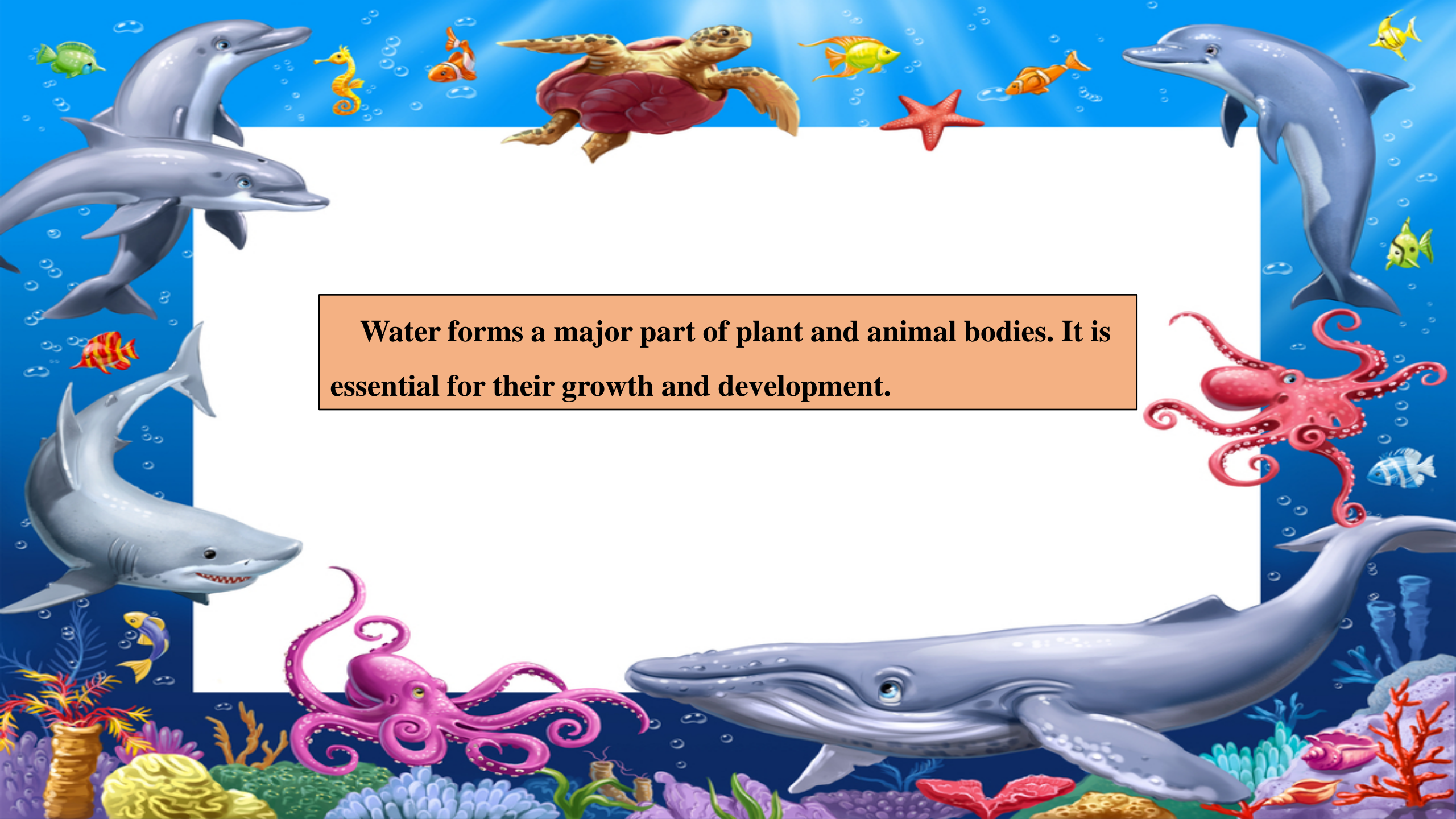
A detailed landscape photograph of a traditional Chinese garden pond. On the left, a large, leafy tree stands behind a rocky waterfall that cascades into the pond. The water is calm, reflecting the surrounding greenery and the orange sky. In the foreground, a low stone wall separates the pond from the viewer. Several lotus plants with large green leaves and pink flowers are scattered throughout the pond. The background is a solid, warm orange color.

