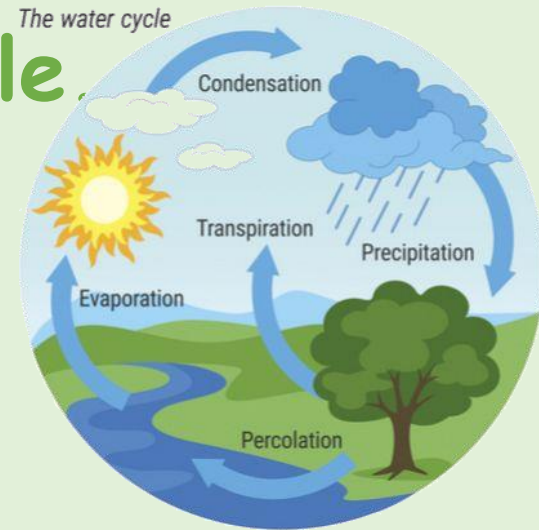


WALT understand the water cycle.

WILF:

- Name the different stages of the water cycle.
- Describe the process.
- Understand the importance of the water cycle.



What do you already know about the water cycle?

Mind map your ideas! 😊

The water cycle



Water is essential to all living things on Earth.

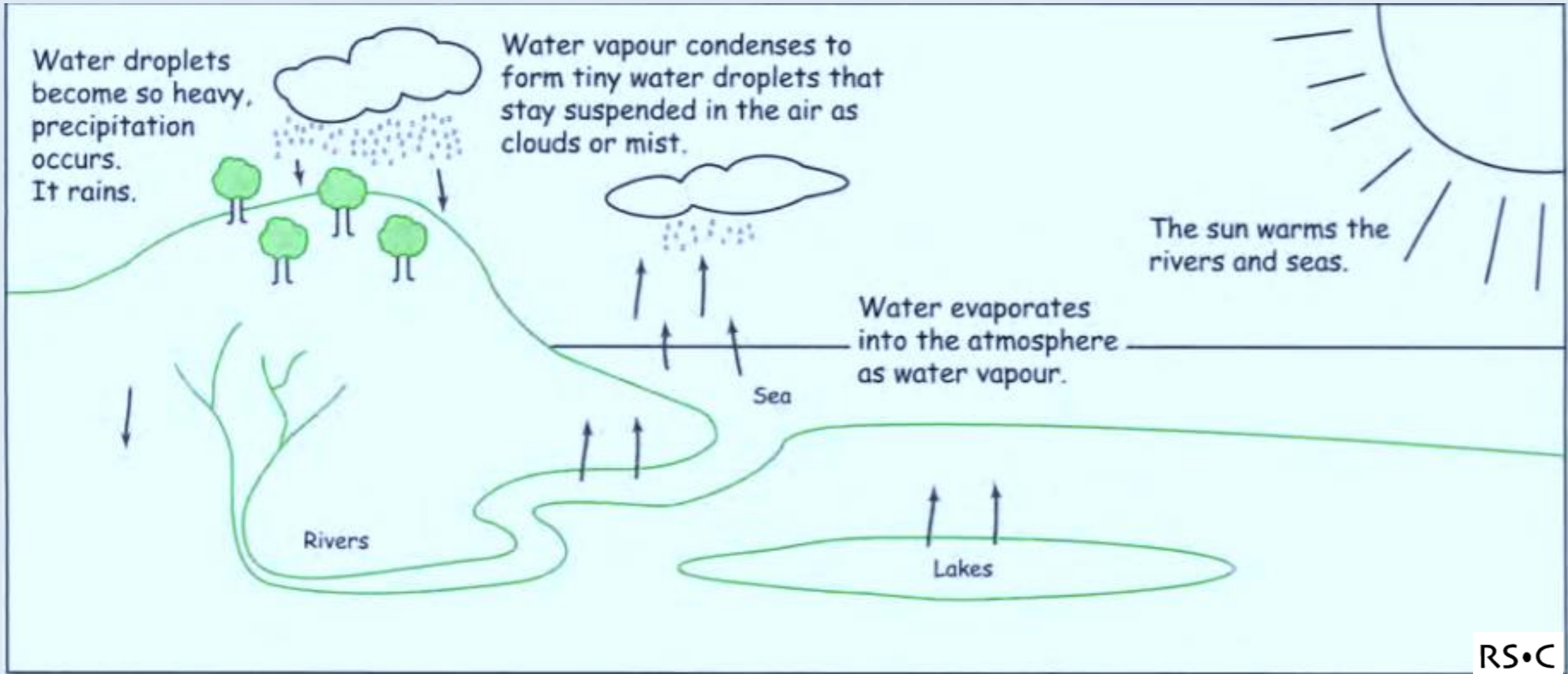
75% of our bodies are made up of water.

