COMMON CORE
Lessons & Activities

WATER CYCLE

Reading for Information
Higher Order Thinking
Writing Prompts
Current Events Analysis
Vocabulary
Cause & Effect
Graphic Organizers
& More!

About this Book

This Common Core Lessons and Activities Book allows you to immediately meet new Common Core State Standards for English Language Arts, as well as Literacy and Writing in History/Social Studies. It is designed to supplement your Social Studies resources, adding new Common Core rigor, analysis, writing, inference, text-dependent questions, and more into your daily instruction.

How to Use this Book:

- Work through the lessons and activities as a class to teach your students higher-order thinking, analysis, and 21st century skills necessary to meet new Common Core expectations.
- Allow students to work through the lessons independently to build and practice these new skills.
- Include technology, collaboration, presentation, and discussion in the activities as you desire—you can decide how in-depth to go.
- Watch your class develop new abilities to meet the rigor of Common Core State Standards, right before your eyes.

Tips:

- Use some of the pages—or use them all—based on your grade, your students, your curriculum, and your needs.
- Use the pages at their current size, or if you prefer them to be 8-1/2" x 11", enlarge them 125% on your copy machine.
- Download graphic organizers labeled **"GO"** in the Table of Contents by going to: www.gallopade.com/client/go
- Use the correlations grid to easily see which Common Core standards are covered in each lesson.

Common Core Lessons & Activities:
Water Cycle

By Carole Marsh
Published by Gallopade International, Inc.

Printed in the U.S.A. (Peachtree City, Georgia)

TABLE OF CONTENTS

G: Includes Graphic Organizer
GO: Graphic Organizer is also available 8½" x 11" online download at www.gallopade.com/client/go
(numbers above correspond to the graphic organizer numbers online)

Water, Water, Everywhere

Read the texts and answer the questions.

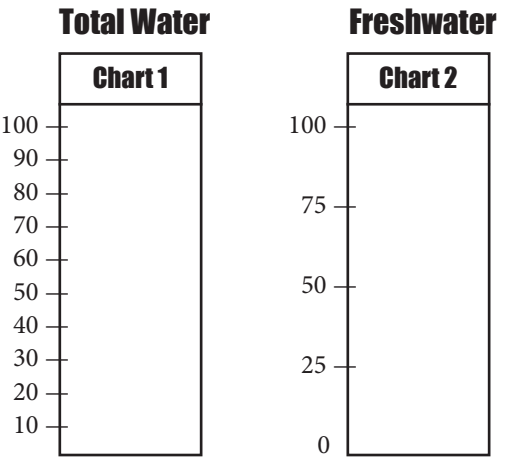
Dictionary entry: scarce: (adjective) rare, uncommon, in short supply

Water covers about 70% of the Earth's surface. However, approximately 97% of ALL the Earth's water is "saltwater" found in the oceans. Saltwater is not safe for humans to drink. Only about 3% of all water is "freshwater." Approximately ¾ of all freshwater is frozen in polar ice caps and glaciers. The remaining ¼ of freshwater, which is what we use for drinking, cleaning, and growing crops, is found in lakes, rivers, and underground.

1. *"Plentiful" is an antonym (opposite) of "scarce".*
   A. Use the dictionary entry for "scarce" to define "plentiful".
   B. What type of water is plentiful on Earth?
   C. What type of water is scarce on Earth?

2. Make inferences from the text to determine whether each statement is **true** or **false**. Correct any false statement to be true.
   A. _____ Most of Earth's saltwater is frozen.
   B. _____ 97% of Earth's water is drinkable.
   C. _____ About 70% of the Earth's surface is NOT covered by water.

3. To complete each chart, use colored pencils to shade in the chart based on data in the text. Add a key to explain what each color means, and write the percentages for each area shaded.
   A. Use Chart 1 to show what percentage of Earth's water is saltwater and what percentage is freshwater.
   B. Use Chart 2 to show Earth's freshwater divided into 2 categories: "ice caps and glaciers" and "freshwater available for human use."