9. Water CLASS – 3 E.V.S



INTRODUCTION

Water is the precious gift given to us by nature. Water is necessary for the survival of all living beings. We cannot live without water.



Water forms a major part of plant and animal bodies. It is essential for their growth and development.



FORMS OF WATER

Water exists in three forms — Solid, Liquid and Gas/Water vapour



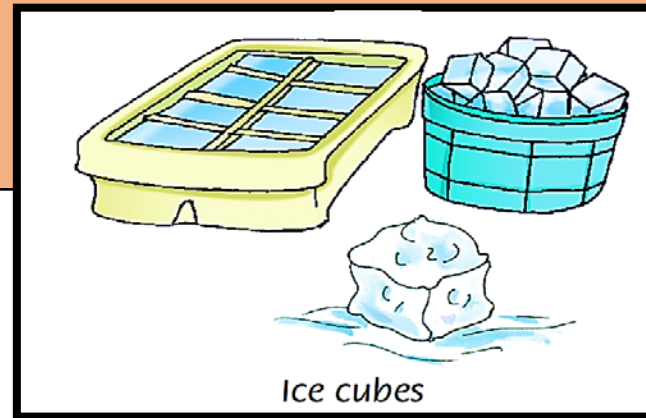
Solid form — Ice

In cold regions and on mountains, water gets frozen. Water changes into ice. It is the solid form of water. Ice has a definite shape.



Glacier— Solid form of water

**Ice is lighter than water. This
is the reason that it floats on
the water.**





Liquid form — Water

The water which we drink is the liquid form of water. It has no fixed shape and flows like any other liquid. It takes the shape of the container in which it is kept.



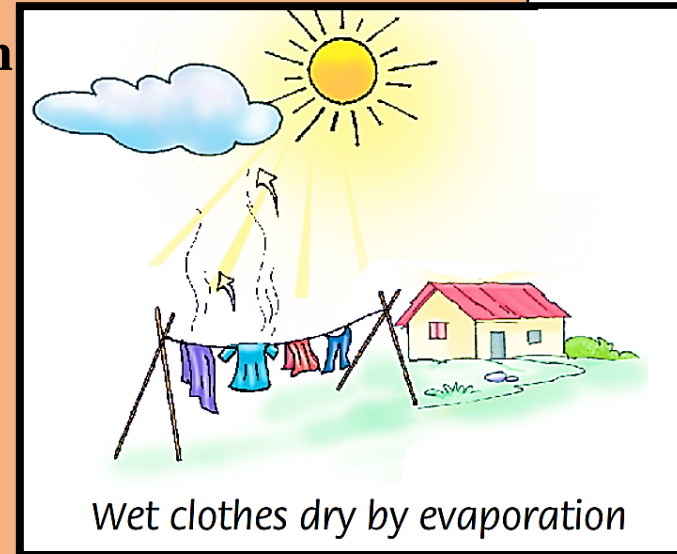
Water containers in different shapes



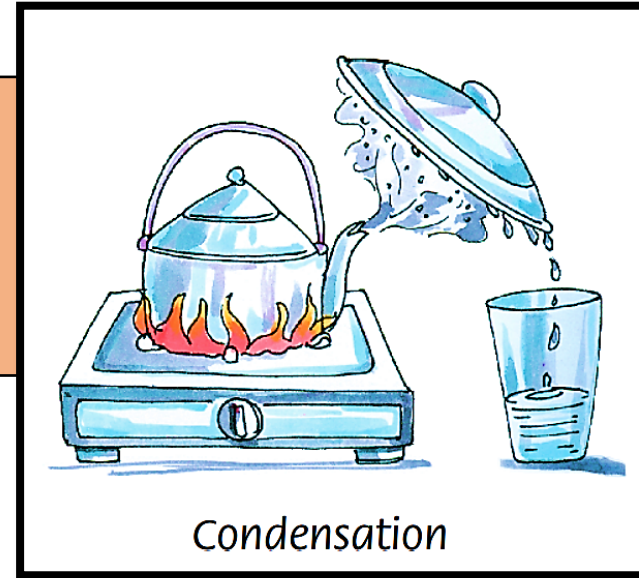
Gaseous form — Water vapour

When we put wet clothes under the sun to dry, water from the clothes goes into the air. Water from other water resources like lakes, rivers, oceans also goes into the air.

