

WET Correlations: SCIENCE GRADE 4

Grade 4 : Embedded Inquiry		
Learning Expectations	Checks for Understanding	Project WET Correlations
<p>GLE 0407.Inq.1 Explore different scientific phenomena by asking questions, making logical predictions, planning investigations, and recording data.</p> <p>GLE 0407.Inq.2 Select and use appropriate tools and simple equipment to conduct an investigation.</p> <p>GLE 0407.Inq.3 Organize data into appropriate tables, graphs, drawings, or diagrams.</p> <p>GLE 0407.Inq.4 Identify and interpret simple patterns of evidence to communicate the findings of multiple investigations.</p> <p>GLE 0407.Inq.5 Recognize that people may interpret the same results in different ways.</p> <p>GLE 0407.Inq.6 Compare the results of an investigation with what scientists already accept about this question.</p>	<p>0407.Inq.1 Identify specific investigations that could be used to answer a particular question and identify reasons for this choice.</p> <p>0407.Inq.2 Identify tools needed to investigate specific questions.</p> <p>0407.Inq.3 Maintain a science notebook that includes observations, data, diagrams, and explanations.</p> <p>0407.Inq.4 Analyze and communicate findings from multiple investigations of similar phenomena to reach a conclusion.</p>	<p>Is there Water on Zork? (43) Life in the Fast Lane (79) Rainy-Day Hike (186) Stream Sense (191) Water Models (201) Wetland Soils . . . (212)</p>

Grade 4 : Embedded Technology & Engineering

Learning Expectations	Checks for Understanding	Project WET Correlations
<p>GLE 0407.T/E.1 Describe how tools, technology, and inventions help to answer questions and solve problems.</p> <p>GLE 0407.T/E.2 Recognize that new tools, technology, and inventions are always being developed.</p> <p>GLE 0407.T/E.3 Identify appropriate materials, tools, and machines that can extend or enhance the ability to solve a specified problem.</p> <p>GLE 0407.T/E.4 Recognize the connection between scientific advances, new knowledge, and the availability of new tools and technologies.</p> <p>GLE 0407.T/E.5 Apply a creative design strategy to solve a particular problem generated by societal needs and wants.</p>	<p>0407.T/E.1 Explain how different inventions and technologies impact people and other living organisms.</p> <p>0407.T/E.2 Design a tool or a process that addresses an identified problem caused by human activity.</p> <p>0407.T/E.3 Determine criteria to evaluate the effectiveness of a solution to a specified problem.</p> <p>0407.T/E.4 Evaluate an invention that solves a problem and determine ways to improve the design.</p>	

Grade 4 : Standard 1 - Cells

Learning Expectations	Checks for Understanding	Project WET Correlations
<p>GLE 0407.1.1 Recognize that cells are the building blocks of all living things.</p>	<p>0407.1.1 Use illustrations or direct observations to compare and contrast the basic structures of plant and animal cells.</p> <p>0407.1.2 Create a basic model of the cell that illustrates different cell structures and describes their functions.</p>	

Grade 4 : Standard 2 - Interdependence

Learning Expectations	Checks for Understanding	Project WET Correlations
<p>GLE 0407.2.1 Analyze the effects of changes in the environment on the stability of an ecosystem.</p>	<p>0407.2.1 Analyze how an increase or decrease in competition or predation affects an ecosystem.</p> <p>0407.2.2 Design a simple experiment to illustrate the effects of competition, predation, and interdependency among living things.</p>	<p>Stream Sense (191)</p>

Grade 4 : Standard 3 - Flow of Matter and Energy

Learning Expectations	Checks for Understanding	Project WET Correlations
<p>GLE 0407.3.1 Demonstrate that plants require light energy to grow and survive.</p> <p>GLE 0407.3.2 Investigate different ways that organisms meet their energy needs.</p>	<p>0407.3.1 Create a food web that illustrates the energy relationships between plants and animals and the key issues or assumptions found in the model.</p> <p>0407.3.2 Classify organisms as carnivores, herbivores, or omnivores.</p> <p>0407.3.3 Identify how a variety of organisms meet their energy needs.</p>	

