The Scientist in Me

Summary
Students learn what a scientist is and does and create a poster that will allow them to see themselves as a scientist.

Objectives
• Students will be able to describe what a scientist does.

Materials
Pre-Assessment Pgs. 3-4 (1 per student)
Pre-Assessment Rubric Pgs. 5-6 (Teacher use only)
White poster paper (1 sheet per student)
Markers, crayons, or colored pencils (1 set per student)

Making Connections
We hear the term “scientists” a lot. We see scientist on T.V. and in books, but what is a scientist? Do they all wear lab coats? Let’s find out.

Teacher Prep for Activity
Print Pre-Assessment Unit Test (one per student).

Background
A scientist is a person who is studying or has expert knowledge of one or more natural or physical sciences. There are many different kinds of scientists; some have broad areas of study, and some study entire ecosystems, earth processes, or even space. On the other hand some scientists have a focused area of study, for example, some study particular species of animals, volcanoes, or even bird communication. Scientists conduct research as questions and are very observant.

Vocabulary
Scientist: A scientist is a person who studies natural or physical science and becomes an expert in that subject.

Procedure (1 Hour)
1. Explain, “We will be learning about science, and we will begin with a test! You will take this same test after we have completed our science lessons. Don’t worry if you do not know the answers, you are not expected to know everything on the test. Try your best to answer the questions.” Allow students 15 minutes to complete this test. Pre-Assessments are to be corrected using the Pre-Assessment Rubric.

2. Ask, “What is a scientist? What do scientists do?” Take answers and write these on the board. [study things, conduct experiments, etc.]
3. Explain, “A scientist is a person who studies natural or physical science and becomes an expert in that subject. For example, a scientist can be a person who studies space, a particular animal, how something works, chemistry, a type of ecosystem, or even how an animal lives.”


5. It is likely not many students will raise their hands, but in a way children are great scientists. They are always asking “why” and are very observant of their surroundings. Many times children are more observant of their surroundings than adults. Ask, “Are you observant? Do you ask many questions? Do you try to figure out how things work? If you do any of these things you are thinking like a scientist”

6. Distribute a sheet of poster paper and coloring utensils to each student. Instruct students to draw and color themselves as a scientist. Explain, “Title your poster ‘I am a scientist,’ write your title anywhere on you poster. Think about what kind of scientist you would like to be and draw yourself. Draw the tools you would use. If you are a scientist that works in the jungles of Africa you can draw a jungle as your background, if you study reef fish you can draw yourself underwater looking at fish, or if you study planets you can draw yourself looking through a telescope at them.”

7. Instruct students to write a short sentence at the bottom of their poster that describes what they would like to study. You may write the sentence prefix on the board and have students finish the sentence with what they would be interested in studying. What they would like to study should match their poster.

I would like to study ____________________________.

8. Allow students time to compete their posters, if they do not complete it in class, have students complete it as homework.

**Note:** Once all lessons of this unit are completed proctor post assessment. The post assessment and rubric can be found within the last lesson of the unit, Lesson 11: The 8 Realms.

**Assessments**
I am a Scientist Poster
Partnerships for Reform through Investigative Science and Mathematics

The Scientist In Me

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Student Assessment

Write all answers in full sentences.

1. Give an example of how plants are important in Hawaiian culture.

2. Circle the following that are NOT true.
   a. Plants need sunlight to live.
   b. Plants need people to survive.
   c. Plants need nutrients to live.
   d. Plants need water to live.

3. Why are decomposers important in an ecosystem? Write a complete sentence.

4. Write one sentence why pollinators (birds, bees, insects, or wind) are important to plants.

5. Circle the letter below that is NOT a way native plants got to Hawai‘i.
   a. Light seeds floated across the ocean.
   b. Small seeds blew across the wind.
   c. Seeds eaten by birds or stuck to the wings and feet of birds that flew to Hawai‘i.
   d. Humans brought them to Hawai‘i.

6. What is one thing you can do to help care for Hawaii’s forests?
7. Circle the correct food chain (who eats who) order below:
   a. Mouse, Rice Grains, Hawk
   b. Rice Grains, Mouse, Hawk
   c. Hawk, Mouse, Rice Grains
   d. Mouse, Hawk, Rice Grains

8. Circle all of the following that make the sentence correct.
   Non-Native organisms ____________________________;
   a. Disrupt native forest.
   b. Are great additions to our native forests.
   c. Compete with native plants for food, water, and sunlight.
   d. Can disrupt native ecosystems in Hawaii.

9. In the Picture below circle three organisms that are not native to Hawaii’s rainforests.
### Student Assessment Rubric

<table>
<thead>
<tr>
<th>Question</th>
<th>4 Points</th>
<th>3 Points</th>
<th>2 Points</th>
<th>1 Point</th>
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</thead>
<tbody>
<tr>
<td><strong>Explain how native forests are important in Hawaiian culture? Please give one example.</strong></td>
<td>Made connection between native forest and Hawaiian culture.</td>
<td></td>
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<tr>
<td>2. Multiple choice. To adapt means to ___</td>
<td></td>
<td></td>
<td></td>
<td>b.</td>
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<tr>
<td>3. List one way an organism could adapt to a cold environment.</td>
<td>2 Points - Lists one way logical way an organism could adapt to a cold environment. (Ex: Grow a thick coat, build a shelter, and hibernate).</td>
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<tr>
<td>4. List 4 reasons why plants are important.</td>
<td>Lists four logical reasons why plants are important. (Ex: Any food and materials for humans. Oxygen. Any importance for other organisms.)</td>
<td>Lists three logical reasons why plants are important.</td>
<td>Lists two logical reasons why plants are important.</td>
<td>Lists one logical reason why plants are important.</td>
</tr>
<tr>
<td>5. Multiple choice. How did the native plants we see today get to Hawaii?</td>
<td>e.</td>
<td>Any two of a, b, or c.</td>
<td>Any one of a, b, or c.</td>
<td></td>
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<tr>
<td>6. What is one thing you can do to help care for Hawai‘i’s forests?</td>
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<tr>
<td>6. What is one thing you can do to help care for Hawai‘i’s forests?</td>
<td></td>
<td>Writes logical complete sentence about one way we can help care for Hawai‘i’s forest. (Ex: their yard, Not grow non-native plants in yard, volunteer to plant native trees, teach others about Hawai‘i’s forest, learn more.) Plant native plants in yard.</td>
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<td>7. Multiple Choice. Circle the correct food chain (who eats who) order below.</td>
<td></td>
<td>c.</td>
<td></td>
<td></td>
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<tr>
<td>8. Finish the sentence. Non-</td>
<td>Circles a, c, and d.</td>
<td>Circles 2 of 3 (a, c, or d.)</td>
<td>Circles one of the three (a, c, or d.)</td>
<td></td>
</tr>
</tbody>
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