

Instructional Recipe

Why Should We Save Our Water?

2nd Grade
Science

Step 1 – Ask

Objectives: Students will describe and illustrate the water cycle. Students will persuade others to conserve and protect our water supply.



“AUGUST 2001 - NEW YORK, NEW YORK, USA: New York City temperatures broke the 100 degree mark for a fifth day in a row, August 9, 2001, while a young child frolics in the cool waters of a Washington Square Park fountain.” Online Photograph. EBSCO Image Collection. 13 Oct. 2008
<http://search.ebscohost.com/login.aspx?direct=true&db=imh&AN=imh158778&site=srck5-live>

Introduction: People, plants, and animals must have water to live. Each day, we use water in many ways.

Ask:

- ★ How do people use water each day?
- ★ From where does water come?
- ★ Where does the water go when it rains?
- ★ Why must we protect our water?

Vocabulary:

- ★ water cycle
- ★ evaporation
- ★ condensation
- ★ precipitation

Science TEKS:

(2.10) **Science concepts.** The student knows that the natural world includes rocks, soil, water, and gases of the atmosphere. (A) describe and illustrate the water cycle; (B) identify uses of natural resources.
 (2.1) **Scientific processes.** The student conducts classroom and field investigations following home and school safety procedures. (B) learn how to use and conserve resources and dispose of materials.

Technology Application TEKS:

(5) **Information acquisition.** The student acquires electronic information in a variety of formats, with appropriate supervision. (A) acquire information including text, audio, video, and graphics.
 (7) **Solving problems.** The student uses appropriate computer-based productivity tools to create and modify solutions to problems. (A) use software programs with audio, video, and graphics to enhance learning experiences; and (B) use appropriate software, including the use of word processing and multimedia, to express ideas and solve problems.
 (11) **Communication.** The student delivers the product electronically in a variety of media, with appropriate supervision. (A) publish information in a variety of media including, but not limited to, printed copy or monitor display. (B) publish information in a variety of media including, but not limited to, stored files or video.

Step 2 – Investigate

Search for “water cycle” or “conserve water” in EBSCO Kids Search.

K-12 Databases Resources:

- ★ [Keep Earth's Water Clean!](#) (cover story) Weekly Reader News - Edition 2, 4/2/2004, Vol. 73 Issue 23, p1-3, 3p, 8c; (AN 12599593)
- ★ [Help Earth's Animals.](#) Scholastic News -- Edition 2, Apr2004, Vol. 60 Issue 7, Special section p2-3, 2p, 6c; Reading Level (Lexile): 390; (AN 12540865)
- ★ "water." Britannica Elementary Encyclopedia. 2008. Encyclopædia Britannica Online School Edition. 13 Oct. 2008
<<http://school.eb.com/elementary/article?articleId=390625>>.

Additional Websites:

http://www.epa.gov/safewater/kids/flash/flash_watercycle.html

http://www.southeastwater.com.au/games/education_kidsroom_wcactivity.asp

<http://www.smwd.com/kids-corner.htm>

Books:

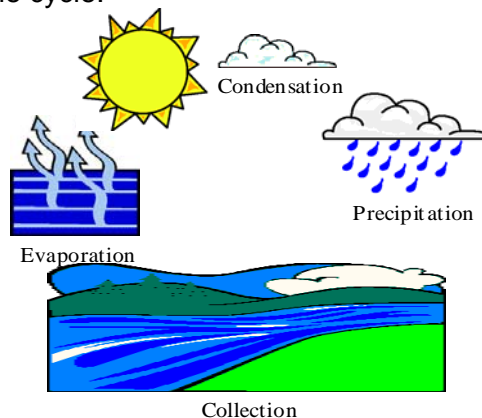
Green, Jen. Why Should I Save Water? Barron's Educational Series: New York, 2005.

Relf, Pat. The Magic School Bus Wet All Over: A Book About the Water Cycle. Scholastic Paperback: New York, 1996.



Step 3 – Create

Students will create a diagram of the water cycle. They should write a sentence to explain each step of the cycle.



