Student Workbook

California Education and the Environment Initiative

5

Science Standard 5.3.b.

Changing States: Water, Natural Systems, and Human Communities

California Education and the Environment Initiative
Approved by the California State Board of Education, 2010

The Education and the Environment Curriculum is a cooperative endeavor of the following entities:
California Environmental Protection Agency
California Natural Resources Agency
Office of the Secretary of Education
California State Board of Education
California Department of Education
California Integrated Waste Management Board

Key Leadership for the Education and Environment Initiative:
Linda Adams, Secretary, California Environmental Protection Agency
Patty Zwarts, Deputy Secretary for Policy and Legislation, California Environmental Protection Agency
Andrea Lewis, Assistant Secretary for Education and Quality Programs, California Environmental Protection Agency
Mark Leary, Executive Director, California Integrated Waste Management Board
Mindy Fox, Director, Office of Education and the Environment, California Integrated Waste Management Board

Key Partners:
Special thanks to **Heal the Bay,** sponsor of the EEI law, for their partnership and participation in reviewing portions of the EEI curriculum.

Valuable assistance with maps, photos, videos and design was provided by the **National Geographic Society** under a contract with the State of California.

Office of Education and the Environment
1001 I Street • Sacramento, California 95812 • (916) 341-6769
http://www.calepa.ca.gov/Education/EEI/

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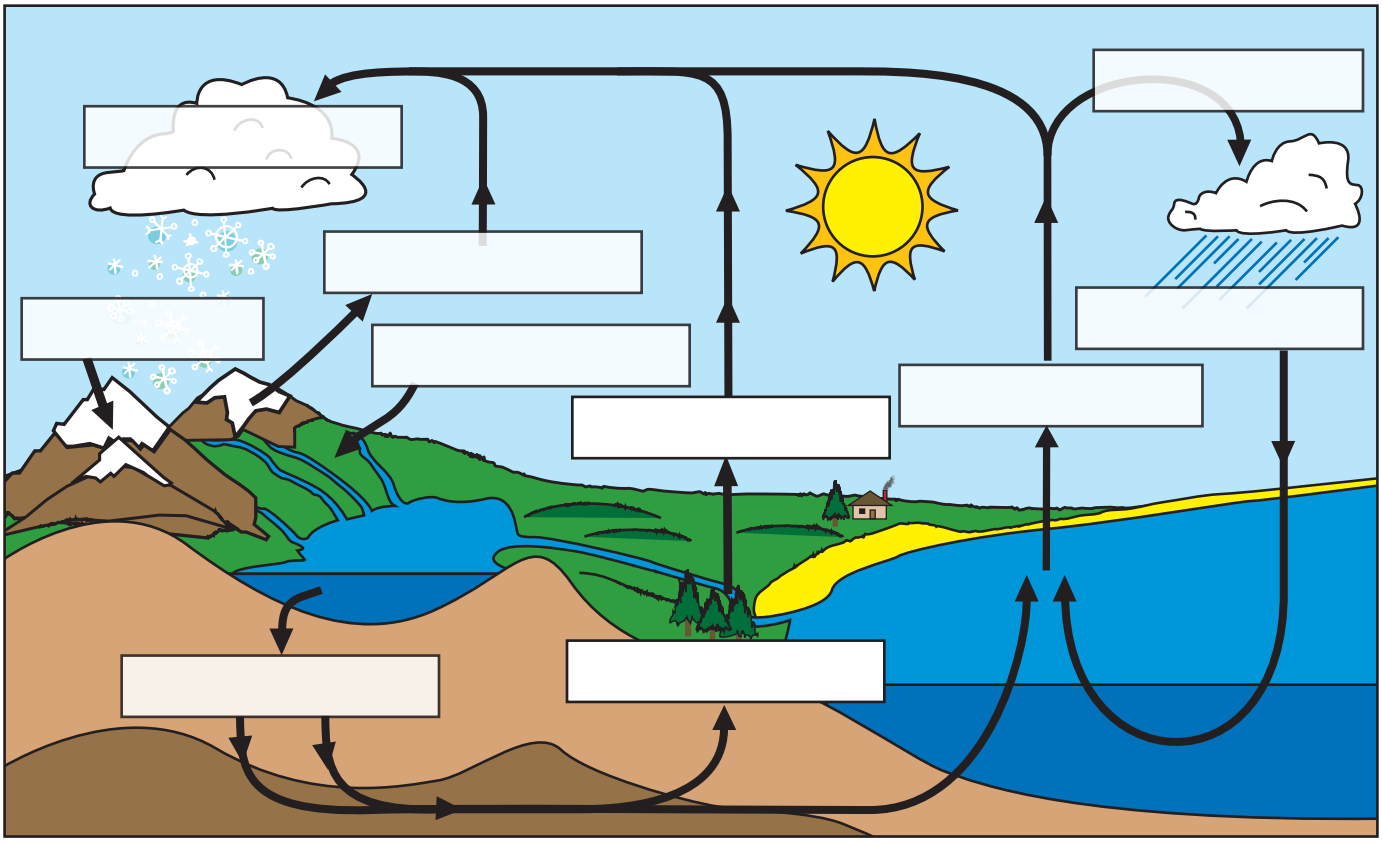
Name: _____

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.

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?

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?

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)

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?

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?

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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