will Cup 1 or Cup 2 cool faster?  
A. Cup 1  B. Cup 2
### Item Information

<table>
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This is about land temperatures and ocean temperatures.

A student did an experiment to compare land and ocean temperatures. The student placed three cups in bright sunlight for one hour. Each cup held a different substance. The student measured the temperature of the substance in each cup before and after the cups were placed in the sunlight. All of the substances had a starting temperature of 25 degrees Celsius.

Point to the diagram.

[For all students, read “Cup 1 contained water (point to Cup 1). Cup 1 was like the ocean. It took 95 minutes to raise the temperature of Cup 1 to 40 degrees Celsius. Cup 2 contained light-colored sand (point to Cup 2). Cup 2 was like the beach. It took 62 minutes to raise the temperature of Cup 2 to 40 degrees Celsius. Cup 3 contained dark-colored soil (point to Cup 3). Cup 3 was like dirt on the land. It took 51 minutes to raise the temperature of Cup 3 to 40 degrees Celsius.”]

### Results of Experiment

<table>
<thead>
<tr>
<th>Substance</th>
<th>Time for Substance to Reach 40°C</th>
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<tbody>
<tr>
<td>Cup 1 Water</td>
<td>95 minutes</td>
</tr>
<tr>
<td>Cup 2 Sand</td>
<td>62 minutes</td>
</tr>
<tr>
<td>Cup 3 Soil</td>
<td>51 minutes</td>
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</table>
Use the information to answer the questions.

*Point to and read each question to the student.*

Did it take more energy to raise the temperature of Cup 1 or Cup 2?  
A. Cup 1  
B. Cup 2

Did it take less energy to raise the temperature of Cup 1 or Cup 3?  
A. Cup 1  
B. Cup 3

Will Cup 1 or Cup 3 cool faster?  
A. Cup 1  
B. Cup 3
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<td>Standard Text:</td>
<td>Describe the effects of the oceans on weather and climate.</td>
</tr>
<tr>
<td>AAT or UC Text:</td>
<td>Identify that it will take longer to heat a large volume of water than a small volume, when applying the same amount of heat.</td>
</tr>
<tr>
<td>Category:</td>
<td>The Universe, The Earth, The Atmosphere</td>
</tr>
<tr>
<td>Correct Answer:</td>
<td>B</td>
</tr>
</tbody>
</table>
This is about heating water.

A student put two bowls of cool water in a sunny place. The water in each bowl started at the same temperature.

The bowls stayed in the sun for many hours.

Point to the diagram.

[For all students, read “The picture shows two bowls outside. This bowl is full of water (point to the bowl on the left). This bowl has only a little water (point to the bowl on the right).”]
Which bowl of water became warm faster?

Point to and read each option to the student.

[For all students, read “This is the bowl that is full of water.”]

A.

[For all students, read “This is the bowl that has only a little water.”]

B.
This is about heating the land and the ocean water.

Energy from the sun heats the land and ocean water all day. The land gets warm faster than the ocean water.

*Point to the diagram.*

*[For all students, read “This diagram shows the sun heating the land and the ocean water.”]*
Which of these statements best describes the land and the ocean water in the afternoon on a sunny day?

*Point to and read each option to the student.*

A. The land is the same temperature as the ocean water.
B. The land is warmer than the ocean water.
C. The land is cooler than the ocean water.
Grade 5 Science ALT Items

Item Information

ETS Item Code: TAS02S0631

Item ID: 

Grade: 05

DOK Level: 4

Item Type: MP

Level: 3a

Points: 3

Standard Code: 0507.8.1

AAT or UC: AAT

Standard Text: Describe the effects of the oceans on weather and climate.

AAT or UC Text: Recognize that it takes more energy to change the temperature of the ocean than of the land.

Category: The Universe, The Earth, The Atmosphere

Correct Answer: A,B,A
This is about land and ocean temperatures.

Students modeled land and ocean water. They used a cup of soil and a cup of water. They put the cups under a heat lamp. The data table shows how the temperatures in the cups changed after a few hours under the heat lamp.

*Point to and read the diagram to the student.*

*[For all students, read “This diagram shows the student model of the land and ocean water. This is a heat lamp (point to the heat lamp). It models the sun. This cup holds soil (point to the cup on the left). It models the land. This cup holds water (point to the cup on the right). It models the ocean.”]*
Point to and read the data table to the student.

[For all students, read “This data table shows the temperatures in the cups. The soil started at 20 degrees Celsius (point to the starting soil temperature). The soil ended at 30 degrees Celsius (point to the ending soil temperature). The water started at 20 degrees Celsius (point to the starting water temperature). The water ended at 25 degrees Celsius (point to the ending water temperature).”]