The change of water into water vapour is called Evaporation.



**On cooling, water vapour changes
back to water. This is called
Condensation.**





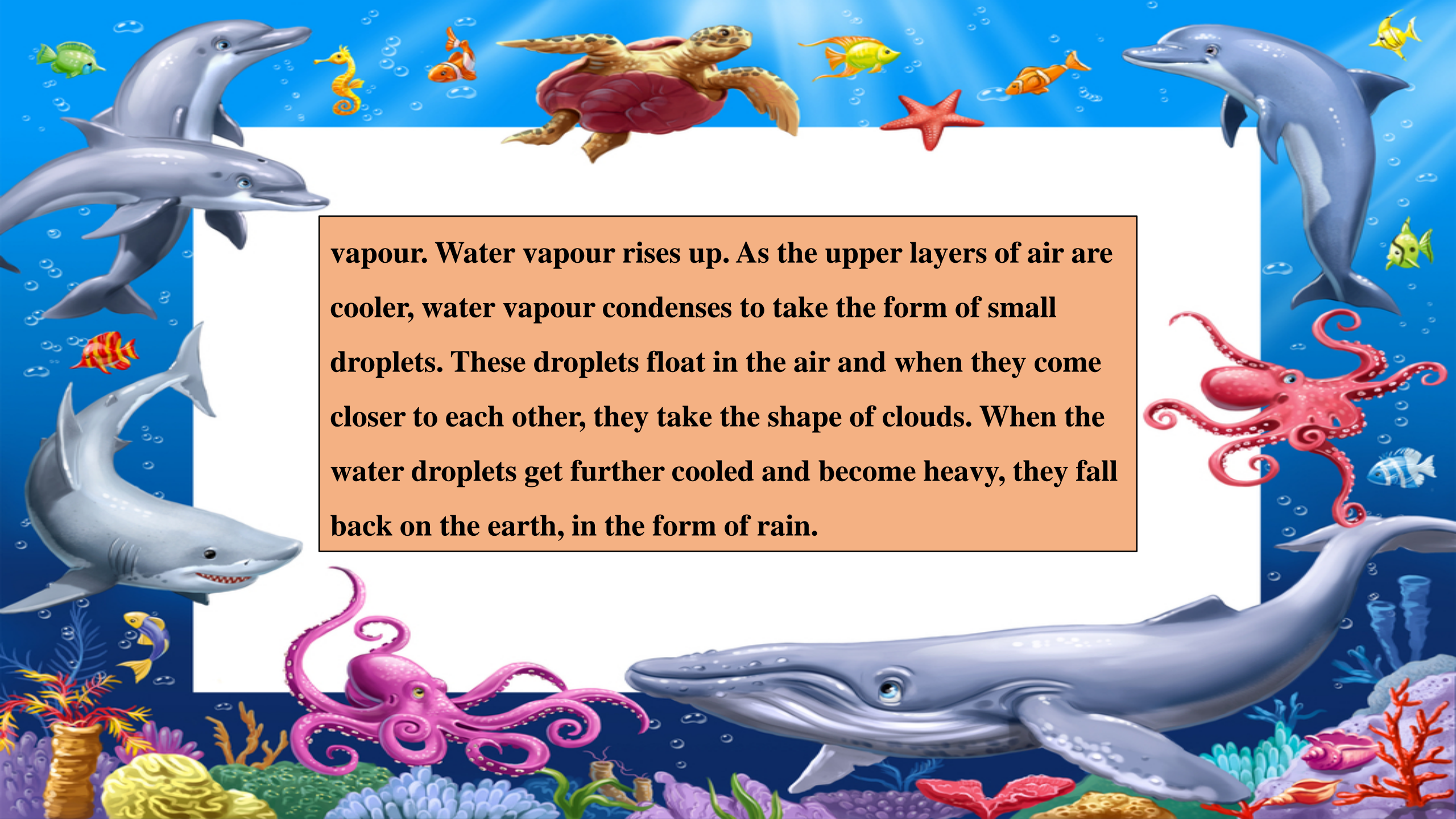
WATER CYCLE

In nature, water keeps on changing its form. This change forms cloud and thus results in rain. Sea, rivers and lakes are the main sources of water. When the water in these water bodies get heated by the hot rays of the sun, it changes into water

