



Yale-New Haven
Teachers Institute®

Curriculum Units by Fellows of the Yale-New Haven Teachers Institute
2018 Volume II: Engineering Solutions to 21st Century Environmental Problems

Water Filtration Engineering in the Elementary Grades

Guide for Curriculum Unit 18.02.06
by Carol Boynton

Whatever method we use to get a drink, we don't have to consider the environmental and water quality engineering underlying clean water. Living in the industrialized world, like the United States, we are fortunate - we don't have to worry about the quality of our drinking water. But in many parts of the world, people don't have this luxury. The focus in this six-week curriculum unit is for primary-grade scientists to build an appreciation for the outdoors, impart an understanding of how many people in the world struggle to find clean water, and empower them to solve a problem. Students will spend time learning new concepts and experiencing laboratory and field demonstrations as they move through this curriculum unit on environmental engineering and specifically, water filtration.

The curriculum unit begins with the primary mentor texts, *The River Ran Wild: An Environmental History* by Lynne Cherry and *The Water Princess* by Susan Verde. Classroom activities include learning about water treatment and access, experience carrying water, engineer a working water filter, field trips to the pond, and connecting with an area in need of easier access to clean water.

(Developed for Science/STEM, grade K; recommended for Science/STEM, grades K-3)

<https://teachersinstitute.yale.edu>

©2019 by the Yale-New Haven Teachers Institute, Yale University
For terms of use visit <https://teachersinstitute.yale.edu/terms>