**Temperatures**

<table>
<thead>
<tr>
<th></th>
<th>Starting Temperature (°C)</th>
<th>Ending Temperature (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Water</td>
<td>20</td>
<td>25</td>
</tr>
</tbody>
</table>

Use the information in the data table to answer the questions.

Point to and read each question to the student.

Did the soil gain more heat than the water? A. YES B. NO

Does the soil take more energy to change temperature than the water? A. YES B. NO

Will the soil cool faster than the water when the heat lamp is removed? A. YES B. NO
### Item Information

<table>
<thead>
<tr>
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<th>TAS02S0632</th>
<th>Content:</th>
<th>Science</th>
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<td>4</td>
<td>Item Type:</td>
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<tr>
<td>Level:</td>
<td>3b</td>
<td>Points:</td>
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<td>Standard Code:</td>
<td>0507.8.1</td>
<td>AAT or UC:</td>
<td>AAT</td>
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<td>Standard Text:</td>
<td>Describe the effects of the oceans on weather and climate.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AAT or UC Text:</td>
<td>Recognize that it takes more energy to change the temperature of the ocean than of the land.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category:</td>
<td>The Universe, The Earth, The Atmosphere</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correct Answer:</td>
<td>A,B,A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This is about land and ocean temperatures.

Students modeled land and ocean water. They used a cup of soil and a cup of water. They put the cups under a heat lamp. The data table shows how the temperatures in the cups changed after a few hours under the heat lamp.

Point to and read the diagram to the student.

[For all students, read "This diagram shows the student model of the land and ocean water. This is a heat lamp (point to the heat lamp). It models the sun. This cup holds soil (point to the cup on the left). It models the land. This cup holds water (point to the cup on the right). It models the ocean.""]
Point to and read the data table to the student.

[For all students, read “This data table shows the temperatures in the cups. The soil started at 20 degrees Celsius (point to the starting soil temperature). The soil ended at 30 degrees Celsius (point to the ending soil temperature). The water started at 20 degrees Celsius (point to the starting water temperature). The water ended at 25 degrees Celsius (point to the ending water temperature).”]

**Temperatures**

<table>
<thead>
<tr>
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<th>Starting Temperature (°C)</th>
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</tr>
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<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Water</td>
<td>20</td>
<td>25</td>
</tr>
</tbody>
</table>

Use the information in the data table to answer the questions.

Point to and read each question to the student.

Which material had a greater change in temperature?

A. Soil  
B. Water

Which material requires more energy to change temperature?

A. Soil  
B. Water

Which material will cool faster when the heat lamp is removed?

A. Soil  
B. Water
This is about mountains.

Mountains are landforms that are very tall.

Point to the picture of the mountain.

[For all students, read “The mountain has snow at the top (point to the top of the mountain). The mountain does not have snow at the bottom (point to the bottom of the mountain).”]
Why does the mountain have snow at the top?

*Point to and read each option to the student.*

A. The top of the mountain has cold temperatures.
B. The top of the mountain has warm temperatures.
This is about weather.

Point to the diagram.

[For all students, read “This diagram shows an ocean and a mountain. The warm air above the ocean contains water vapor. The warm, moist air rises up the side of the mountain.”]
What will happen once the warm, moist air reaches the top of the mountain?

*Point to and read each option to the student.*

A. The air will become hot.
B. The ocean will become cooler.
C. The mountaintop will have rain or snow.
Item Information

ETS Item Code: TAS01S0203  
Item ID: 1118  
DOK Level: 4  
Level: 3a  
Standard Code: 0507.8.2  
Standard Text: Explain how mountains affect weather and climate.
AAT or UC Text: Recognize that when warm air rises, the water vapor in the air will cool and form rain, or snow in the winter.
Category: The Universe, The Earth, The Atmosphere

Correct Answer: A,B,A

This is about weather.

Point to the diagram.

[For all students, read “This diagram shows an ocean and a mountain. The warm air above the ocean contains water vapor. The warm, moist air rises up the side of the mountain. Clouds form at the top of the mountain.”]
Use the diagram to answer the questions.

*Point to and read each question to the student.*

Will the air cool as it rises up the side of the mountain?  
A. YES  
B. NO

Will snow fall from the clouds in the summer?  
A. YES  
B. NO

Does the air get moisture from the ocean?  
A. YES  
B. NO
This is about weather.

Point to the diagram.

[For all students, read “This diagram shows an ocean and a mountain. The warm air above the ocean contains water vapor. The warm, moist air rises up the side of the mountain. Clouds form at the top of the mountain.”]
Use the diagram to answer the questions.

*Point to and read each question to the student.*

Will the air get warmer as it rises up the side of the mountain?  
A. YES  B. NO

Will snow fall from the clouds in the winter?  
A. YES  B. NO

Will rain fall if there are no clouds?  
A. YES  B. NO
This is about properties of objects.

