



EDUCATOR GUIDE

WATER WOW! A Visual Exploration

by Antonia Banyard and Paula Ayer
illustrated by Belle Wuthrich

GENRE: Children's non-fiction

THEMES: environment, energy, biodiversity, renewable and non-renewable resources

SUITABLE FOR:

Grade 4–7, Ages 9–13

GUIDED READING LEVEL:

Fountas and Pinnell V

LEXILE:

Illustrated Guide 1070L

COMMON CORE STANDARDS:

W.5.4,7,8,9,9b,10

L.5.3,3a,3b,4,4a,4c,5,5a,5c,6

SL.5.1,1c,1d,2,3,4,5,6

RI.5.1,2,3,4,5,6,7,8,9,10

SUMMARY:

A colorful infographic look at the many surprising and fascinating facts about water.

Where did water come from—before it got to Earth? Why is the water you drink the same stuff that was around when dinosaurs were alive? If water can't be created or destroyed, how can we run out? Find out the answers to these and many more intriguing questions in this vibrant book, designed to appeal to visual learners.

Dive in and discover: • Why water is so important to different religious faiths; • Amazing extreme lakes and rivers around the world; • The surprising connection between water access and girls' education worldwide; • How climate change affects water, and vice versa—and what you can do about it; . . . and more.

Filled to the brim with colorful illustrations and diagrams, easy-to-understand infographics, and illuminating photos, *Water Wow!* is a dazzling and fun introduction to the importance of water in our lives.

Please remember that the suggested questions and activities within this educator guide are meant to serve as a starting point. Educators are encouraged to select items from each part of the guided inquiry process that work best for their style of teaching and will help them meet their goals when covering the topics in this book. Activities and prompts should be tweaked and/or reformatted to best fit your students, context, and community to ensure equity and inclusion.

ABOUT INFOGRAPHICS

Water Wow! uses a mixture of artwork, photography, and infographics (charts, graphs, etc.) to present key points visually. The text is brief, to convey the basic concepts quickly. Each infographic illustrates a larger idea, and so can be the starting point for longer discussions. A reading list and a detailed bibliography are provided for students or teachers who are interested in looking deeper into a topic.

Classroom Discussion Questions and Activities

ECOSYSTEMS AND BIODIVERSITY

1. Why is water so important for living things? (See p 16–17)
2. Can you name three different types of water ecosystems? (See p 20–21)
3. What is a wetland, and why are they important? (See p 20–21)
4. What is an estuary? (See p 20–21)
5. What happens to an ecosystem when there is not enough water? (p 14–15)



ENVIRONMENT AND RESOURCES

1. How do you use water in your everyday life? In the home? Can you think of four categories of personal water use? (See p 24–25)
2. What is the difference between direct water use and indirect water use? (See p 24–25 and 26–27)
3. The water you use in the home is an example of direct water use (ie. your answer to question #1). What other ways do we use water? (See p 26–27 and 32–33 and 34–35)

- Where does the water in your community come from? How does it get to you? (See p 40–41)
Your local water authority will have information on the water source for your community. As well, here are a couple of useful resources for locating your local watershed:
 - watershedreports.wwf.ca
 - www.nrcan.gc.ca/earth-sciences/geography/atlas-canada/selected-thematic-maps/16888
 - flowergarden.noaa.gov/image_library/regionmaps.html
 - americaswatershed.org/reportcard/
 - water.usgs.gov/wsc/map_index.html
- How does pollution get into our sources of water? (See p 46–47)
- Can you think of ways to reduce water pollution? Try to think of at least one thing you can do personally to reduce pollution. (See p 48–49 and 50–51)
- Draw a map of your home. (Include your yard and garage if you have one.) Write down one way you use water in each room. Write a “D” beside every direct use, and an “I” beside every indirect use. Write down one way you could use less water in each room.
This is a way for students to create their own infographic. Students can either write in point form, or draw a picture or icon to represent different water uses (ie. a tap, a light bulb, etc.).

WATER AND ENERGY

- What is hydropower? (See p 30–31)
- Besides hydroelectric power, how is water used to make energy?
What forms of energy are the “thirstiest”? The least “thirsty”? (See p 32–33)
- How are food, water, and energy connected? (See p 34–35)
- Can you think of some ways to use less energy?

WATER AND CLIMATE CHANGE

- How does water affect the weather? (See p 12–13)
- How do changes to water affect the climate? (See p 12–13)
- What are some ways to reduce your impact on water? (see p 12–13 and 50–51)