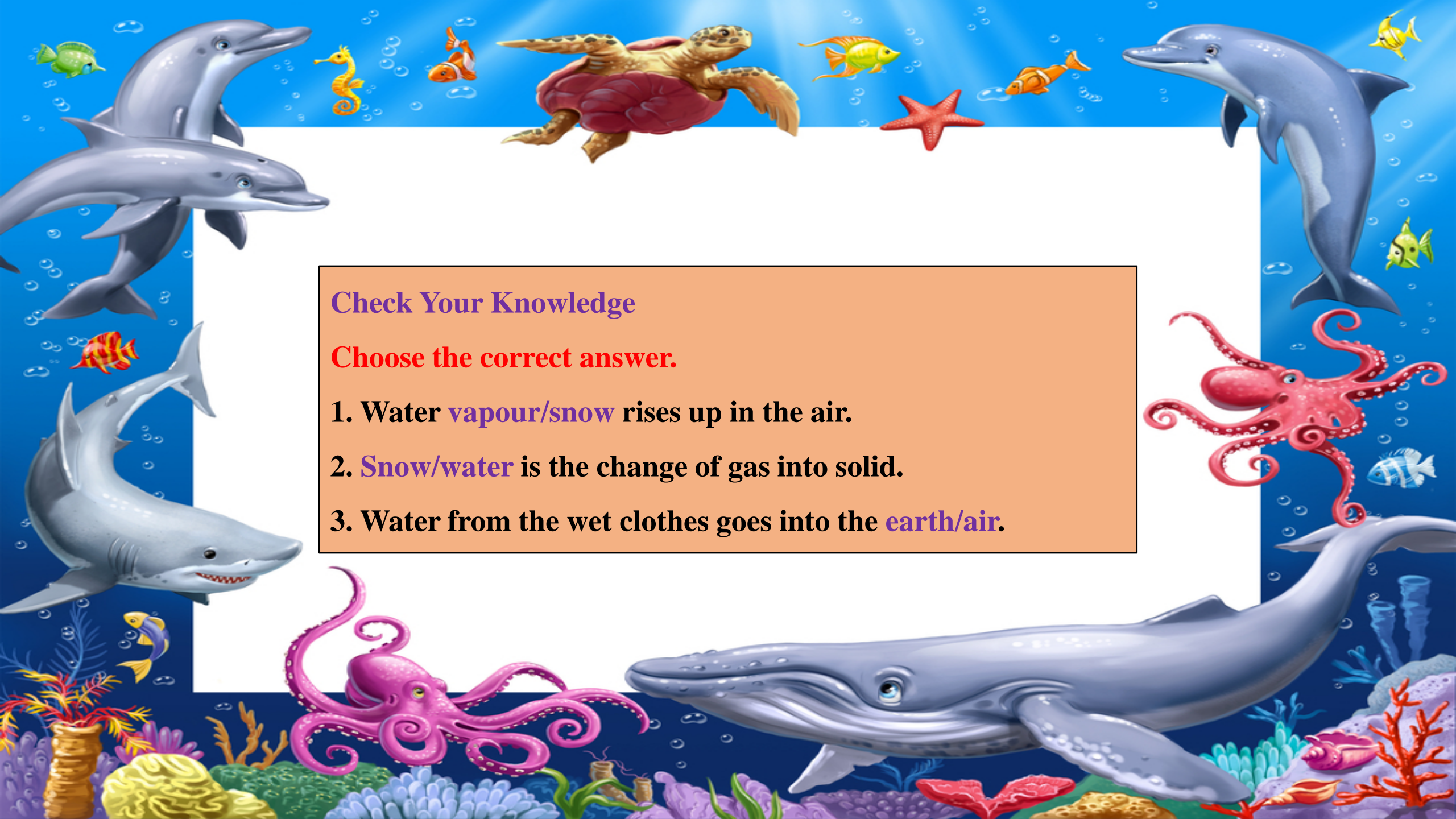


INTERESTING FACTS

- ❖ Cactus plant lives grows in the desert. It stores water in its spongy and hollow stem.
- ❖ Human body contains about 70% water.