70% of the Earth's surface is covered in water - of this 97% is salty and 3% is fresh.

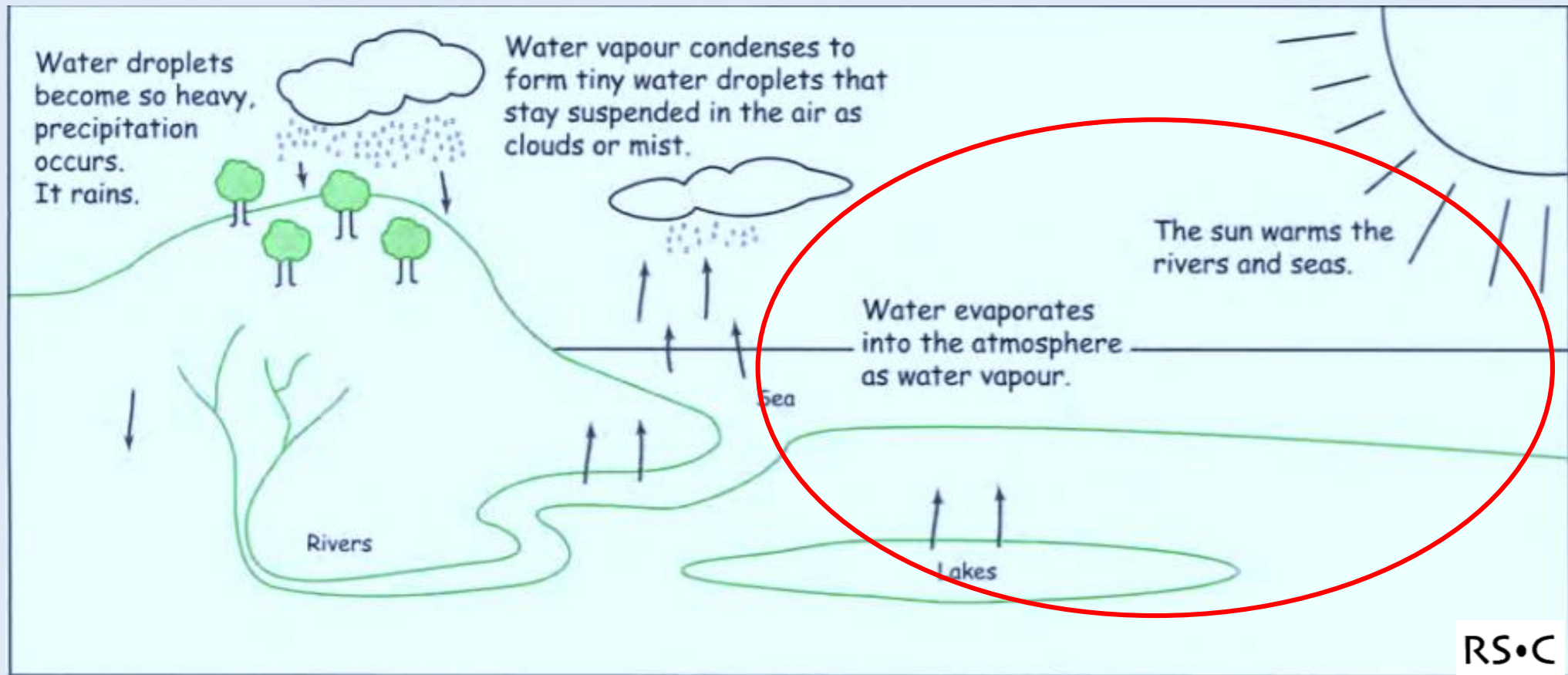
This water has been around as long as the Earth, and is constantly recycled and reused through the water cycle. That means, the water you drink today is the same water Tutankhamun and Cleopatra had! (It's clean, don't worry.)