A student sorted a set of objects into two groups.

Point to the diagram.

[For all students, read “The diagram shows two groups of objects. Group 1 is a set of identical tennis balls. Group 2 is a set of large and small wooden beads.”]
Which group contains objects that are all the same size?

*Point to and read each option to the student.*

A. Group 1
B. Group 2
This is about matter.

Matter can be a solid, a liquid, or a gas.

Which of these is a liquid?

Point to and read each option to the student.

[For students with visual impairment, read “This picture shows a cup filled with juice.”]

A. the juice in this cup
[For students with visual impairment, read “This picture shows a balloon filled with air.”]

B. the air in this balloon

[For students with visual impairment, read “This picture shows a bowl filled with ice cubes.”]

C. the ice cubes in this bowl
This is about matter.

Matter can be a solid, a liquid, or a gas.

Point to the picture of the coffee cup.

[For all students, read “This is a picture of a cup of hot coffee. Steam is rising from its surface.”]
Use the picture to answer the questions.

Point to and read each question to the student.

Is the cup a gas? A. YES B. NO
Is the steam a solid? A. YES B. NO
Is the coffee a liquid? A. YES B. NO
This is about matter.

Matter can be classified as a solid, a liquid, or a gas.

Point to the picture of the cup of hot cocoa.

[For all students, read “This is a picture of a cup of hot cocoa. Steam is rising from its surface.”]
Use the picture to answer the questions.

*Point to and read each question to the student.*

Is the hot cocoa a gas? A. YES B. NO
Is the steam a solid? A. YES B. NO
Is the cup a liquid? A. YES B. NO
This is about the properties of objects.

*Point to the picture.*

*[For all students, read “The picture shows two groups of objects. Group 1 contains different types of buttons. Some buttons look like circles. Some buttons look like flowers. Some buttons look like hearts. Some buttons look like squares. Group 2 contains different types of balls from the playground. Some balls are a solid color. Some balls have stripes. Some balls have spots. Some balls have holes.”]
Which group has objects that are all the same shape?

*Point to and read each option to the student.*

A. Group 1  
B. Group 2
This is about matter.

Matter can be a solid, a liquid, or a gas. Food is made of matter.

Point to and read the picture to the student.

[For students with visual impairment, read “The picture shows a student’s breakfast. This shows a pancake on a plate (point to the pancake). This shows syrup being poured onto the pancake (point to the bottle of syrup). This shows milk in a glass next to the plate (point to the glass of milk).”]
Which food is a solid?

Point to and read each option to the student.

[For students with visual impairment, read “This picture shows milk in a glass.”]

A. the milk in the glass

[For students with visual impairment, read “This picture shows syrup in a bottle.”]

B. the syrup in the bottle
For students with visual impairment, read “This picture shows a pancake on a plate.”

the pancake on the plate
This is about matter.

Matter can be a solid, a liquid, or a gas. Food is made of matter.

Point to the picture.

[For all students, read “The picture shows a cook making a pizza. This shows the pizza crust before it is cooked (point to the crust). This shows a bottle of cooking oil being poured onto the crust (point to the oil). These show cheese before and after it was shredded (point to the cheese block, then to the shredded cheese).”]
Use the picture to answer the questions.

*Point to and read each question to the student.*

Is the pizza crust a gas?  
A. YES  
B. NO

Is the cooking oil a liquid?  
A. YES  
B. NO

Is the cheese a solid?  
A. YES  
B. NO
This is about matter.

Matter can be a solid, a liquid, or a gas. Food is made of matter.

*Point to the picture.*

*[For all students, read “The picture shows a bowl of vegetable soup. This shows the water used to make the soup (point to the water). This shows some vegetables in the soup (point to the labeled vegetables). This shows steam rising from the warm bowl of soup (point to the steam).”]*
Use the picture to answer the questions.

*Point to and read each question to the student.*

- **Is the water a liquid?**  
  A. YES  
  B. NO
- **Is a vegetable a gas?**  
  A. YES  
  B. NO
- **Is the steam a solid?**  
  A. YES  
  B. NO
This is about water.

Water can be a liquid. Water is sometimes a solid.

Which of these shows when water would **most** likely change from a liquid to a solid?

*Point to and read each option to the student.*
[For all students, read “This picture shows a cup of water that has been placed outside on a very cold day.”]

A.

[For all students, read “This picture shows a cup of water that has been placed outside on a very hot day.”]

B.
This is about water freezing.

Freezing happens when liquid water changes to a solid.

Which of these would cause water from a fountain to freeze the fastest?

*Point to and read each option to the student.*

A. lowering the temperature of the water
B. keeping the temperature of the water the same
C. raising the temperature of the water
This is about the phases of water.

