

Science Grade 7 A

**Grade Level Standard(s): Science 7 Earth Science: Use or revise a model to describe the cycling of water (including changes in state of water) through Earth’s systems (land, ocean and atmosphere) driven by energy from the sun and the force of gravity.**

<b>Material(s) Provided for Science 7 A</b>	<b>Question(s)</b>	<b>Page Number</b>
Science 7 A Water Cycle Model	1 - 5	13
Science 7 A Attainment Task Questions for Student Use	1 - 5	15

**Response Code:**

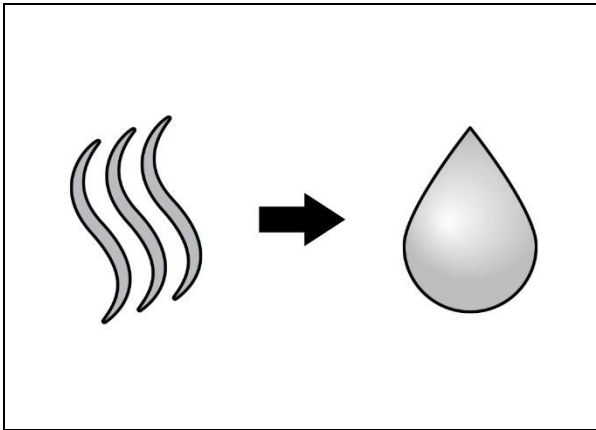
- Indicate the answer provided by the student.

**Text Coding:**

- “Quotation marks” indicate the script that the teacher should read to the student.
- *Italicized text* provides further direction for the test administrator.
- Words in parenthesis ( ) are optional; they may replace or be read in addition to the word(s) immediately preceding.

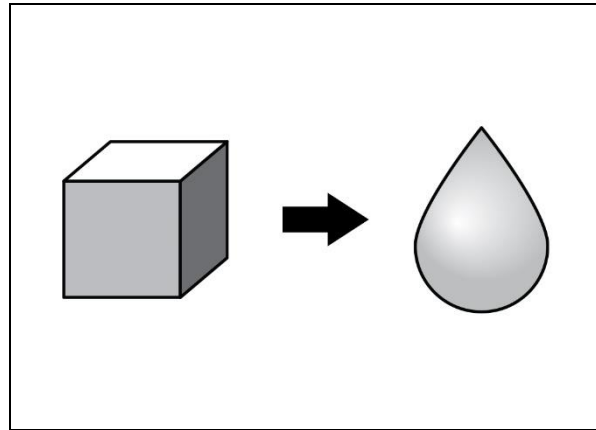
a.

The sun heats the water to change it from a gas to a liquid.



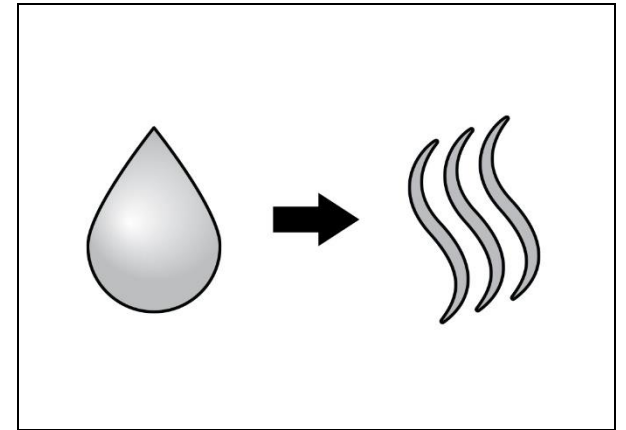
b.

The sun heats the water to change it from a solid to a liquid.



c.

The sun heats the water to change it from a liquid to a gas.



*Before beginning task administration, please ensure that all conditions specified in the administration protocol (starting on page 10 of the Administration Guide Overview and Attainment Task Administration) have been met. Inform the student that the task is about to start by saying, “We are about to start the task, and I am going to ask you some questions.”*