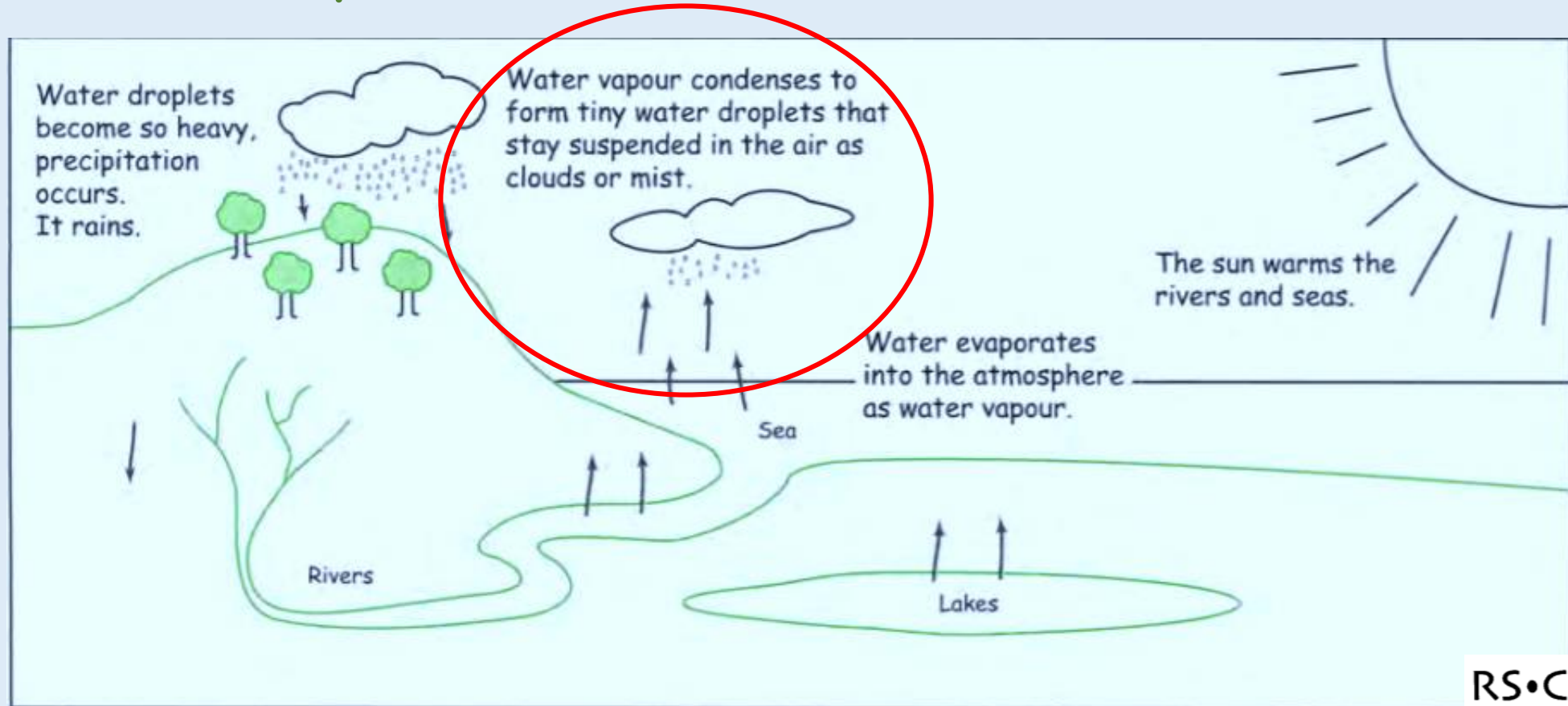
Click on the image to hear Scientists explain the water cycle. No internet or prefer to read? I'll explain on the next slide. Note: they are American, so some of the spellings in the video are not British spelling.