Water can be a solid, like ice. Water can be a liquid, like water from the faucet. Water can be a gas, like water vapor.

Water can change from one phase to another.

*Point to and read each question to the student.*

Will ice melt faster on a hot day or on a cold day?   A. hot day  B. cold day

Will water freeze faster on a hot day or on a cold day?   A. hot day  B. cold day

Will water evaporate faster on a hot day or on a cold day?   A. hot day  B. cold day
This is about the phases of water.

Water can be a solid, like ice. Water can be a liquid, like water from the faucet. Water can be a gas, like water vapor.

Water can change from one phase to another.

Point to and read each question to the student.

Which full cup of ice will take more time to melt?  
A. large cup  B. small cup

Which full cup of water will take more time to freeze?  
A. large cup  B. small cup

Which full cup of water will evaporate faster?  
A. large cup  B. small cup
This is about water.

Water can be a liquid. Water is sometimes a solid.

Which of these is an example of water changing from a solid to a liquid?

*Point to and read each option to the student.*

A. a puddle freezing

B. a snowman melting
This is about ice melting.

Melting happens when frozen water changes to a liquid.

*Point to the picture.*

*[For students with visual impairment, read “This is a picture of a metal pan filled with ice cubes.”]*
Which of these will cause a pan of ice to melt the fastest?

*Point to and read each option to the student.*

A. putting the pan of ice in the refrigerator
B. putting the pan of ice on an indoor table
C. putting the pan of ice in a warm oven
This is about the phases of water.

Water can be a solid, a liquid, or a gas.

Snow and ice are examples of solid water. Rain is an example of liquid water. Water vapor that makes the air feel damp is an example of water as a gas.

*Point to and read each question to the student.*

Will a small snowman melt faster or slower than a large snowman? A. faster B. slower

Will a small puddle evaporate faster or slower than a large puddle? A. faster B. slower

Will a large puddle freeze faster or slower than a small puddle? A. faster B. slower
This is about the phases of water.

Water can be a solid, a liquid, or a gas.

Snow and ice are examples of solid water. Rain is an example of liquid water. Water vapor that makes the air feel damp is an example of water as a gas.

*Point to and read each question to the student.*

Will a large cup filled with water evaporate faster or slower than a small cup filled with water?

A. faster  B. slower

Will a small ice cube melt faster or slower than a large ice cube?

A. faster  B. slower

Will a small cup filled with water freeze faster or slower than a large cup filled with water?

A. faster  B. slower
<table>
<thead>
<tr>
<th>Item Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ETS Item Code:</strong> TAS01S0157</td>
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<tr>
<td><strong>Item ID:</strong> 1089</td>
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<td><strong>DOK Level:</strong> 2</td>
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<tr>
<td><strong>Level:</strong> 1</td>
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<tr>
<td><strong>Standard Code:</strong> 0507.12.1</td>
</tr>
<tr>
<td><strong>Standard Text:</strong> Recognize that the earth attracts objects without touching them.</td>
</tr>
<tr>
<td><strong>AAT or UC Text:</strong> Determine if the force used on an object is a push or a pull.</td>
</tr>
<tr>
<td><strong>Category:</strong> Motion, Forces in Nature</td>
</tr>
<tr>
<td><strong>Correct Answer:</strong> B</td>
</tr>
</tbody>
</table>
This is about forces.

A force can be described as a push or a pull.

*Point to the picture.*

*[For all students, read “This picture shows a student moving a wagon full of books.”]*
What type of force is the student using to move the wagon?

*Point to and read each option to the student.*

A. a push
B. a pull
This is about gravity.

Gravity is the force that makes objects fall to Earth.

*Point to the picture.*

*[For all students, read “The picture shows an apple falling from a tree. Gravity causes the apple to fall.”]*
Which of these tells why gravity makes the apple fall?

Point to and read each option to the student.

A. The tree pushes the apple down to the ground.
B. Earth pulls the apple down to the ground.
C. The apple pushes itself down to the ground.
This is about gravity.

Gravity is the force that makes objects fall.

*Point to and read each question to the student.*

Is gravity a force that pulls objects down?  
A. YES  
B. NO

Is gravity a force that pushes objects away from Earth?  
A. YES  
B. NO

Can objects that are not touching the ground be affected by Earth’s gravity?  
A. YES  
B. NO
This is about gravity.

Gravity is the force that makes objects fall.

*Point to and read each question to the student.*

Is gravity a force that pushes objects apart?  
A. YES  
B. NO

Is gravity a force that pulls objects toward Earth?  
A. YES  
B. NO

Do objects have to be touching the ground to be affected by Earth’s gravity?  
A. YES  
B. NO
Identify the force that causes an object to fall to the earth.

Standard Text: Identify the direction an object will go when dropped.