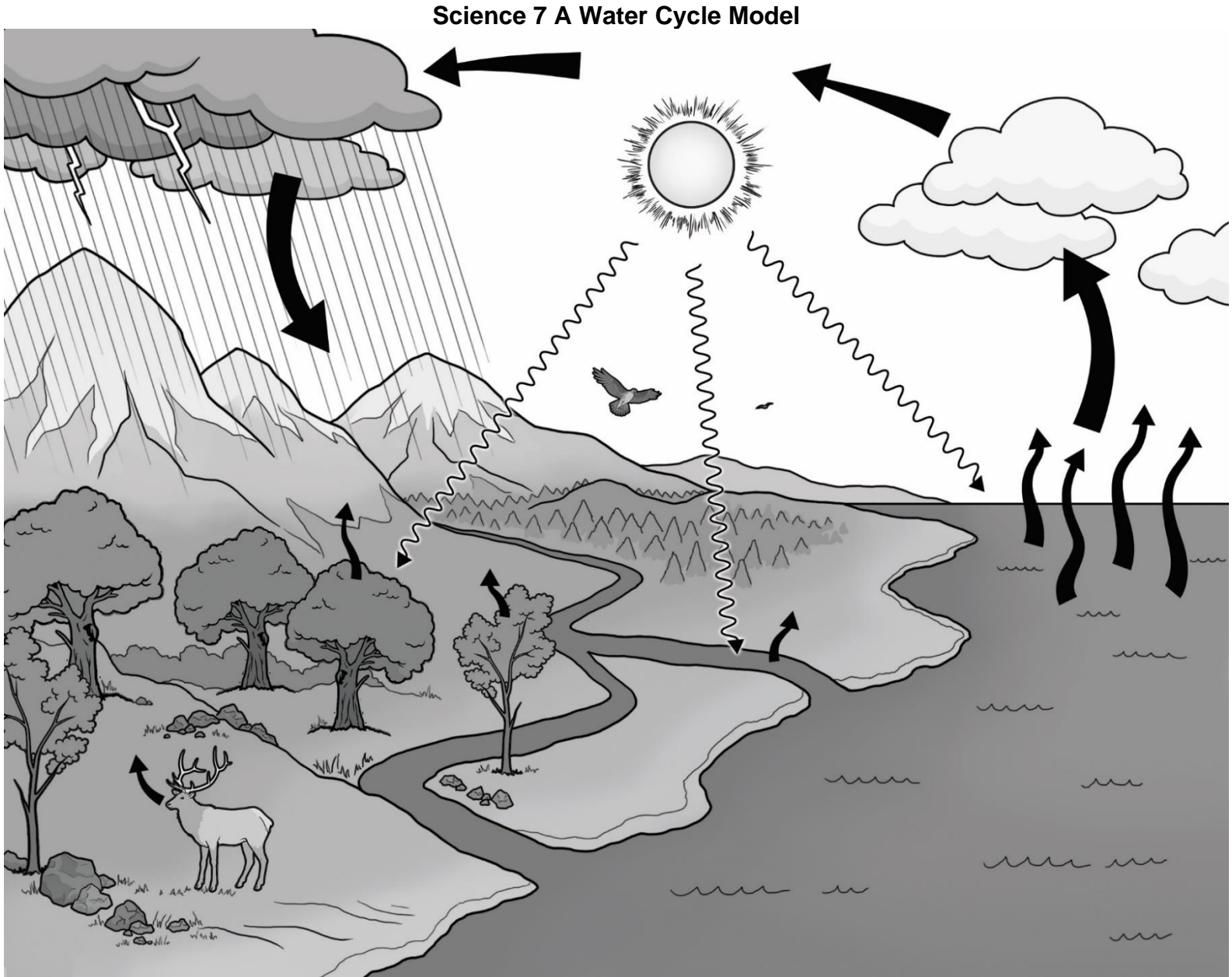
*All questions from this task are available for presentation to the student in the supplemental material Science 7 C Attainment Task Questions for Student Use.*

*Present the student with Science 7 A Water Cycle Model.*

“Lucy explains the water cycle using a model.”

3. “Which of the following describes the change in the state of water during evaporation?”

<b>Response Option</b>	<b>Response Rationale</b>
a. The sun heats the water to change it from a gas to a liquid.	<i>The student recognizes the first step in the process of evaporation but does not understand the change in state of matter.</i>
b. The sun heats the water to change it from a solid to a liquid.	<i>The student recognizes the first step in the process of evaporation but does not understand the change in state of matter.</i>
c. The sun heats the water to change it from a liquid to a gas. <b>(Correct)</b>	<i>The student uses the Water Cycle Model and recognizes the change in the state of water through evaporation from liquid to gas, a change in state of matter.</i>
<b>Depth of Knowledge (DOK) 1</b>	



**Science 7 A Attainment Task Questions for Student Use**

3. Which of the following describes the change in the state of water during evaporation?

**Kentucky Academic Standard:** Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity. [Clarification Statement: Emphasis is on the ways in which water changes its state as it moves through the multiple pathways of the hydrologic cycle. Examples of models can be conceptual or physical.] 06-ESS2-4

**Alternate Assessment Target:** *Use or revise a model to describe the cycling of water (including changes in the state of water) through Earth's systems (land, ocean, and atmosphere) driven by energy from the sun and the force of gravity.*

Student Group	Number of Students*	Percent Correct
<b>All students</b>	547	50.46%
<b>Gender</b>		
Female	197	48.73%
Male	350	51.43%
<b>Ethnicity</b>		
African American	74	56.76%
American Indian or Alaska Native	<10	Not Reported
Asian	<10	Not Reported
Hispanic or Latino	<10	Not Reported
Native Hawaiian or Pacific Islander	<10	Not Reported
White (non-Hispanic)	393	50.89%
Two or More Races	71	43.66%
<b>English Learner</b>	29	41.38%
<b>Economically Disadvantaged</b>	412	50.00%

\*Number of Students that attempted the item