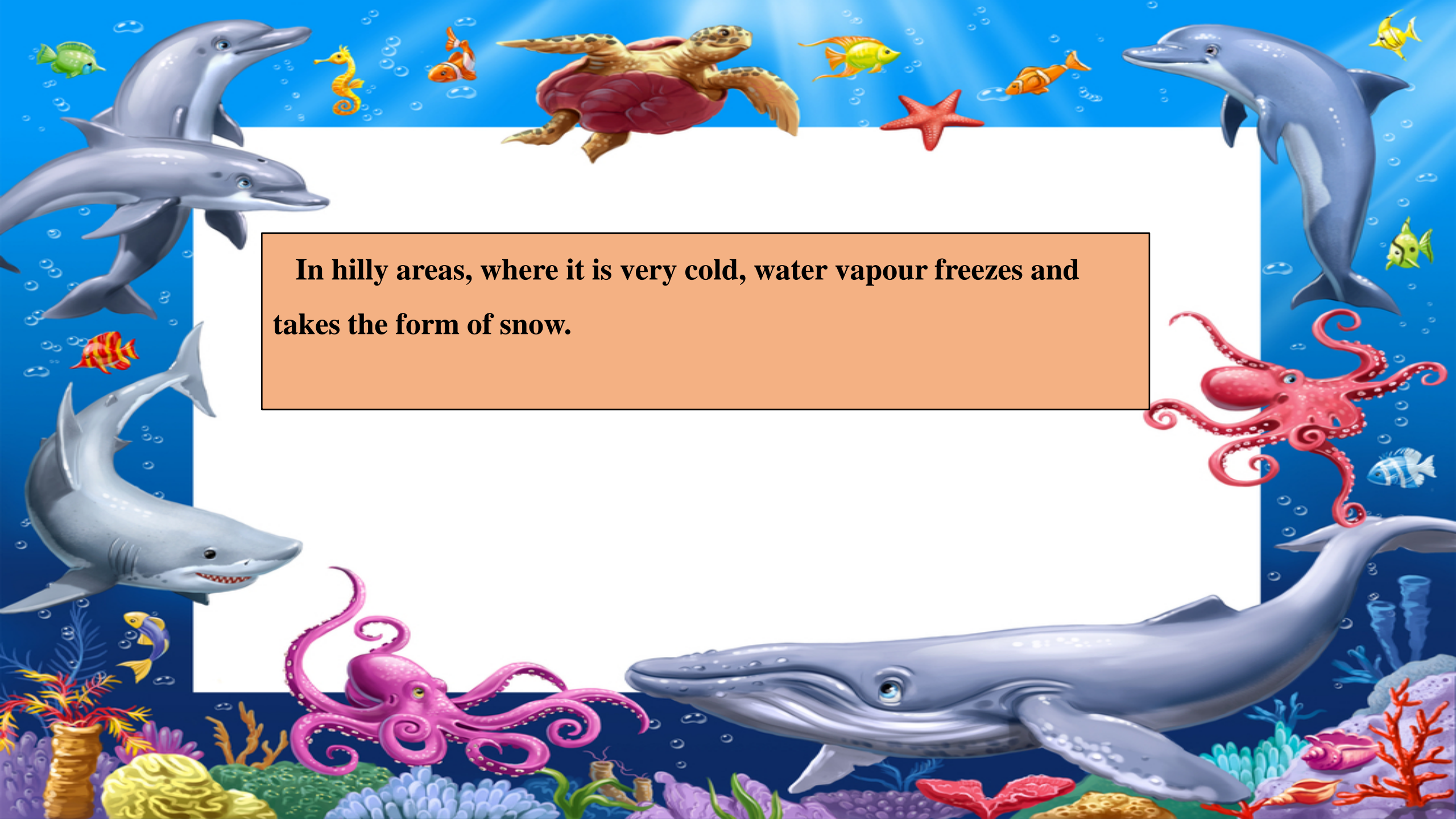
vapour. Water vapour rises up. As the upper layers of air are cooler, water vapour condenses to take the form of small droplets. These droplets float in the air and when they come closer to each other, they take the shape of clouds. When the water droplets get further cooled and become heavy, they fall back on the earth, in the form of rain.



