

The Hydrological Cycle

How much of the world's water is available for us to drink?



It's a closed system

- The **hydrosphere** consists of all the water on the planet
- Water flows in a never-ending cycle between the atmosphere, land and oceans
- The **hydrological cycle** is a closed system
- **What do you think this means?**

What it includes

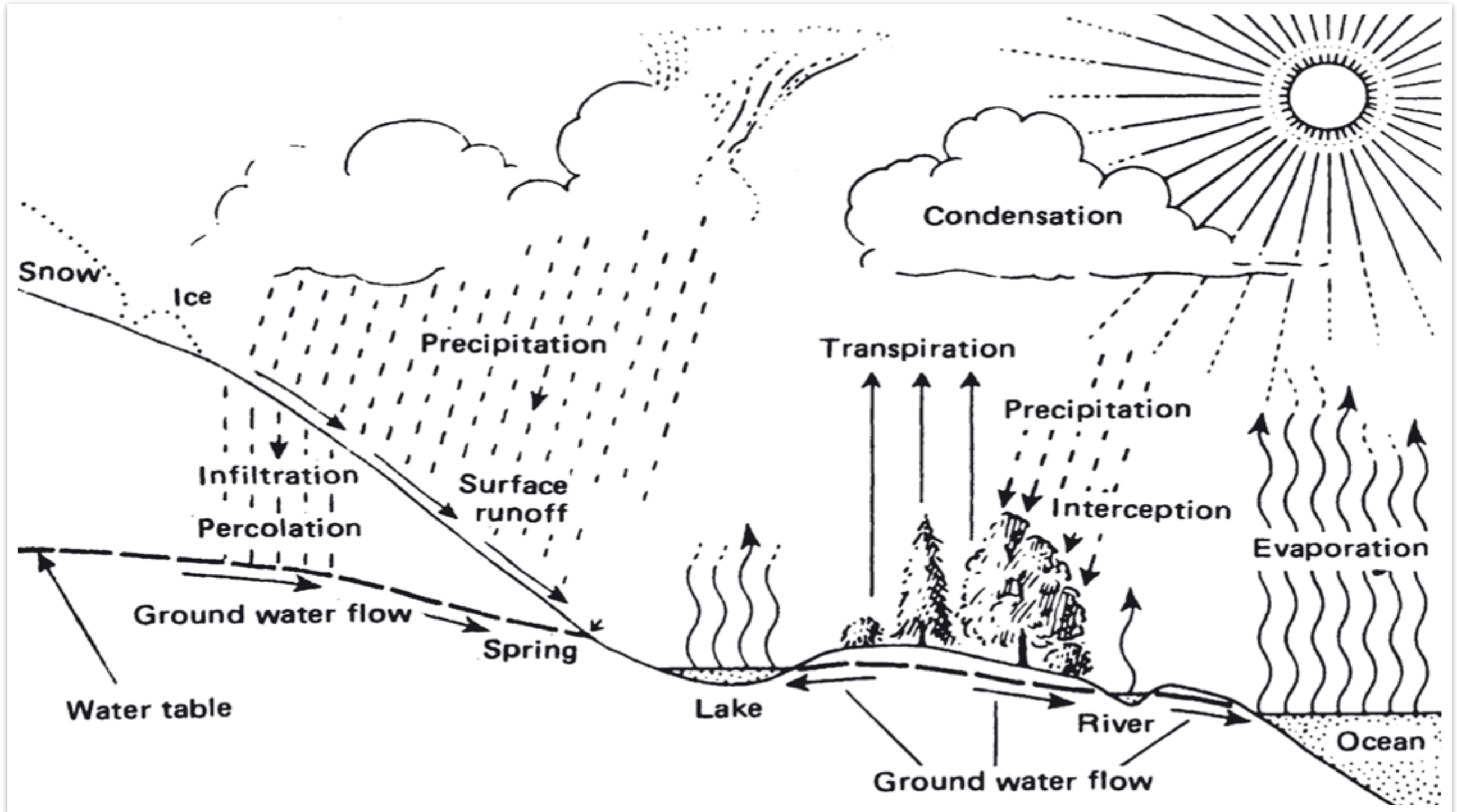
- **INPUTS:** water entering the system through precipitation
- **STORES:** water stored in lakes, rocks, soil or vegetation. Storage can be temporary and is linked to the amount of rainfall
- **TRANSFERS:** processes that move water through the system such as surface run-off
- **OUTPUTS:** where water is lost to the system as the river reach the sea or through evaporation

What do you know already?

- With your partner I want you to draw the water cycle
- Include as much detail as possible
- Include any key terms you might know



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Key Terms

- If rain falls on a saturated or impermeable surface it is unable to infiltrate so will flow over the surface.
- Some rainfall is prevented from reaching the ground by plants and trees.
- Some rainfall falls on the ground and soaks into the soil.
- Some water will move through the soil into the underlying rocks if they are permeable.

What impacts are there on the hydrological cycle?

- With a partner, discuss how each of the following can impact on the hydrological cycle
 - River Management
 - Deforestation
 - Urbanisation
 - Deforestation
- Then write up your answers using as many key terms as you can

Key Term Test

- Write down the key terms that go with these definitions:
 - Water turning into water vapour
 - Seeping of water into the soil
 - Moisture that falls from the atmosphere in any form
 - Collection of water by vegetation
 - Loss of moisture from plants
 - All water flowing on the Earth's surface

Answer

- Evaporation
- Infiltration
- Precipitation
- Interception
- Transpiration
- Surface run-off