

Riparia's River

RIF EXTENSION ACTIVITIES FOR EDUCATORS

STEAM-THEMED: SCIENCE, TECHNOLOGY, ENGINEERING, ART, MATH

SCIENCE, MATH

WHERE DOES ALL THE WATER GO?

Have small groups of students investigate where the water from the school goes after students wash their hands. Have them create a flow chart or map showing the journey of the water from tap to its final destination. How far does the water have to travel? Is any of that water carrying pollutants? How is that pollution cleaned up before the water is released back into the environment?



SCIENCE, TECHNOLOGY

VIRTUALLY THERE

Go to <https://www.dewater.com/virtual-tour> for a virtual tour of a water treatment plant (in English or Spanish). Search online to find the water treatment plant for your area.

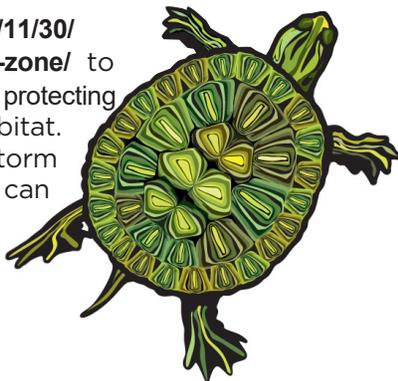
SCIENCE, TECHNOLOGY

REAL WORLD RESULTS

Visit <https://riparianhabitat.org/2020/11/30/welcome-to-the-riparian-zone/> to see a short video about protecting and restoring riparian habitat. After watching, brainstorm simple ways your class can help the environment.

TECHNOLOGY

WATER, WATER EVERYWHERE



Use the interactive tool <https://river-runner.samlearner.com/> to follow the path of a raindrop that falls any place in the United States. As you track the water, think about the areas it's traveling through and what pollutants it might pick up on the way.

ENGINEERING, SCIENCE, WRITING, MATH

ENVIRONMENTAL ENGINEERING

Have your class become environmental engineers! Explain that an environmental engineer deals with air and water pollution, waste disposal, recycling, and other public health issues. Put students into small groups and have them come up with an on-campus issue to address in one of these areas. They should then work to develop a solution for the problem and a plan of action to implement their ideas. Have them present their findings on a poster or in a PowerPoint.

ART, SCIENCE, WRITING

SOMETHING FISHY IN THE WATER

Have students make a picture book to explain nonpoint pollution to younger children. The book should follow Fred the fish as he leaves his home in a protected area of Blue River and swims downstream. What happens to Fred and his river as he swims past farmland, housing developments, parking lots, construction sites, big factories, and hazardous waste dumps? Students should illustrate their books.

MATH, SCIENCE

POLLUTION PROBLEM SOLVING

Provide students with problems that relate directly to the information learned in the story. For example: The area of wildflowers and trees along the riverbank in front of a local corn field is 900 square feet. What are some possible lengths and widths of this buffer? Does the buffer need to be bigger? Why or why not? Does this number make sense realistically? Explain.