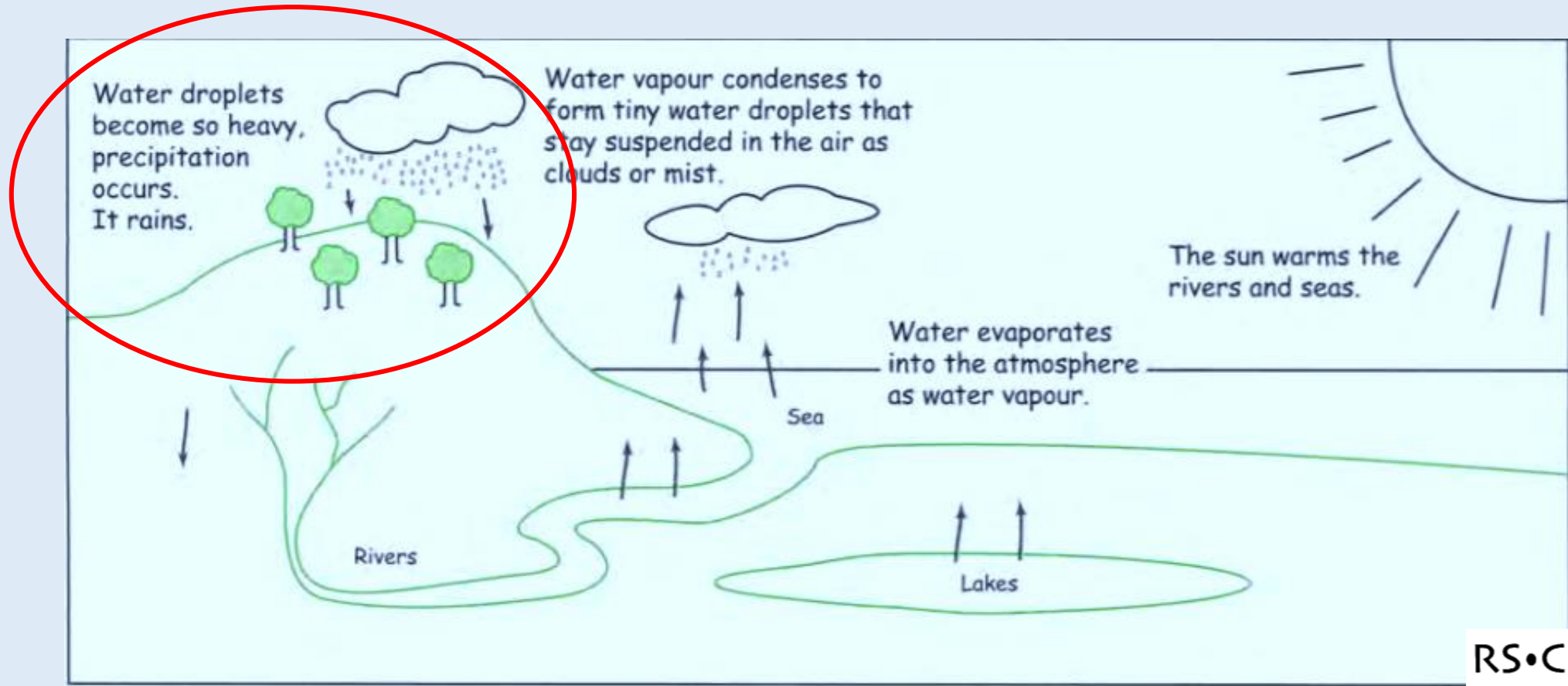
- 1) **Evaporation** - you know about this from your liquids, solids and gasses knowledge! This is a little different with **bodies of water** as they do not have to reach 100 degrees. When the **sun heats the water** up, the **molecules of water** at the top of the body **separate** from the rest and **evaporate into water vapour**, which unlike steam, is cool. Wind can help to speed up this process, moving the water vapour away faster so the next layer can begin to evaporate.