Grade 4 : Standard 4 - Heredity

Learning Expectations	Checks for Understanding	Project WET Correlations
<p>GLE 0407.4.1 Recognize the relationship between reproduction and the continuation of a species.</p> <p>GLE 0407.4.2 Differentiate between complete and incomplete metamorphosis.</p>	<p>0407.4.1 Design a simple demonstration that illustrates the relationship between reproduction and survival of a species.</p> <p>0407.4.2 Study the life cycles of a variety of organisms and determine whether these processes illustrate complete or incomplete metamorphosis.</p>	<p>Macroinvertebrate Mayhem (322)</p>

Grade 4 : Standard 5 - Biodiversity and Change

Learning Expectations	Checks for Understanding	Project WET Correlations
<p>GLE 0407.5.1 Analyze physical and behavioral adaptations that enable organisms to survive in their environment.</p>	<p>0407.5.1 Classify animals according to their physical adaptations for obtaining food, oxygen, and surviving within a particular environment.</p> <p>0407.5.2 Describe how animal behaviors such as migration, defense, means of locomotion, and hibernation enable them to survive in an environment.</p> <p>0407.5.3 Investigate tropisms that plants exhibit in response to changes in their environment.</p>	<p>Aqua Bodies (63) The Life Box (76) Life in the Fast Lane (79) Macroinvertebrate Mayhem (322) Salt Marsh Players (99) Water Address (122)</p>
<p>GLE 0407.5.2 Describe how environmental changes caused the extinction of various plant and animal species.</p>	<p>0407.5.4 Gather fossil information to draw conclusions about organisms that exist today.</p> <p>0407.5.5 Analyze the common causes of extinction and explain how human actions sometimes result in the extinction of a species.</p>	

Grade 4: Standard 6 – Omitted

Grade 4 : Standard 7 – The Earth		
Learning Expectations	Checks for Understanding	Project WET Correlations
<p>GLE 0407.7.1 Investigate how the Earth’s geological features change as a result of erosion (weathering and transportation) and deposition.</p>	<p>0407.7.1 Prepare a demonstration to illustrate how wind and water affect the earth’s surface features.</p> <p>0407.7.2 Design an investigation to demonstrate how erosion and deposition change the earth’s surface.</p>	<p>Just Passing Through (166) Rainy-Day Hike (186) Wetland Soils in Living Color (212)</p>
<p>GLE 0407.7.2 Evaluate how some earth materials can be used to solve human problems and enhance the quality of life.</p>	<p>0407.7.3 List factors that determine the appropriate use of an earth material.</p> <p>0407.7.4 Use data from a variety of informational texts to analyze and evaluate man’s impact on non-renewable resources.</p>	<p>No Bellyachers (85) Poison Pump (93)</p>

Grade 4 : Standard 8 - The Atmosphere		
Learning Expectations	Checks for Understanding	Project WET Correlations
<p>GLE 0407.8.1 Recognize the major components of the water cycle.</p>	<p>0407.8.1 Prepare a model that illustrates the basic features of the water cycle.</p> <p>0407.8.3 Use an illustration to predict and draw conclusions about how weather and climate affect the water cycle.</p>	<p>Capture, Store, & Release (133) Imagine! (157) The Incredible Journey (161) Poetic Precipitation (182) The Thunderstorm (196) Water Models (201)</p>

GLE 0407.8.2 Differentiate between weather and climate.	0407.8.2 Use long term weather data to distinguish between weather and climate.	Piece It Together (174)
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Grade 4 : Standard 9 - Matter

Learning Expectations	Checks for Understanding	Project WET Correlations
GLE 0407.9.1 Collect data to illustrate that the physical properties of matter can be described with tools that measure weight, mass, length, and volume.	0407.9.1 Use appropriate tools to measure and compare the physical properties of various solids and liquids.	Is there Water on Zork? (43)
GLE 0407.9.2 Explore different types of physical changes in matter.	0407.9.2 Compare the causes and effects of various physical changes in matter.	Molecules in Motion (47) Water Match (50)

Grade 4 : Standard 10 - Energy

Learning Expectations	Checks for Understanding	Project WET Correlations
<p>GLE 0407.10.1 Distinguish among heat, radiant, and chemical forms of energy.</p> <p>GLE 0407.10.2 Investigate how light travels and is influenced by different types of materials and surfaces.</p>	<p>0407.10.1 Design an investigation to demonstrate how different forms of energy release heat or light.</p> <p>0407.10.2 Design an experiment to investigate how different surfaces determine if light is reflected, refracted, or absorbed.</p> <p>0407.10.3 Gather and organize information about a variety of materials to categorize them as translucent, transparent, or opaque.</p>	