
READING ACTIVITIES (ANSWER KEY)

1.1. Look at the diagram on the text about the distribution of water on the Earth and answer:

- a. What percentage of water is in oceans?

97% of water is in oceans and seas.

What percentage represents fresh water?

Fresh water represents 3% of the water on the Earth

- b. What percentage of fresh water is at disposal of living beings?

Only 1% of fresh water is at disposal of living beings.

What part of it is accumulated as ice and groundwater?

It is 99% (79% is accumulated as ice and 20% is accumulated as groundwater).

- c. What percentage forms part of living beings?

Only 0'01% (0'1% of 0'1%) of fresh water forms part of living beings.

1.2. What relationship is there between volcanic activity and the hydrosphere?

The relationship is that volcanic activity is one of the origins of the hydrosphere.

In the primitive Earth there was an intense **volcanic activity** that released great amounts of water vapour in the primitive atmosphere.

This water vapour condensed and became rainfall as the planet slowly cooled down and created the oceans.

1.3. Answer these questions about the properties of water:

- a. When a lake freezes in winter, why does the ice layer float on the surface of the water?

It is because water is **less dense** and has **more volume** in a solid state (ice) than in a liquid state. As a result, the ice floats on top of the liquid water.

- b. Why is water a good regulator of temperature?

It is because water has a **high thermal capacity**. This means that it heats up and cools down slowly so that water moderates changes of temperature.

- c. Why is water a good medium to transport substances for living beings?

It is because water is a **very good solvent**. This means that water can dissolve the most part of substances.