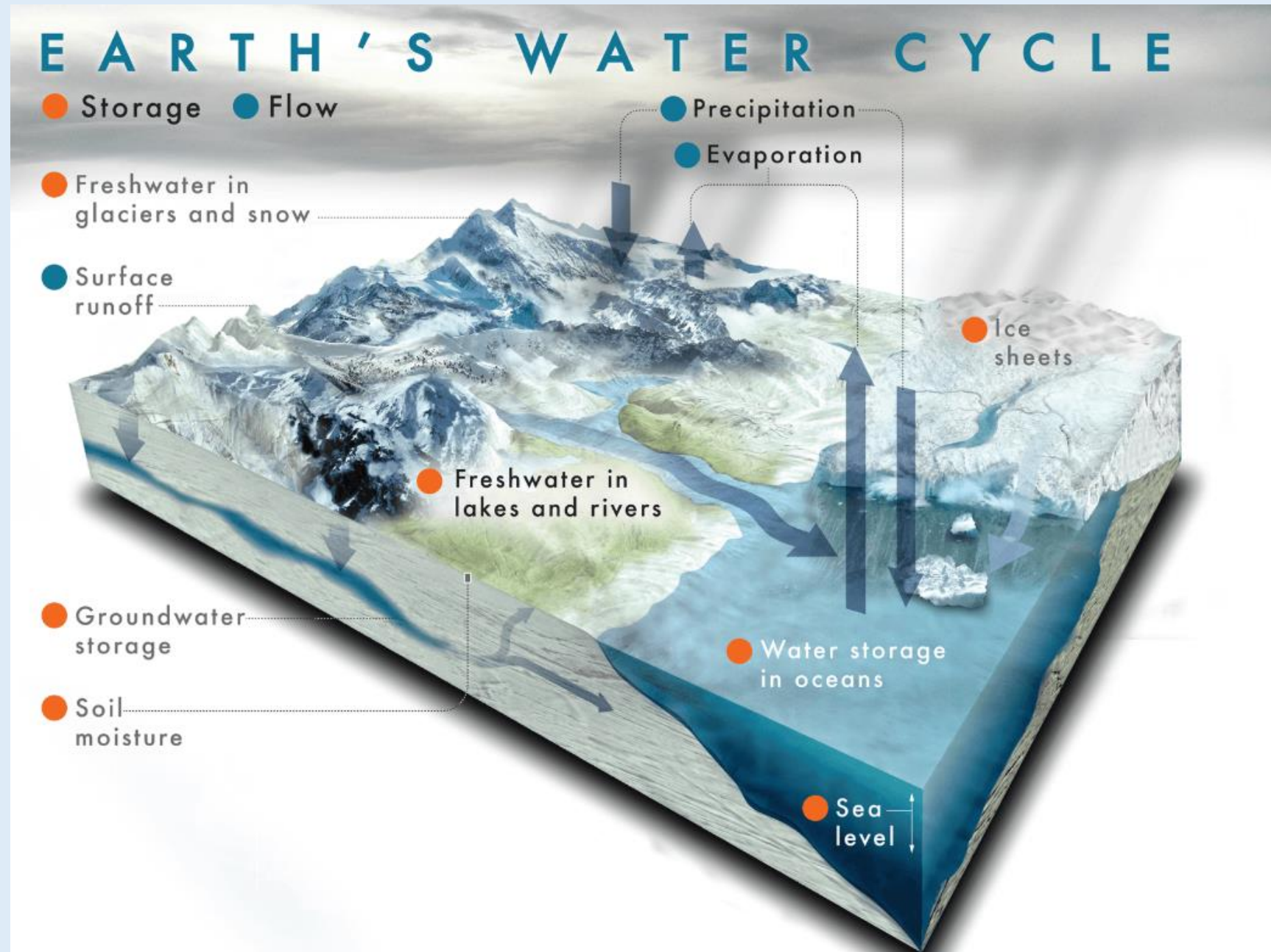
2) **Condensation**: many bodies of water (sea, lakes, rivers) evaporate into **water vapour** at the same time- this becomes humidity if the weather is very warm, but **as it rises, the air cools, so the water condenses and forms clouds out of the many water droplets.**