Category: Motion, Forces in Nature

Correct Answer: B
This is about gravity.

Point to the picture of the person holding the ball.

[For all students, read “This shows a person about to drop a ball.”]
Which direction will the ball go when it is dropped?

*Point to and read each option to the student.*

A. up
B. down
This is about Earth’s gravity.

A student rolls a ball across a table. The ball does not stop when it reaches the end of the table. Gravity will affect the ball when it rolls off the table.
Which of these shows the direction the ball will go?

Point to and read each option to the student.

[For all students, read “Gravity makes the ball fall up after rolling off the table.”]

A.

[For all students, read “Gravity makes the ball fall to the right after rolling off the table.”]

B.

[For all students, read “Gravity makes the ball fall down after rolling off the table.”]

C.
This is about Earth’s gravity.

Point to the model of gravity.

[For all students, read “This model shows Earth as a planet. The model shows people standing in different places on Earth. An arrow is pointing from each person toward the center of Earth. The arrows represent Earth’s gravity acting on each person.”]
Use the model of gravity to answer the questions.

*Point to and read each question to the student.*

Is gravity a force that pulls an object toward the center of Earth?  
A. YES  
B. NO

Does Earth’s gravity push up on objects?  
A. YES  
B. NO

Does the model show why a person cannot fall off Earth into outer space?  
A. YES  
B. NO
This is about Earth’s gravity.

Point to the model of gravity.

[For all students, read “This model shows Earth as a planet. The model shows people standing in different places on Earth. An arrow is pointing from each person toward the center of Earth. The arrows represent Earth’s gravity acting on each person.”]
Use the model of gravity to answer the questions.

*Point to and read each question to the student.*

Is gravity a force that pushes an object away from the center of Earth?  
A. YES  
B. NO

Does Earth’s gravity pull down on objects?  
A. YES  
B. NO

Does gravity affect all objects on Earth?  
A. YES  
B. NO
Tennessee Comprehensive Assessment Program TCAP
Grade 5 Science
Alternative Assessment
Item Release
Spring 2018
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## ITEM INFORMATION

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<th>TAS01S0477</th>
<th>Category:</th>
<th>Biodiversity and Change</th>
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<tr>
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<td>1273</td>
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<tr>
<td>DOK Level:</td>
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<td>Content:</td>
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<tr>
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<td>3210.5.1</td>
<td>Item Type:</td>
<td>SR</td>
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<tr>
<td>Standard Text:</td>
<td>Compare and contrast the structural, functional, and behavioral adaptations of animals or plants found in different environments.</td>
<td>Points:</td>
<td>1</td>
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<tr>
<td>AAT or UC Text:</td>
<td>Compare physical characteristics of animals advantageous for survival in their environments.</td>
<td>AAT or UC:</td>
<td>UC</td>
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## METADATA DEFINITIONS

<table>
<thead>
<tr>
<th>ETS Item Code:</th>
<th>Unique letter/number code used to identify the item.</th>
<th>Category:</th>
<th>Text of the Reporting Category the standard assesses.</th>
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<tr>
<td>Item ID:</td>
<td>Unique number code the vendor uses to identify the item internally.</td>
<td>Correct Answer:</td>
<td>Correct answer. For multi part items correct answers are listed in order, separated by a comma.</td>
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<td>Content:</td>
<td>Subject.</td>
<td></td>
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<tr>
<td>Level:</td>
<td>Tier, on the following scale: 1 = SR item with two options, lower complexity; 2 = SR item with three options, moderate complexity; 3 = MP item includes 3 questions with two answer options each, higher complexity.</td>
<td>Grade:</td>
<td>Grade level.</td>
</tr>
<tr>
<td>Standard Code:</td>
<td>Primary educational standard assessed.</td>
<td>Item Type:</td>
<td>SR for single response multiple choice item, MP for multiple part multiple choice items.</td>
</tr>
<tr>
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<td>Text of the educational standard assessed.</td>
<td>Points:</td>
<td>Maximum points possible for this item.</td>
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<tr>
<td>AAT or UC Text:</td>
<td>Text of the Alternate Assessment Target or Underlying concept</td>
<td>AAT or UC:</td>
<td>Alternate Assessment Target or Underlying Concept.</td>
</tr>
</tbody>
</table>
This is about features of objects.

A student is describing an object in the classroom. The student describes the object as smooth and round.

Which object is the student describing?

A. ball
B. wooden ruler
This is about magnets.

Some objects stick to magnets. The magnets attract the objects.

