

Water Cycle Final Model - Requirements and Grading

Name: _____ Date: _____ Core: _____

LT: I can develop a model that clearly and accurately describes the cycling of water through the Earth's systems driven by energy from the sun and the force of gravity.

Directions: Make sure that your poster and explanations include all of the items on the checklist. **This packet must be paper clipped to your poster and the explanations must be completed.**

Checklist:

- Model drawing of the cycle of water among land, ocean, and atmosphere by transpiration, evaporation, condensation, precipitation, percolation and the downhill flows on land must be shown.
- Water cycling is shown between land, ocean and atmosphere. Land, ocean and atmosphere are labeled.
- The terms transpiration, evaporation, condensation, precipitation, infiltration/percolation, and run-off must appear on the poster.
- The effect of the sun's energy (radiation) on the cycle must be specifically portrayed and labeled.
- The effect of gravity on the cycle must be specifically portrayed and labeled.
- Phase changes of water that occur must be shown as reactions with correct labels. For example, evaporation would be shown as: $\text{H}_2\text{O (l)} \longrightarrow \text{H}_2\text{O (g)}$
- Poster must have a title.
- Poster must have a border that frames the poster.
- Student's name and period number must be written on the back of the poster.
- Explanation of the Water Cycle must be a paragraph that includes key vocabulary terms from above.
- The description of the driving force of energy behind the Water Cycle must be accurately and precisely explained in complete sentences.
- The description of the effect of gravity on the Water Cycle must be accurately and precisely explained in complete sentences.

Scoring Rubric:

ACCOMPLISHED (6 / 5)	SUFFICIENT (4)	NOT YET MEETS (3/ 2/ 1/ 0)
<p><input type="checkbox"/> All items in "Sufficient" column are checked off.</p> <p>AND</p> <p><input type="checkbox"/> Border is suitable to the poster and show accomplished craftsmanship.</p> <p><input type="checkbox"/> Explanation of the Water Cycle is exceptionally detailed and well-written.</p> <p><input type="checkbox"/> The explanation of the driving force of energy behind the Water Cycle is exceptionally detailed and well-written.</p> <p><input type="checkbox"/> The explanation of force of gravity on the Water Cycle is exceptionally detailed and well-written.</p> <p><input type="checkbox"/> Craftsmanship is "Accomplished" – The requirements for "sufficient" are met, drawings are exceptional, AND spelling and grammar conventions are correct.</p>	<p><input type="checkbox"/> Includes all checklist requirements.</p> <p><input type="checkbox"/> The Water Cycle is modeled accurately and clearly as a cycle.</p> <p><input type="checkbox"/> All phase changes are described and shown accurately.</p> <p><input type="checkbox"/> The effect of the sun's energy and gravity are clearly shown.</p> <p><input type="checkbox"/> Well thought out 5-7 sentence paragraph accurately explaining the Water Cycle.</p> <p><input type="checkbox"/> Paragraph begins with a clear topic sentence telling what the paragraph will discuss.</p> <p><input type="checkbox"/> Paragraph includes at least 3-5 supporting sentences using key vocabulary terms that support the topic sentence.</p> <p><input type="checkbox"/> Paragraph ends with a concluding sentence which summarizes the information in the paragraph.</p> <p><input type="checkbox"/> The driving force of energy behind the Water Cycle clearly and accurately explained in complete sentences.</p> <p><input type="checkbox"/> The effect of the force of gravity on the Water Cycle is clearly and accurately explained in complete sentences.</p> <p><input type="checkbox"/> Border is suitable to the poster, but lacks some craftsmanship.</p> <p><input type="checkbox"/> Craftsmanship is "Sufficient"- Drawings, coloring and writing on the poster is neat and readable. Handwriting for written explanations is neat and readable. Spelling and grammar conventions are mostly correct. Sentences all begin with capital letters and end with proper punctuation.</p>	<p><input type="checkbox"/> Missing one or more checklist requirement(s).</p> <p><input type="checkbox"/> The Water Cycle may not be modeled accurately and clearly as a cycle.</p> <p><input type="checkbox"/> There are many mistakes or missing information about the water cycle, phase changes or the effect of the sun's energy and gravity on the cycle.</p> <p><input type="checkbox"/> Paragraph is less than 5-7 sentences long.</p> <p><input type="checkbox"/> Paragraph does not begin with a clear topic sentence telling what the paragraph will discuss.</p> <p><input type="checkbox"/> Paragraph does not include 3-5 supporting sentences using technical language that explains the phenomenon and supports the topic sentence.</p> <p><input type="checkbox"/> Paragraph does not end with a concluding sentence which summarizes the information in the paragraph.</p> <p><input type="checkbox"/> The driving force of energy behind the Water Cycle clearly and accurately explained in complete sentences.</p> <p><input type="checkbox"/> The effect of the force of gravity on the Water Cycle is clearly and accurately explained in complete sentences.</p> <p><input type="checkbox"/> Border is not included or is not suitable to poster.</p> <p><input type="checkbox"/> Craftsmanship is "Developing or Inadequate"- Drawings, coloring and writing on the poster are neat or readable. Handwriting for written explanations is not neat or readable. Spelling and grammar conventions are not correct. Sentences do not all begin with capital letters and end with proper punctuation.</p>

2. Explain the driving force of energy behind the Water Cycle.

3. Explain the effect of the force of gravity on the Water Cycle.
