

EDUCATIONAL RESOURCES ON WATER TREATMENT

(1) CDC Article On Water Treatment

Coagulation - Flocculation - Sedimentation - Filtration - Disinfection

https://www.cdc.gov/healthywater/drinking/public/water_treatment.html

(2) Encyclopedia Britannica

Explanation of water treatment cycle

<https://www.britannica.com/technology/water-supply-system/Coagulation-and-flocculation#ref1084799>

(3) Teach Engineering - Stem curriculum for K-12

Countless activities and lessons for teachers on the subject of engineering

<https://www.teachengineering.org/>

(4) Wastewater Education, K-12 Resources for Teachers

https://wastewatereducation.org/teacher_resources.html

(5) The Water Project

Water Crisis Lesson Plans for grades K-12

<https://thewaterproject.org/resources/>

(6) United States Environmental Protection Agency - Lesson Plans, Teacher Guides and Online Environmental Resources for Educators

Topics include air, climate change, ecosystems, energy, health, waste and water.

<https://www.epa.gov/students/lesson-plans-teacher-guides-and-online-environmental-resources-educators>

(7) Water Resources for Educators

Multiple links to free online water education resources.

<https://www.watercalculator.org/education/water-resources-for-educators/>

(8) Water Education Resource Library by APEC Water

<https://www.freedrinkingwater.com/resource-water-education-library.htm>

(9) U.S. Geological Survey - Education Resources on Water

<https://education.usgs.gov/primary.html#water>

(10) Nasa Cleaning Water Activity for Grades 3-5

https://www.nasa.gov/audience/foreducators/topnav/materials/listbytype/Cleaning_Water_Activity.html

(11) Water System

Including the process of aeration, coagulation, sedimentation, filtration, disinfection.

For grades 4-8

https://www3.epa.gov/safewater/kids/pdfs/activity_grades_4-8_waterfiltration.pdf

VIDEOS

(1) *Water and You: The Water Treatment Process* [Youtube Video]

Topics Covered:

- o How does drinking water get to your home?
- o How the water travels through treatment facilities
- o “Coagulation” and “Flocculation” and how these are removed.
- o Disinfection of Water
- o Ozone
- o Testing of water.

<https://www.youtube.com/watch?v=tuYB8nMFxQA>

(2) Advanced Stormwater Treatment using CESF Starring Bill Nye

<https://www.youtube.com/watch?v=gT3V9OeXOI8>

(3) Sewage treatment cycle for grades 4-6

<https://www.youtube.com/watch?v=8isr9nSDCK4>

(4) Water Treatment cycle for grades 7+

<https://www.youtube.com/watch?v=9z14I51ISwg>

(5) Waste water treatment for grades 7+

<https://www.youtube.com/watch?v=FvPakzqM3h8>

(6) Water treatment project (News channel)

https://www.youtube.com/watch?v=tPP_Yn2w2Sk

(7) Hard and soft water | Chemistry for All | The Fuse School

<https://www.youtube.com/watch?v=ebygQes5Wig>