

Big Idea: Where do we find water?

Guiding Questions: How can we identify where water is found on Earth and if it is solid or liquid?  
In what ways can you represent the shapes and kinds of land and bodies of water in an area?

21st Century Themes/Skills:

| DCI (Disciplinary Core Ideas)                                                                                                                                                                                                                                                                                                                                                                                             | Science and Engineering Practices                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Cross Cutting Concepts                                                                                                                 | Student Learning Objectives                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Differentiated Activities<br>(Consider the 5 Es)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Resources/Technology                               | Formative Assessments                                     | Benchmark Assessment |
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| <p>ESS2.C: The Roles of Water in Earth's Surface Processes</p> <ul style="list-style-type: none"> <li>Water is found in the ocean, rivers, lakes, and ponds. Water exists as solid ice and in liquid form. (2-ESS2-3)</li> </ul> <p>ESS2.B: Plate Tectonics and Large-Scale System Interactions</p> <p>Maps show where things are located. One can map the shapes and kinds of land and water in any area. (2-ESS2-2)</p> | <p>Obtaining, Evaluating, and Communicating Information</p> <ul style="list-style-type: none"> <li>Obtain information using various texts, text features (e.g., headings, tables of contents, glossaries, electronic menus, icons), and other media that will be useful in answering a scientific question. (2-ESS2-3)</li> </ul> <p>Developing and Using Models</p> <ul style="list-style-type: none"> <li>Develop a model to represent patterns in the natural world. (2-ESS2-2)</li> </ul> | <p>Patterns</p> <ul style="list-style-type: none"> <li>Patterns in the natural world can be observed. (2-ESS2-2),(2-ESS2-3)</li> </ul> | <p>Students who understand the concepts are able to:</p> <ul style="list-style-type: none"> <li>Observe patterns in the natural world.</li> <li>Obtain information using various texts, text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) and other media that will be useful in answering a scientific question.</li> </ul> <p>Obtain information to identify where water is found on Earth and to communicate that it can be a solid or liquid.</p> | <p><b>ENGAGE:</b> Lesson Questions:<br/>How do maps show things in the real world?<br/>How are maps like the real world, and how are they different?<br/>What patterns in the real world can maps show?<br/>Why can a map also be called a model?<br/><b>Activate Prior Knowledge</b><br/>Build background knowledge about models by showing the video segment Small Models. Write the word "model" on the board. Explain that a model can be used to show things that are too difficult for us to observe, such as really large things or really small things. A model is similar to the real-world object. Models can look, move, or act like the real-world object.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <p><a href="#">Unit 4 Resources</a></p>            | <p>Have students answer the Primary Assessment items.</p> |                      |
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|                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <p><b>EXPLAIN:</b> Again, review and answer any questions students might have about how they are to use the Claim and Scientific Explanation sections of the form.<br/>Have students use the evidence that they collected in the previous Explore sessions to complete the Claim and Scientific Explanation sections of the form.<br/>Have groups of 2 to 4 students share their explanation(s) with each other and then revise or enhance their explanations based on group discussion.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                    |                                                           |                      |
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