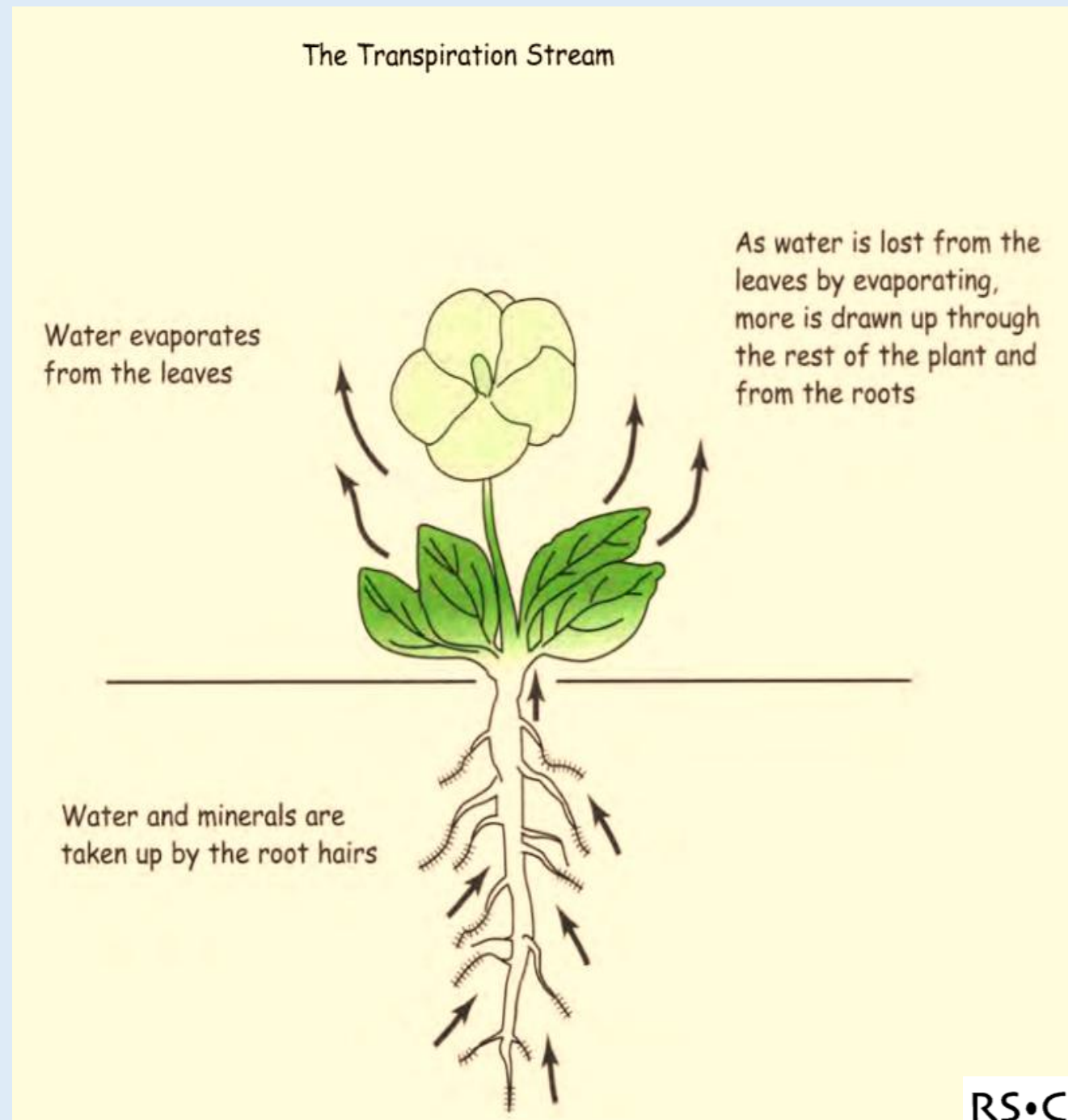
3) **Precipitation**: as the **water droplets gather** in the cloud, they bump together and **become heavier**. Eventually, they become too **heavy (dense)** and **fall** back down to the ground. This is usually **in the form of rain**. In colder weather, it can be ice or snow.



4) Run off: the water then runs down into rivers, where the water cycle continues. The water collected in rivers, lakes and oceans is called 'water storage'.



P.S.: Transpiration: remember plants? They contribute to the water cycle, too! Plants do this through transpiration. This occurs when the water is absorbed by the roots, travels up the stem and into the leaves, where it evaporates. Trees lose about 360 litres of water each day this way, contributing to the water cycle and the local environment's humidity and amount of rain.



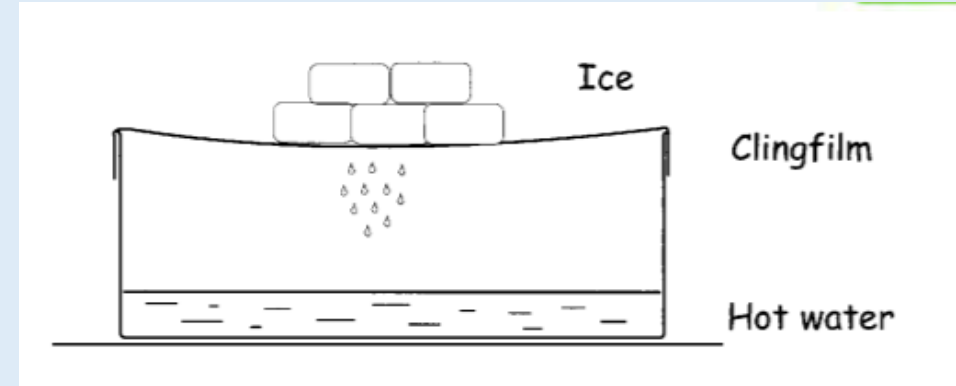
Today's Activity:

Click the image to watch an experiment on this. Please only have a go at this experiment yourself if you are helped by an adult.

I have uploaded the instructions for how to do this - you can find the print version of these as 'Week 1. Monday. Geography Experiment.

No adult? Try putting a watered, flowered plant pot in a plastic bag for a few days.

Then, draw a labelled diagram flow chart to show how the water cycle works. **You must use the words: evaporation, water vapour, precipitation and run off, explaining the meaning of each.**



Stuck? Use the 'Week 1. Geography. Water Cycle Cards' to help you. Can you order them?

Bonus challenge: can you explain this?