A student tested a magnet on different objects.
What are the results of the student’s test?
A. Magnets attract nails and crayons.
B. Magnets do not attract nails or crayons.
C. Magnets attract nails but not crayons.
Item Information

ETS Item Code: TAS01S0047  
Item ID: 1015  
DOK Level: 4  
Level: 3a  
Standard Code: 0307.12.2

Content: Science  
Grade: 03  
Item Type: MP  
Points: 3  
AAT or UC: AAT

Standard Text: Identify objects that are attracted to magnets.  
AAT or UC Text: Identify materials attracted to magnets based on observations or measurements.  
Category: Motion, Forces in Nature  
Correct Answer: A,B,A
This is about magnets.

Magnets can attract some objects. The objects stick to the magnets.

A student tested a magnet with different objects.

**Objects Tested With a Magnet**

<table>
<thead>
<tr>
<th>Sticks to Magnet</th>
<th>Does Not Stick to Magnet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key</td>
<td>Rubber Band</td>
</tr>
<tr>
<td>Safety Pin</td>
<td>Crayon</td>
</tr>
<tr>
<td>Screw</td>
<td>Eraser</td>
</tr>
</tbody>
</table>

Use the data table to answer the questions.

Is a key attracted to a magnet?  
A. YES  B. NO
Is a rubber band attracted to a magnet?  
A. YES  
B. NO

Is a screw attracted to a magnet?  
A. YES  
B. NO
<table>
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<th>Item Information</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td><strong>Item ID:</strong> 1016</td>
</tr>
<tr>
<td><strong>DOK Level:</strong> 4</td>
</tr>
<tr>
<td><strong>Level:</strong> 3b</td>
</tr>
<tr>
<td><strong>Standard Code:</strong> 0307.12.2</td>
</tr>
<tr>
<td><strong>Standard Text:</strong> Identify objects that are attracted to magnets.</td>
</tr>
<tr>
<td><strong>Category:</strong> Motion, Forces in Nature</td>
</tr>
</tbody>
</table>
This is about magnets.

Magnets can attract some objects. The objects stick to the magnets.

A student tested a magnet with different objects.

### Objects Tested With a Magnet

<table>
<thead>
<tr>
<th>Magnet Made the Object Move</th>
<th>Magnet Did Not Make the Object Move</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Pin</td>
<td>Eraser</td>
</tr>
<tr>
<td>Screw</td>
<td>Crayon</td>
</tr>
<tr>
<td>Key</td>
<td>Rubber Band</td>
</tr>
</tbody>
</table>

Use the data table to answer the questions.

Is an eraser attracted to a magnet?  
A. YES  
B. NO
Is a safety pin attracted to a magnet? A. YES  B. NO

Is a crayon attracted to a magnet? A. YES  B. NO
This is about features of objects.

A student is describing an object in the classroom. The student describes the object as smooth and round.

Which object is the student describing?
Point to and read each option to the student.

[For students with visual impairment, read “This is a picture of a ball.”]

A. ball
B. wooden ruler

[For students with visual impairment, read “This is a picture of a wooden ruler.”]
This is about magnets.

Some objects stick to magnets. The magnets attract the objects.

A student tested a magnet on different objects.

*Point to the picture.*

*[For all students, read “The nails stick to the magnet (point to the magnet and the nails). The crayons do not stick to the magnet (point to the magnet and the crayons).”]*
What are the results of the student’s test?

*Point to and read each option to the student.*

A. Magnets attract nails and crayons.
B. Magnets do not attract nails or crayons.
C. Magnets attract nails but not crayons.
## Item Information

<table>
<thead>
<tr>
<th>ETS Item Code:</th>
<th>TAS01S0047</th>
<th>Content:</th>
<th>Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item ID:</td>
<td>1015</td>
<td>Grade:</td>
<td>03</td>
</tr>
<tr>
<td>DOK Level:</td>
<td>4</td>
<td>Item Type:</td>
<td>MP</td>
</tr>
<tr>
<td>Level:</td>
<td>3a</td>
<td>Points:</td>
<td>3</td>
</tr>
<tr>
<td>Standard Code:</td>
<td>0307.12.2</td>
<td>AAT or UC:</td>
<td>AAT</td>
</tr>
<tr>
<td>Standard Text:</td>
<td>Identify objects that are attracted to magnets.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AAT or UC Text:</td>
<td>Identify materials attracted to magnets based on observations or measurements.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category:</td>
<td>Motion, Forces in Nature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correct Answer:</td>
<td>A,B,A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This is about magnets.

Magnets can attract some objects. The objects stick to the magnets.

A student tested a magnet with different objects.

Point to and read the data table to the student.

[For all students, read “This is a data table with two sections. The first section is 'Sticks to Magnet.' It shows a key, a safety pin, and a screw. The second section is 'Does Not Stick to Magnet.' It shows a rubber band, a crayon, and an eraser.”]