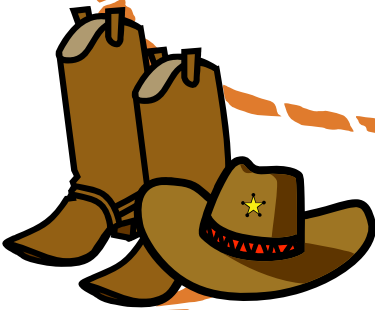
🔗 Technology Link - Use a graphic organizer program, such as Kidspiration, to create the diagram. A drawing program, such as Kid Pix or MS Paint, may also be used.

Step 4 – Discuss

The amount of water on the earth stays the same. Therefore, we must be careful that we do not waste that water or pollute it. Allow students to choose one of the following activities to show what they have learned:

- ★ Design a poster to convince other students to protect our water supply. Explain ways students can save water each day. Include a diagram of the water cycle
- ★ Create a public service announcement to inform other students about the water cycle and ways to protect our water supply.

🔗 Technology Link – Students may use a drawing program, such as Kid Pix or MS Paint to produce their poster. Students may video tape their public service announcement.



Step 5 – Reflect

Allow students to present their projects to the rest of the class. Use the following suggested rubric to assess the students' work. Make sure that the students are familiar with the rubric *before* they begin creating their project. They should refer to the rubric repeatedly to monitor their progress in creating their project.

🔗 Technology Link: You can also create your own rubric with your students at <http://rubistar.4teachers.org/index.php>.

Protecting Our Water - Poster

CATEGORY	4	3	2	1
Accuracy – water cycle	Student accurately illustrates and describes each step of the water cycle.	Student accurately illustrates and describes only 3 steps of the water cycle.	Student accurately illustrates and describes only 2 steps of the water cycle.	Student only accurately illustrates and describes 1 (or 0) steps of the water cycle.
Accuracy – conserving water	Student explains 4 or more ways to protect the water supply.	Student explains 3 ways to protect the water supply.	Student explains 2 ways to protect the water supply.	Student explains only 1 way to protect the water supply.
Persuasiveness	Student provides at least 3 convincing reasons to protect our water supply (such as ways we depend on water).	Student provides 2 convincing reasons to protect our water supply (such as ways we depend on water).	Student provides only 1 convincing reason to protect our water supply (such as ways we depend on water).	Student does not provide any convincing reasons to protect our water supply.
Creativity	Several of the graphics used on the poster reflect a exceptional degree of student creativity in their creation and/or display.	One or two of the graphics used on the poster reflect student creativity in their creation and/or display.	The graphics are made by the student, but are based on the designs or ideas of others.	No graphics made by the student are included.
Attractiveness	The poster is exceptionally attractive in terms of design, layout, and neatness.	The poster is attractive in terms of design, layout and neatness.	The poster is acceptably attractive though it may be a bit messy.	The poster is distractingly messy or very poorly designed. It is not attractive.

Protecting Our Water – Public Service Announcement

CATEGORY	4	3	2	1
Accuracy – water cycle	Student accurately describes each step of the water cycle.	Student accurately describes only 3 steps of the water cycle.	Student accurately describes only 2 steps of the water cycle.	Student only accurately illustrates and describes 1 (or 0) steps of the water cycle.
Accuracy – conserving water	Student explains 4 or more ways to protect the water supply.	Student explains 3 ways to protect the water supply.	Student explains 2 ways to protect the water supply.	Student explains only 1 way to protect the water supply.
Persuasiveness	Student provides at least 3 convincing reasons to protect our water supply (such as ways we depend on water).	Student provides 2 convincing reasons to protect our water supply (such as ways we depend on water).	Student provides only 1 convincing reason to protect our water supply (such as ways we depend on water).	Student does not provide any convincing reasons to protect our water supply.
Creativity	The student includes many creative elements in the presentation, such as humor, skits, costumes, or props.	The student includes some creative elements in the presentation, such as humor, skits, costumes, or props.	The student includes very little creative elements in the presentation,	The presentation lacks any creative elements.
Delivery of Presentation	Student delivers the presentation with enthusiasm and fluency. Student has obviously rehearsed well for the presentation	Student delivers the presentation with enthusiasm and fluency. Student has obviously rehearsed for the presentation, although he or she may make a few minor mistakes.	Student struggles with the delivery of the presentation, but the information is still easily understood by the audience.	Student struggles with the delivery of the presentation, making it difficult for the audience to hear or understand the information.