Evaporation & Transpiration

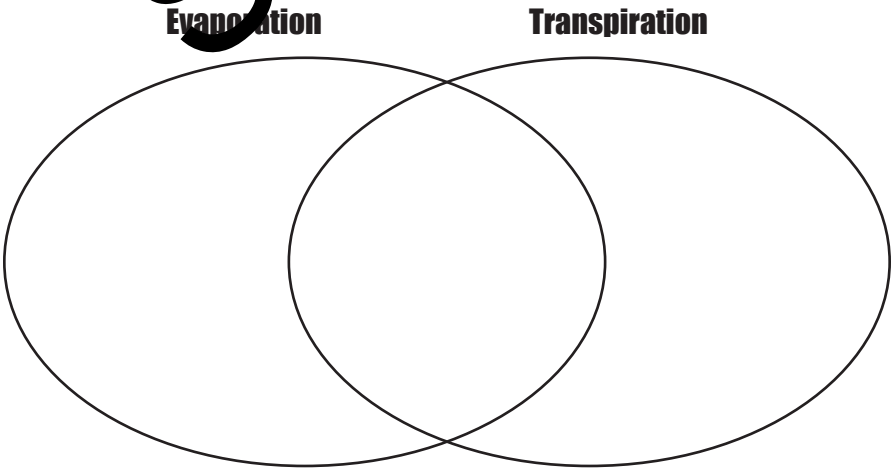
Read the text and answer the questions.

Evaporation occurs when water is heated and changes to a gas (water vapor). In the water cycle, this occurs when the sun shines on bodies of water, such as oceans, lakes, rivers, and ponds. The sun causes the water to heat up and some of it turns into water vapor in the air. About 90% of all water vapor in the air is a result of evaporation.

Plants produce water vapor too. Plants gather water and nutrients from the soil through their roots. They use this to produce food and energy. Plants return some of the water back to the air. They release water, in the form of water vapor, through tiny pores on the surface of their leaves. This process is called transpiration. A large oak tree can produce 40,000 gallons of water vapor every year through transpiration. About 10% of all water vapor in the air is a result of transpiration from plants.

Evaporation and transpiration are the two parts of the water cycle that return the water on earth back to the atmosphere.

1. Define evaporation and transpiration as they are used in the text.
2. Predict what would happen if evaporation and transpiration did not occur. Cite evidence from the text to support your answer.
3. Use the Venn diagram to compare and contrast evaporation and transpiration.



Accumulation

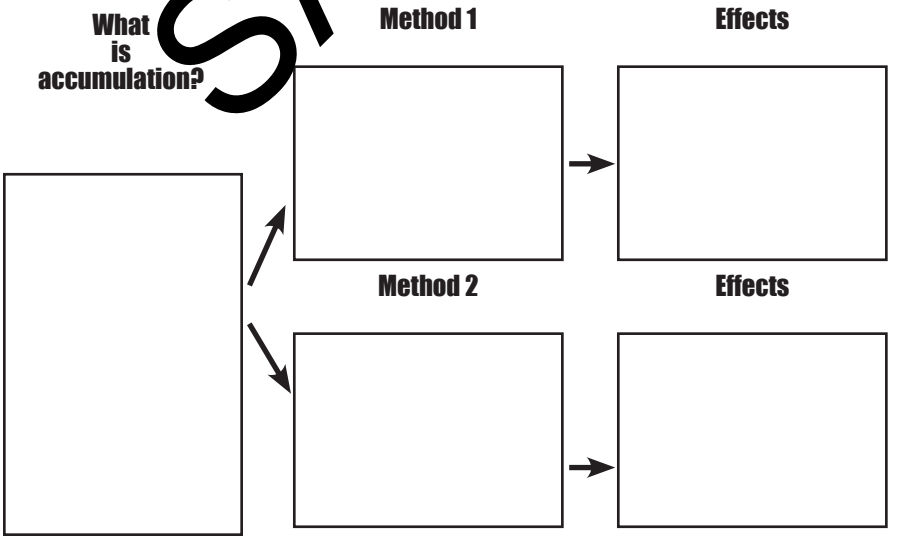
Read the text and complete the graphic organizer.

Water on Earth collects in lakes, rivers, the ocean, and pockets underground. How water gets to these places varies. This process is called accumulation, and it is part of the water cycle.

When precipitation falls on land, what happens next? Sometimes it falls into a body of water, returning directly to an ocean, lake, or river. Sometimes it falls on land. When precipitation falls on land, it doesn't just stay where it fell. Sometimes the water flows across the ground until it eventually finds a body of water to join. This water is called runoff. Sometimes the water seeps into the ground, either staying in the soil or collecting in rock crevices underground. This water is called groundwater.

Runoff is responsible for refilling lakes and rivers that have evaporated or been used by humans. Many cities and communities use the water in lakes and rivers for drinking, cooking, and cleaning. Runoff in streams and lakes provides water for nearby plants and animal wildlife as well.