**Objects Tested With a Magnet**

<table>
<thead>
<tr>
<th>Sticks to Magnet</th>
<th>Does Not Stick to Magnet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key</td>
<td>Rubber Band</td>
</tr>
<tr>
<td>Safety Pin</td>
<td>Crayon</td>
</tr>
<tr>
<td>Screw</td>
<td>Eraser</td>
</tr>
</tbody>
</table>
Use the data table to answer the questions.

*Point to and read each question to the student.*

<table>
<thead>
<tr>
<th>Question</th>
<th>A. YES</th>
<th>B. NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is a key attracted to a magnet?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is a rubber band attracted to a magnet?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is a screw attracted to a magnet?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item Information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ETS Item Code:</strong> TAS01S0048</td>
<td><strong>Content:</strong> Science</td>
<td></td>
</tr>
<tr>
<td><strong>Item ID:</strong> 1016</td>
<td><strong>Grade:</strong> 03</td>
<td></td>
</tr>
<tr>
<td><strong>DOK Level:</strong> 4</td>
<td><strong>Item Type:</strong> MP</td>
<td></td>
</tr>
<tr>
<td><strong>Level:</strong> 3b</td>
<td><strong>Points:</strong> 3</td>
<td></td>
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<tr>
<td><strong>Standard Code:</strong> 0307.12.2</td>
<td><strong>AAT or UC:</strong> AAT</td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Category:</strong> Motion, Forces in Nature</td>
<td><strong>Correct Answer:</strong> B,A,B</td>
<td></td>
</tr>
</tbody>
</table>
This is about magnets.

Magnets can attract some objects. The objects stick to the magnets.

A student tested a magnet with different objects.

Point to and read the data table to the student.

[For all students, read “This is a data table with two sections. The first section is ‘Magnet Made the Object Move.’ It shows a safety pin, a screw, and a key. The second section is ‘Magnet Did Not Make the Object Move.’ It shows an eraser, a crayon, and a rubber band.”]

### Objects Tested With a Magnet

<table>
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<th>Magnet Made the Object Move</th>
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</tr>
<tr>
<td>Key</td>
<td>Rubber Band</td>
</tr>
</tbody>
</table>
Use the data table to answer the questions.

*Point to and read each question to the student.*

- Is an eraser attracted to a magnet?  
  A. YES  
  B. NO

- Is a safety pin attracted to a magnet?  
  A. YES  
  B. NO

- Is a crayon attracted to a magnet?  
  A. YES  
  B. NO
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  METADATA DEFINITIONS............................................................................................... 4

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Grade 4 Science ALT Directions for Test Administration (Teacher Book) ..................... 11
## ITEM INFORMATION

| ETS Item Code: | TAS01S0477 | Category: | Biodiversity and Change |
| Item ID: | 1273 | Correct Answer: | B |
| DOK Level: | 2 | Content: | Science |
| Level: | 1 | Grade: | 10 |
| Standard Code: | 3210.5.1 | Item Type: | SR |
| Standard Text: | Compare and contrast the structural, functional, and behavioral adaptations of animals or plants found in different environments. | Points: | 1 |
| AAT or UC Text: | Compare physical characteristics of animals advantageous for survival in their environments. | AAT or UC: | UC |

## METADATA DEFINITIONS

| ETS Item Code: | Unique letter/number code used to identify the item. | Category: | Text of the Reporting Category the standard assesses. |
| Item ID: | Unique number code the vendor uses to identify the item internally. | Correct Answer: | Correct answer. For multi part items correct answers are listed in order, separated by a comma. |
| DOK Level: | Depth of Knowledge (cognitive complexity) is measured on the following scale: 2 = Memorize/Recall, 3 = Performance, 4 = Comprehension. | Content: | Subject. |
| Level: | Tier, on the following scale: 1 = SR item with two options, lower complexity; 2 = SR item with three options, moderate complexity; 3 = MP item includes 3 questions with two answer options each, higher complexity. | Grade: | Grade level. |
| Standard Code: | Primary educational standard assessed. | Item Type: | SR for single response multiple choice item, MP for multiple part multiple choice items. |
| Standard Text: | Text of the educational standard assessed. | Points: | Maximum points possible for this item. |
| AAT or UC Text: | Text of the Alternate Assessment Target or Underlying concept | AAT or UC: | Alternate Assessment Target or Underlying Concept. |
This is about food.

Which of these do humans eat?

A. vegetables
B. rocks
This is about how living things get food.

Living things need energy to survive. Animals get energy from food.

What would a group of animals **most** likely do if they could **not** find food?

A. move to a new place
B. grow larger
C. eat rocks
This is about how living things survive.

Living things need energy to survive. Plants get energy from the sun. Animals get energy from food.

Use the food chain diagram to answer the questions.