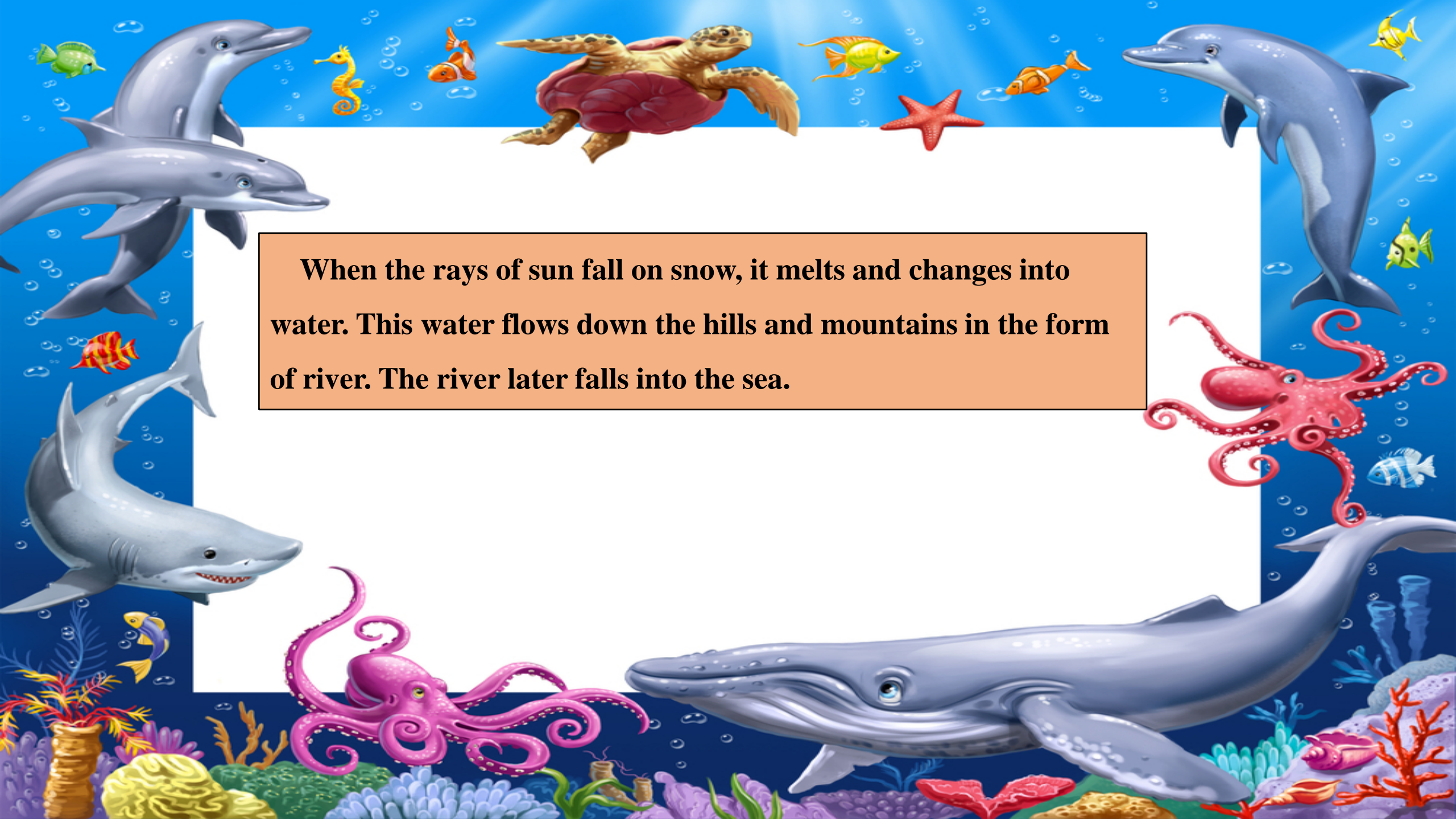
Check Your Knowledge

Choose the correct answer.

