

Knowledge organiser:

Why is water so important?

Key Concepts

Key Vocabulary

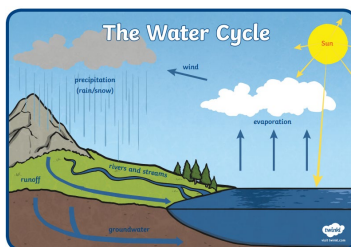
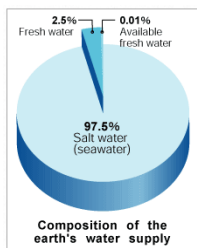
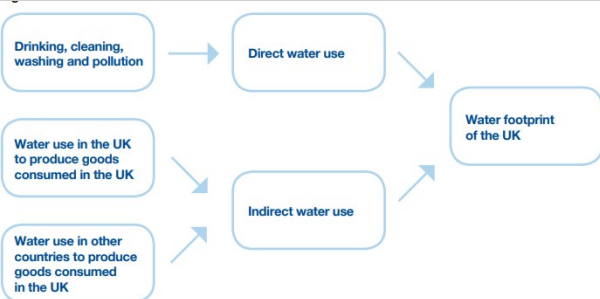
Week 1:

Water is essential to humans and the planet.

The main uses of water by humans are:

- Domestic – 10%
- Industry – 20%
- Agriculture – 70%

Water is held in stores on the planet and it can be moved between the stores.



Domestic – related to the home.

Agriculture – farming (crops/dairy/cattle)

Irrigation – system of watering crops.

Atmosphere – the layer of gases surrounding the earth.

Condensation – when water vapour, a gas turns back into a liquid as it cools.

Evaporation – when water is turned into a gas (water vapour) due to heat.

Precipitation – rain, sleet, hail or snow that falls to the ground.

Week 2:

Water is not evenly distributed around the world.

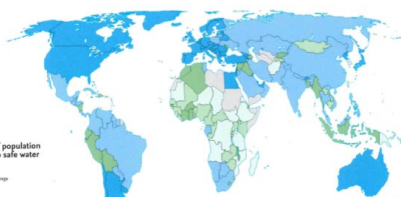
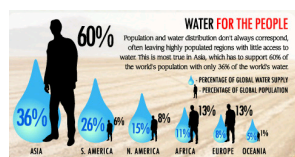
- Areas along the equator and between the tropics have more precipitation but this does not mean people living there have access to safe water.

Access to safe drinking water is affected by:

- Population size, poverty, poor infrastructure, season and pollution.

Countries that lack access to safe water experience water insecurity.

- Water insecurity leads to problems such as disease and missed school as children and women have to walk long distances to collect water.



Percentage of population with access to safe water

- 0% - 10%
- 11% - 20%
- 21% - 30%
- 31% - 40%
- 41% - 50%
- 51% - 60%
- 61% - 70%
- 71% - 80%
- 81% - 90%
- 91% - 100%
- no data

Access to safe water: The percentage of population with access to an adequate amount of water from an improved source. World average 95%. Statistics are for 2015.

Distribution – the way something is spread over an area.

Infrastructure – the essential services a community needs eg roads, power supplies, communications.

Safe water – water that will not cause harm if you drink or use it.

Seasonal – occurring during a certain season of the year eg winter, summer.

Water Scarcity – where the supply of water does not meet the demand so there are shortages.

Water insecurity - the lack of a reliable, clean source of water.

Week 3:

- Water is essential for economic and social development in LICs.

- In places with little water there can often be conflict over how it is used and who has the right to use it.

- The Nile travels through 6 countries, starting in Ethiopia and ending in Egypt. It also goes through Sudan.

- Countries on the Nile disagree about how the water from the Nile should be used.

- Ethiopia – HEP Sudan - irrigate for farming. This causes problems as Egypt has less water flowing in the Nile.

- To control the Nile, Egypt has built the Aswan Dam. There are advantages & disadvantages of this.

- The Aral Sea has decreased in size by 60+%.

- The two rivers that feed the Aral Sea were diverted by the Soviet Union reducing water for Uzbekistan & Kazakhstan,

- Solutions - build a dam, desalination, transfer water.

Population density – the number of people in an areas.

Conflict – a disagreement over an issue.

Desalination – removing salt from seawater.

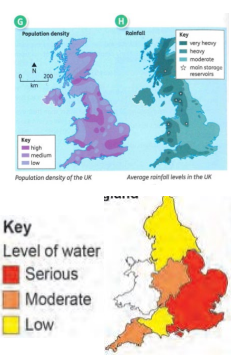
Life Expectancy – the average age someone is expected to live to.

Adult Literacy – the percentage of people that can read and write.

Hydroelectricity – a renewable energy source from water being released through a dam.

Knowledge organiser:

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Key Concepts	Key Vocabulary
<p>Week 4:</p> <ul style="list-style-type: none"> Both water and population are unevenly distributed in the UK. Upland areas in the N&W of the UK have the highest amounts of precipitation and the lowest population density. The SE of the UK has the lowest precipitation but the highest population density. Precipitation is seasonal. This means that we have more precipitation in autumn and winter and less in summer. This can cause problems such as floods and heatwaves. <p>Impacts of heatwaves: Crops dying • More tourism</p> <ul style="list-style-type: none"> Hosepipe ban • Wildfires 	<p>Water Surplus – where there is a larger water supply than demand. Too much water.</p> <p>Water Deficit – where there is a larger demand for water than supply. Too little water.</p> <p>Heatwave – a long period of extraordinarily hot weather.</p> <p>Drought – an extended period without rainfall leading to a shortage of water.</p> <p>Impact – the effect of something.</p>
<p>Week 4:</p> <p>Total water use in the UK has increased by 1% a year since 1930.</p> <p>Reasons for increased water use:</p> <ul style="list-style-type: none"> Growing populations. Increased use of technology eg dishwashers, washing machines. Improved personal hygiene, more use of showers for example. More leisure time so increased use of facilities such as golf courses, swimming pools. More food grown out of season in greenhouses. Increased industrial usage. Increased wealth means more cars, meat based diets that all use more water. <p>There are several ways to conserve and manage water in the UK. These include:</p> <p>Water transfer schemes Building new reservoirs</p> <p>Repairing leakages Recycling grey water</p> <p>Water saving measures – dual flush toilets, shorter showers</p>	<p>Water Transfer – the movement of water from one area to another.</p> <p>Reservoir - a large natural or artificial lake used as a source of water supply</p> <p>Habitat – the natural environment of an animal.</p> <p>Embankment - a wall or bank of earth or stone built to prevent flooding an area.</p> <p>Water conservation – reducing the amount of water that is used or wasted.</p>

Test Yourself

What is irrigation?	Define water scarcity.	Why is water essential for humans.	What is a water surplus?	Give 2 reasons why water use has increased.
Name 4 types of precipitation	What is the global pattern of safe water?	Where is the River Nile located?	What are the impacts of heatwaves.	What is a reservoir?
How much water on the earth is freshwater?	Name 3 impacts of water insecurity.	Name 3 countries that use water from the Nile and why.	Why is precipitation seasonal.	How can individuals conserve water?
Name 3 transfers of water in the water cycle	How does lack of safe water affect children in LICs?	What are the advantages of dams?	Describe the population density in the UK	How can reservoirs be good socially?
How much global water usage is domestic?	What can affect access to safe water?	What has happened to the Aral Sea?	Where are there water surpluses in the UK?	How can reservoirs damage the environment?