If the foxes move away, will it be easier for rabbits to survive? A. YES  B. NO

If the rabbits move away, will it be easier for foxes to survive? A. YES  B. NO
If the grass goes away, will it be easier for foxes to survive?    A. YES   B. NO
This is about how living things survive.

Living things need energy to survive. Animals get energy from food.

Use the food chain diagram to answer the questions.

If the owls move away, will it be harder for mice to survive?

A. YES      B. NO

If the mice move away, will it be harder for owls to survive?

A. YES      B. NO
If the insects move away, will it be harder for owls to survive?  
A. YES  B. NO
This is about food.

Which of these do humans eat?

*Point to and read each option to the student.*

A. vegetables
B. rocks
This is about how living things get food.

Living things need energy to survive. Animals get energy from food.

What would a group of animals most likely do if they could not find food?

- A. move to a new place
- B. grow larger
- C. eat rocks
This is about how living things survive.

Living things need energy to survive. Plants get energy from the sun. Animals get energy from food.

Point to the diagram.

[For all students, read “This is a diagram of a food chain. In this food chain, the grass is food for the rabbit. This helps the rabbit survive (point to the grass, then to the rabbit). The rabbit is food for the fox. This helps the fox survive (point to the rabbit, then to the fox).”]
Use the food chain diagram to answer the questions.

*Point to and read each question to the student.*

If the foxes move away, will it be easier for rabbits to survive?  
A. YES  B. NO

If the rabbits move away, will it be easier for foxes to survive?  
A. YES  B. NO

If the grass goes away, will it be easier for foxes to survive?  
A. YES  B. NO
This is about how living things survive.

Living things need energy to survive. Animals get energy from food.

Point to the diagram.

[For all students, read “This is a diagram of a food chain. In this food chain, the insect is food for the mouse. This helps the mouse survive (point to the insect, then the mouse). The mouse is food for the owl. This helps the owl survive (point to the mouse, then the owl).”]
Use the food chain diagram to answer the questions.

*Point to and read each question to the student.*

If the owls move away, will it be harder for mice to survive?  
A. YES  
B. NO

If the mice move away, will it be harder for owls to survive?  
A. YES  
B. NO

If the insects move away, will it be harder for owls to survive?  
A. YES  
B. NO
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<td>DOK Level:</td>
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<tr>
<td>Level:</td>
<td>1</td>
<td>Grade:</td>
<td>10</td>
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<tr>
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**Standard Text:**
Compare and contrast the structural, functional, and behavioral adaptations of animals or plants found in different environments.

**Points:**
1

**AAT or UC Text:**
Compare physical characteristics of animals advantageous for survival in their environments.

**AAT or UC:**
UC

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</tr>
</tbody>
</table>
This is about water.

A student took two ice cubes out of the freezer and placed them on a table. Ice cubes are made out of water.

Before

![Ice cube before](image1)

After

![Ice cubes after](image2)
What change happened to the water in the ice cubes?
A. The water changed from a liquid to a solid.
B. The water changed from a solid to a liquid.
This is about water changing phases.

Evaporation happens when liquid water turns into water vapor. Water vapor is water that has become a gas.

Which of these will cause a bowl of liquid water to evaporate the fastest?

A. putting the bowl of liquid water in the freezer
B. putting the bowl of liquid water in a dark room
C. putting the bowl of liquid water in a hot pan
This is about water changing phases.

Water can be a solid, a liquid, or a gas.

Ice and snow are examples of solid water. Water that you drink or use for washing is liquid water. Water vapor is water that has become a gas.

Will ice melt faster if it is left outside on a sunny day rather than on a cold day?  
A. YES  B. NO

Will a large amount of liquid water freeze faster than a small amount of liquid water?  
A. YES  B. NO

Will liquid water evaporate faster on a cloudy day rather than on a sunny day?  
A. YES  B. NO
This is about water changing phases.

Water can be a solid, a liquid, or a gas.

Ice and snow are examples of solid water. Water that you drink or use for washing is liquid water. Water vapor is water that has become a gas.

Will liquid water evaporate faster on a hot day rather than on a cloudy day?  
A. YES  
B. NO

Will a large ice cube melt faster than a small ice cube?  
A. YES  
B. NO

Will a large bowl of liquid water take more time to freeze than a small cup of liquid water?  
A. YES  
B. NO
This is about water.

A student took two ice cubes out of the freezer and placed them on a table. Ice cubes are made out of water.

Point to the pictures of the ice cubes.

[For all students, read “This says ‘Before’ (point to the word ‘Before’). The ‘Before’ picture shows that the ice cubes were frozen when the student placed them on the table. This says ‘After’ (point to the word ‘After’). The ‘After’ picture shows the ice cubes after being left on the table for a few minutes. Some of the ice had melted.”]
What change happened to the water in the ice cubes?

*Point to and read each option to the student.*

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