

**Goal(s): Student will**

- increase knowledge about interconnections and relationships.

# Unit I

## Relating to Science

### Lesson #2

**Standards:**

- Science 1-3
- Language Arts 1-2, 4, 6
- GLO 1-5

Topic	Task/Activity	Materials/Time	Notes
Entry	<ul style="list-style-type: none"> <li>• Share info from <i>Science and Me</i> homework assignment with 2 peers (definition of science and scientists).</li> </ul>	Science and Me Worksheet	
Review	<ul style="list-style-type: none"> <li>• Ask Ss to turn in Course Overview and Self Assessment.</li> <li>• Facilitate a brief discussion, with Ss ideas on "What is science?"</li> </ul>	Course Self Assessment and Course Overview Worksheets #1-2 Est: 3-5 minutes	
Preview	<ul style="list-style-type: none"> <li>• Display OH #1.1 and connect to today's 3 topics/tasks:               <ol style="list-style-type: none"> <li>1. Science binder and Observation Log - ObLog.</li> <li>2. Connections and Interconnections (curriculum themes).</li> <li>3. Ka 'Upena o ke Ola (The Net of Life).</li> </ol> </li> </ul>	Unit Overview OH #1.1	
Science Binders and Observation Logs (ObLogs)	<ul style="list-style-type: none"> <li>• Invite Ss to locate their science binder and dividers.</li> <li>• Ask Ss to label binder with their name and "Physical Science – Grade 6" (write on board-UDL feature).</li> <li>• Ask Ss to label first divider "Unit 1: Relating to Science."</li> <li>• Distribute Unit Table of Contents worksheet and explain purpose and process for keeping track of assignments, papers, and handouts received (in science binder).</li> <li>• Explain that the binder is a tool and will be used all year for various purposes:               <ol style="list-style-type: none"> <li>1. To record and remember what they are seeing, thinking, or learning (scientific knowledge) in Observation Log-ObLog.</li> <li>2. To communicate what they are learning (notes).</li> <li>3. To store course materials for easy reference.</li> </ol> </li> <li>• Define the term "protocol" and discuss protocols for using binder.</li> <li>• Write the name of each item you include on the Unit Table of Contents.</li> </ul>	Science binders and dividers  Unit Table of Contents Worksheet #1	

Topic	Task/Activity	Materials/Time	Notes
ObLogs continued	<ul style="list-style-type: none"> <li>Write the title and date each entry (top right).</li> <li>Bring binder with you to each science class.</li> </ul>	Est: 15 minutes	
Connections & Inter- connections	<ul style="list-style-type: none"> <li>Display OH #2.1 and introduce a concept related to the overarching theme of this curriculum which is the Lōkahi Triangle.</li> <li>Ask Ss to form pairs and discuss what they notice or think this OH is all about.</li> <li>Ask Ss to relate overhead to the Community of Learners Values poster.</li> <li>Conduct a short discussion and share that:               <ol style="list-style-type: none"> <li>Hawaiians understand everything in the world as related.</li> <li>Hawaiians believe there is an interconnected and interdependent relationship between <b>'āina</b> (land or nature), <b>na kanaka</b> (people) and <b>Akua</b> (spirit).</li> </ol> </li> <li>Distribute Handout #1 and read aloud article by Kepa Maly (Sense of Place).</li> <li>Ask Ss for reactions or connections using popcorn strategy.</li> <li>Field any questions and clarify any confusing terms or concepts.</li> <li>Display OH #2.2 and discuss differences between connections and interconnections: (interconnections are also interdependent – that they impact (affect) each other. (e.g., the rock wall would not be solid if rocks were removed).</li> <li>Ask Ss for other examples.</li> </ul>	<p>Lōkahi Triangle OH #2.1</p> <p>Article by Kepa Maly (Sense of Place) Handout #1</p> <p>Connections/ Interconnections OH #2.2</p> <p>Est: 3-5 minutes</p>	

Topic	Task/Activity	Materials/Time	Notes
Ka 'Upena o ke Ola (The Net of Life)	<ul style="list-style-type: none"> <li>Write the curriculum theme: <i>Ka 'Upena o ke Ola, the Net of Life.</i></li> <li>Ask Ss to form pairs and discuss meaning - <i>*What might this mean? *How might a net might represent interconnections? *What they already know about nets (any kind, type, usage, construction, materials, etc.).</i></li> <li>Ask Ss responses and give a general overview of the concept of Ka 'Upena o ke Ola:               <ol style="list-style-type: none"> <li>It represents all that is a part of our universe; everything is part of this "Net of Life."</li> <li>Explain things such as all elements of life are linked together and affect each other.</li> <li>Aspects of this net of life impact each other (when you tug on one "eye" of a net, it affects the whole, etc. <i>(See Unit Content Background for further information)</i>).</li> </ol> </li> <li>Introduce Net of Life idea by:               <ol style="list-style-type: none"> <li>Explaining that this science class will help them understand the Net of Life by learning how forces, energy, and matter work together within the universe.</li> <li>Sharing the elements in Ka 'Upena and how they link in a variety of ways.</li> <li>Asking Ss to think about how they might connect or impact upon each other – how they affect one another in both positive and negative ways.</li> </ol> </li> <li>Distribute materials and explain how to cut and piece together elements to show relationships.</li> <li>Ask Ss to work independently for a few minutes, then form pairs to complete project.</li> </ul>	<p>Ka 'Upena Board and elements (one set per S)</p> <p>Est: 10 minutes</p>	

Topic	Task/Activity	Materials/Time	Notes
Review	<ul style="list-style-type: none"> <li>Ask pairs to share 1 connection they both agree is important to Ka 'Upena o ke Ola, including why it is important (linking to <u>Sense of Place</u> article by Kepa Maly).</li> <li>Ask Ss to label ObLog page "Ka 'Upena o ke Ola; review OH# 2.1 and 2.2 and model how to write down key word/notes for these two slides and the overarching theme.</li> </ul>	ObLogs Lōkahi Triangle OH #2.1 Connections/ Interconnections OH #2.2	
Homework	<ul style="list-style-type: none"> <li>Explain homework assignment while referring to the wall-chart or OH #2.3.  <b>WHAT:</b> Ka 'Upena o ke Ola.  <b>HOW:</b> 1. Share and explain Ka 'Upena to an adult.  2. Discuss how elements might impact or connect to each other.  3. Tape or clue elements to 'Upena board.  4. Read <u>Sense of Place</u> and complete assignment (on bottom portion of handout.</li> </ul>	Wall-chart or OH # 2.3 Ka 'Upena o ke Ola board and elements  Sense of Place Handout #1  Est: 10 minutes	