



## Explorer Challenge: Is your water source polluted?

**10 mins** **Brainstorm** threats and challenges that our freshwater resources around the world face. What do you think are the biggest challenges our water sources are facing at the moment?

**Focus** on pollution – what impact can this have on a water source? What sources of pollution might be impacting your local water source?

**Discuss** how the health and quality of a water source could be measured. **Introduce** the idea of looking at macro-invertebrates (like dragonflies and crayfish) as an indication of health. What would you expect to see in poor/good quality water?

**45 mins** **Visit** a nearby water source (e.g. a river.). Using Resource 1 as a guide for your activity, work in groups to collect a sample of macro-invertebrates. **Identify** them using the Dichotomous Key in Resource 2 and **record** your observations using the score card in Resource 1.

You might also like to try other tests which can be downloaded from [www.minisass.org](http://www.minisass.org)

**Discuss** your results with your group. What did you notice about the quality of the water? What local sources of pollution may have had an impact on the water quality?

**5 mins** **Register** online with [www.minisass.org](http://www.minisass.org) **Explore** the Google Map and upload your results.

**Points:** 300 points

**Time:** 60 mins

**Subject links:**  

### WHAT YOU NEED

- Resources 1 - 2
- Fieldwork Materials: Nets, trays/ice-cream tubs, pencils, recording sheets, suitable clothing/footwear, soap and magnifying glasses (optional).

### THINK ABOUT

How pollution that humans put in our freshwater supplies affects animals as well as people.



### EXPLORE FURTHER

**Continue monitoring** the water source you have chosen throughout the year during different seasons or after different weather events. **Interpret** your results and think about why they might be similar or different to your previous results.

Don't forget to write a newsreel and upload a photo of what you've done.

MAKE  
EVERY  
DROP  
COUNT