

Clean that water up!



SDG Links

6

9

water EXPLORER



Explorer Challenge: How can we make dirty water safe to drink?

10
mins

We are currently experiencing a crisis with local water supplies across the world. Many lakes and rivers have been polluted, resulting in dirty water that can cause people to become sick. We need your help to investigate a quick and simple way to clean water.

Discuss how you think water could be cleaned. What materials would you need? Do you know how water is cleaned in water treatment plants near where you live?

Explore 'How do Water Treatment Plants Filter Water?' (Resource 1).

Ask: Is there anything around the school we could use to filter water? (leaves, sand, grasses etc.). You might like to suggest some other materials for filtering water such as various funnels, filters, sieves, bottles, and containers.

60
mins

Brainstorm how the water could be cleaned using these materials and **create** an experiment to conduct with your group. How will you make sure the water is safe enough to drink? You might like to use Resource 2 to help you.

Record your results using the 'Science Investigation Record' (Resource 3) and **interpret** the results. Is the water now safer to drink?

5
mins

When we save water we are also saving the energy needed to clean, pump, and sometimes heat that water. This helps us to reduce our greenhouse gas emissions, which reduces climate change.

Choose one 'Save It!' action from the list (Resource 4), or come up with your own water saving action. **Write** it on a piece of paper and do it for as many days as possible. As a class you could have a competition to see who can keep their action going for the longest amount of time.

EXPLORE FURTHER

Visit your local water treatment plant. **Explore** how water is filtered there and what systems are in place to keep water safe to drink. What challenges do these plants face? What could be done to reduce this? What could you do? **Count** how many people you talk to about water issues at the plant.

Points: 100 points

Time: 75 mins

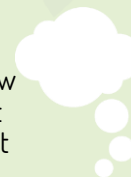
Subject links:  

WHAT YOU NEED

- Resources 1 – 4
- Experiment Materials: Various funnels, filters, sieves, bottles and containers for your experiment. Dirty water, you might like to collect this from a source near your school.

THINK ABOUT

Imagine turning on a tap tomorrow and only getting dirty water. What would you do? How would it affect your day?



Count how many people you talked to about doing a 'Save It' action.
Count how many people pledged to do their chosen 'Save It' action.

MAKE EVERY DROP COUNT