Groundwater is found as moisture in the soil and it collects in deep underground pools. Trees and other plants absorb groundwater through their roots. People in communities dig deep wells to access groundwater for drinking, cooking, and cleaning.



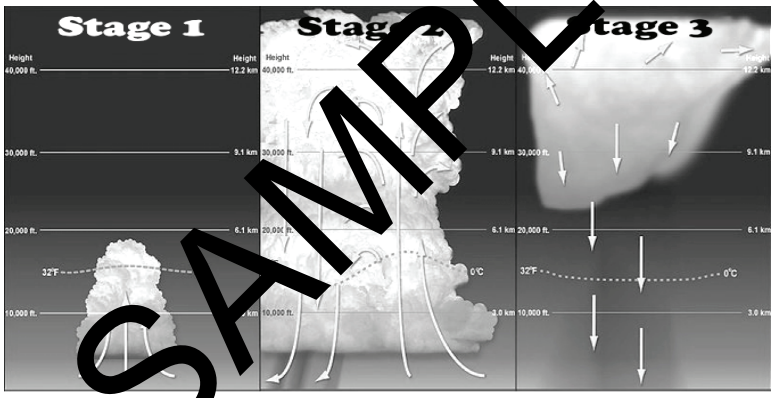
Cycle of a Cloud

Look at the tables and charts, and answer the questions.

Condensation:		
Water vapor rises up to where air gets cool.	Cool air causes the water vapor to turn into tiny water droplets.	

Evaporation:		
Sun warms the water in lakes and oceans.	Water (liquid) turns into water vapor (gas).	

Precipitation:		
Water droplets get too heavy to stay in the atmosphere.	Water droplets clump together and get bigger.	



Courtesy of the NOAA

1. Complete the three tables by adding the ending steps below:
   A. Tiny water droplets gather and form clouds.
   B. Water falls to the earth.
   C. Water vapor rises in the atmosphere.
2. What do the arrows in the diagram indicate?
3. Indicate which stage of the diagram shows each process below:
   A. ___ Precipitation B. ___ Evaporation C. _____ Condensation
4. A. What causes the movement of water in Stage 1?
   B. What causes the movement of water in Stage 2?
   C. What causes the movement of water in Stage 3?

Common Core Lessons & Activities Books

Social Studies Titles:

- Declaration of Independence
- U.S. Constitution
- Bill of Rights
- Road to the Civil War
- The Civil War: Key Battles & Events
- Jamestown
- Key Events of World War II
- Civil Rights Movement
- Branches of Government
- Basic Economic Concepts
- Women's Suffrage and the 19th Amendment
- The American Revolution
- Explorers
- The Olympics
- Underground Railroad
- Forms of Government: Democracy, Monarchy, & Oligarchy & More
- Ancient Greece
- Ancient Egypt
- Native Americans
- Indian Removal & the Trail of Tears
- Inventors & Inventions
- Map Skills
- Westward Expansion
- Communities

Science Titles:

- Habitats
- States of Matter
- Cell Structure
- Weather
- Water Cycle
- Energy
- Solar System
- Sound
- Mammals
- Light
- Rocks and Minerals
- Oceans
- Heredity & Genetics
- Magnetism
- Natural Resources
- Ecosystems
- Force & Motion
- History of the Earth
- Life Cycles
- Wave Properties
- Landforms
- Classification of Organisms
- Electricity
- The Scientific Method

COMMON CORE Lessons & Activities

Are you expected to change how you teach because of new CCSS for English Language Arts & new CCSS for Literacy and Writing in History/ Social Studies and Science?

Are you expected to continue to meet existing science and social studies standards, AND integrate new, more rigorous expectations for reading, writing, analysis, inference, and more into your daily instruction?

This series of 48+ little books is a HUGE help!

Common Core at an Uncommon Value!

Supplement the resources you already have by choosing the books in this series that match the science and social studies topics you teach. Each book will provide you with ready-to-use reproducible pages that are the exact kinds of Common Core lessons and activities you need to meet the new added requirements of Common Core!

"You'll want these for every topic you teach!"
–Amy Johnson, Common Core Specialist

You don't have to start from scratch. This brand new series meets Common Core State Standards for ELA + Common Core State Standards for Literacy and Writing in History/Social Studies and Science!

GALLOPADE
www.gallopade.com