

Year 5
Environmental Science

Water



Name: _____

Class: _____

Lesson 1: Where does water come from?

Resources and equipment needed:

- Large bowl
- Small mug
- Cling film
- Warm water

Key vocabulary

- **Water cycle:** the continuous movement of water on, above and below the earth's surface
- **Precipitation:** water that falls onto Earth – rain, sleet, snow, hail
- **Evaporation:** the process of water turning to water vapour when heated.
- **Condensation:** the process of water vapour turning back to water when cooled
- **Surface run-off:** water on the surface which travels into bodies of water
- **Aquifer:** underground stores of water

Lesson 2: How can we limit the damage caused by floods?

Resources and equipment needed:

- none

Key vocabulary

- **Climate:** the normal weather in a place
- **Climate change:** long term changes to the climate, cause both naturally and as a result of human actions
- **Global warming:** the gradual increase of average temperatures across the planet
- **Floodplain:** the land nearest to a body of water which is often flooded

Lesson 3: Why is clean water important?

Resources and equipment needed:

- large bowl
- mug or small cup
- cling film
- warm **salty** water

Key vocabulary

- **Sanitation:** clean living conditions eg toilets, taps for handwashing and clean water.
- **Desalination:** the removal of salt from seawater so that it is drinkable

Lesson 4: How much water do we use?

Resources and equipment needed:

- none

Key vocabulary

- **Cholera:** an infectious and sometimes deadly disease, causing vomiting and diarrhoea
- **Epidemiology:** the branch of science that explains how diseases are spread
- **Water-borne:** carried by water

Lesson 5: What are the uses and effects of water pollution?

Resources and equipment needed:

- none

Key vocabulary

- **Pollution:** the act of making something dirty or contaminated
- **Industry:** the work of making products from raw materials in factories
- **Agriculture:** farming
- **Pesticides:** chemicals used by farmers to control diseases in their crops and animals

Lesson 6: How do we get clean water?

Resources and equipment needed:

- Dirty water in a jug: water mixed with some soil
- Filter materials: a range such as filter paper, cotton wool, pebbles, sand, gravel, lentils, rice
- Large clear plastic bottle (1.5 or 2 litre)
- 1 glass of tap water
- 4 glasses of water, each with something different added in. eg salt, white vinegar, boiled water, tea/ coffee, a soft drink or squash, white sugar (anything that changes the colour or smell).

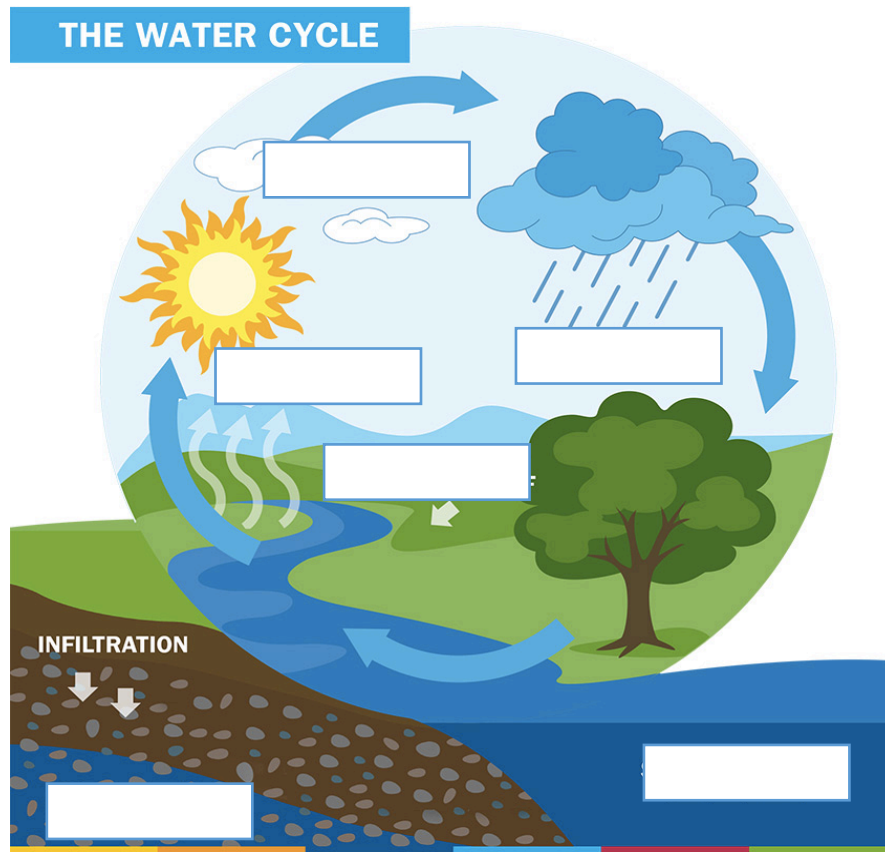
Key vocabulary

- **Screening:** The first part of the process in which screens remove large solids like stones, twigs and leaves.
- **Mixing Tank:** A vat in which a chemical is added to unclean water make the smaller solids (dirt) stick together for easy removal.
- **Sedimentation:** The process by which any remaining solids settle to the bottom of the tank and are collected and removed.
- **Filtration:** part of the process where the water is filtered to make it cleaner.
- **Chlorination:** The addition of chlorine to kill bacteria and make the water safe to drink.



Lesson Seven: Assessment

1) Label the different parts of the water cycle:



2) An increase in extreme weather events such as storms is caused by _____

3) Name three things we can do to protect ourselves from flooding

4) What is desalination?

5) Why is desalination needed?

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6) Name three things causes of water pollution

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7) As a result of our learning this term, are you going to make any changes to your lifestyle?

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