Exploring the Water Cycle Lesson

Created by the GPM Education and Public Outreach Team

NASA Goddard Space Flight Center
Think-Pair Share:
What is precipitation?
The Water Cycle

http://pmm.nasa.gov/video-gallery/what-is-global-precipitation-measurement
Think-Pair-Share

“Based upon what we just viewed, why is it important to study and understand the water cycle?”
Animation – As you watch, think about what is happening in each stage of the water cycle.

http://www.youtube.com/watch?v=iohKd5FWZOE
Stages that require solar radiation. (Heat)
Stages that require water to give up heat. (Cool down)

**Condensation**

- Precipitation
- Transpiration
- Evaporation
- Runoff
- Infiltration
- Groundwater Flow
- Solar Radiation

**Explain:** Condensation

Stages that require water to give up heat. (Cool down)
Which parts of the water cycle are driven by the force of gravity?
Watch each of the following demonstrations so you can answer the questions that go with them on your capture sheet.
Water, Water Everywhere

http://pmm.nasa.gov/education/videos/water-water-everywhere
Evaluate

Water Cycle Mini-Project
## Mini-Project Rubric

<table>
<thead>
<tr>
<th>Concept Understanding</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>The student demonstrated a full understanding of how a water molecule can move through the water cycle. Student included the role of the Sun and gravity.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>The student demonstrated little understanding of how a water molecule can move through the water cycle. Student did not include the role of the Sun or gravity.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proper Use of Terminology</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>The student properly used all the key terms associated with the water cycle.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>The student properly used two or fewer key terms associated with the water cycle.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Writing Skills</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>The student fully communicated the concepts in the water cycle with few grammar and/or spelling errors.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>The student poorly communicated the concepts in the water cycle with many grammar and/or spelling errors.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Neatness and Legibility</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>All of the following are true: The project is neat. All writing is legible. The sequence is easily followed. The project is colorful.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>One of the following is true: The project is neat. All writing is legible. The sequence is easily followed. The project is colorful.</td>
</tr>
</tbody>
</table>