

5

Science Standard
5.3.b.



Changing States: Water, Natural Systems, and Human Communities

California Education and the Environment Initiative

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California State Board of Education
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Department of Resources Recycling and Recovery (CalRecycle)

Key Partners:

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LESSON 1 Evaporation, the Water Cycle, and Human Communities

The Water Cycle 2

LESSON 2 Factors Affecting the Evaporation Rate

Evaporation Rates 4

LESSON 3 How the Water Cycle Affects Natural Systems

Questions About How the Water Cycle Affects Plants and Climate 5

LESSON 4 The Cooling Effects of Evaporation

Questions About Cooling Urban Heat Islands 6

LESSON 5 The Role of Condensation in Natural Systems

Questions About Condensation in Natural Systems 7

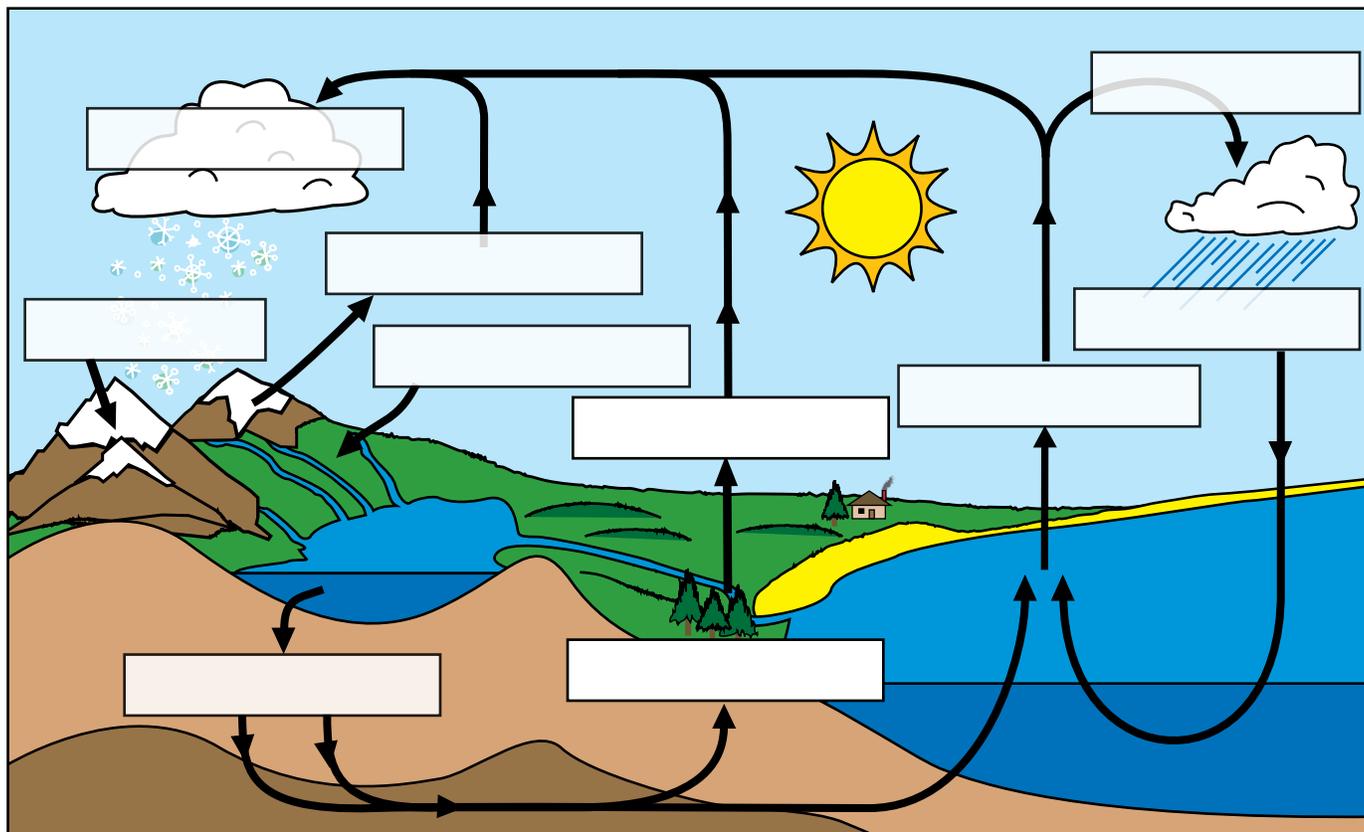
LESSON 6 Freezing in Natural Systems and Human Communities

Questions About Castle Lake Under Ice 8

The Water Cycle

Name: _____

Instructions: Fill in the boxes on the diagram, and write your paragraph in the space provided.



1. Label each of the components of the water cycle.
2. Write a paragraph explaining how the water cycle is important to humans.

The Water Cycle

Lesson 1 | page 2 of 2

Name: _____

Instructions: Write answers in the space provided.

3. What is evaporation?

4. Why is evaporation important to humans?

5. Why is evaporation important to natural systems?

Evaporation Rates

Lesson 2

Name: _____

The evaporation process in the water cycle is very important to life on Earth. Humans rely on the water cycle for many things. When water cycle processes, like evaporation, change, they can have an effect on humans and other living things.

Instructions: Read each question and write your answers in the space provided. (5 points each)

Temperature:

1. What can happen to the water in a reservoir (lake or pond) or in the soil when it is hot?

2. What can happen to the plants when the ground or soil loses water?

Surface Area:

3. How does surface area affect evaporation?

4. Our cities use water from large reservoirs in many ways. What shape should these reservoirs have to slow down evaporation?

Wind:

5. What effect does wind have on evaporation?

6. How can an increase in evaporation affect humans?

Questions About How the Water Cycle Affects Plants and Climate

Lesson 3

Name: _____

Instructions: Read each question and write answers in the space provided.

1. How is transpiration important to plants? (5 points)

2. What happens to the water that evaporates from rainforests? (5 points)

3. Are all rainforests the same when it comes to the water cycle and climate? Why or why not? (10 points)

4. How is transpiration important to people? (10 points)

Questions About Cooling Urban Heat Islands

Lesson 4

Name: _____

Instructions: Read the article and answer the questions in the space provided.
(10 points each)

1. How does evaporation cool down an area?

2. How can gardens and trees in a city benefit the people living there?

Questions About Condensation in Natural Systems

Lesson 5

Name: _____

Instructions: Read each question and write answers in the space provided.
(5 points each)

1. What happens during condensation?

2. Where does dew come from?

3. When does dew appear?

4. How is condensation important to plants and animals in some places?

5. How is condensation important to people?

Questions About Castle Lake Under Ice

Lesson 6

Name: _____

Instructions: Read each question and write your answers in the space provided.
(5 points each)

1. What happens to the water in Castle Lake in winter?

2. Explain why the freezing helps animals and plants survive the winter.

3. What happens in the spring when the ice melts?

4. What would happen to all the living things in the lake if the algae did not survive over the winter?

5. How is the freezing of a lake important to people?



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