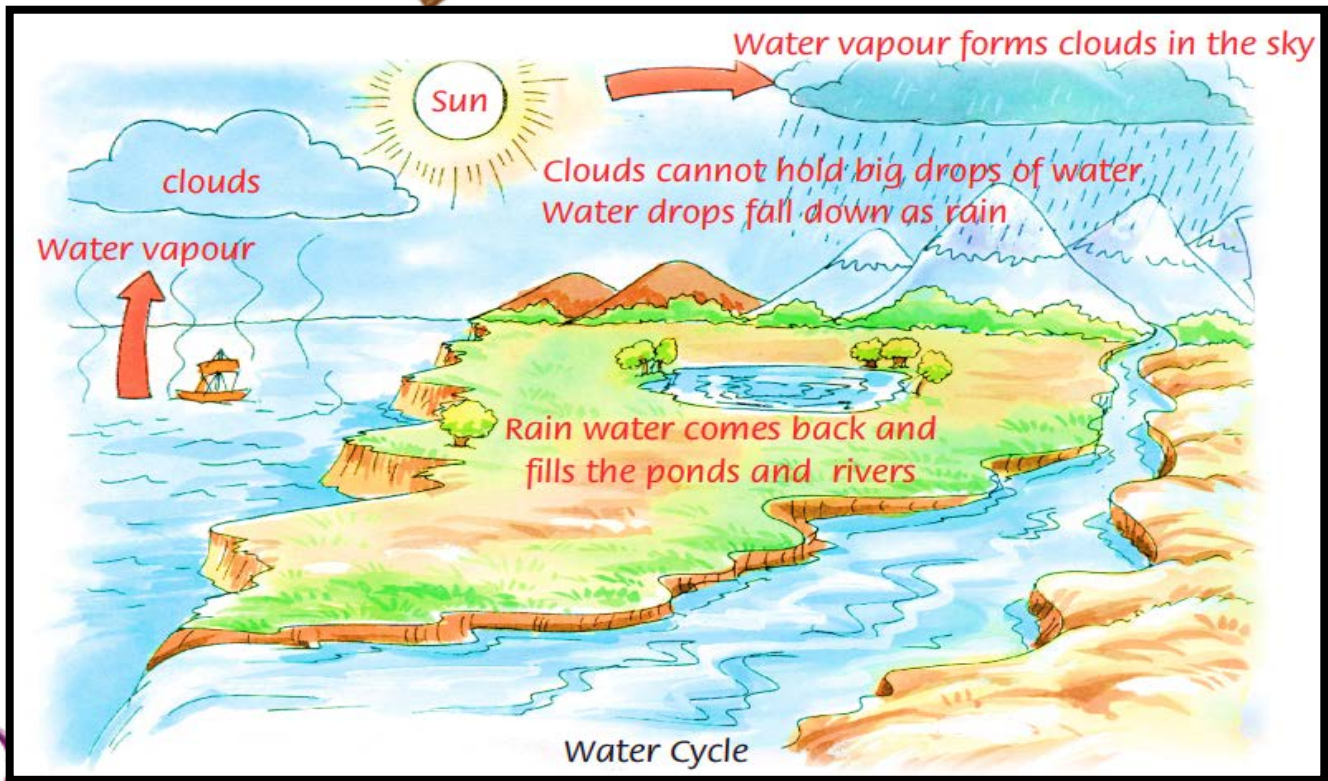
1. Water **vapour/snow** rises up in the air.
2. **Snow/water** is the change of gas into solid.
3. Water from the wet clothes goes into the **earth/air**.

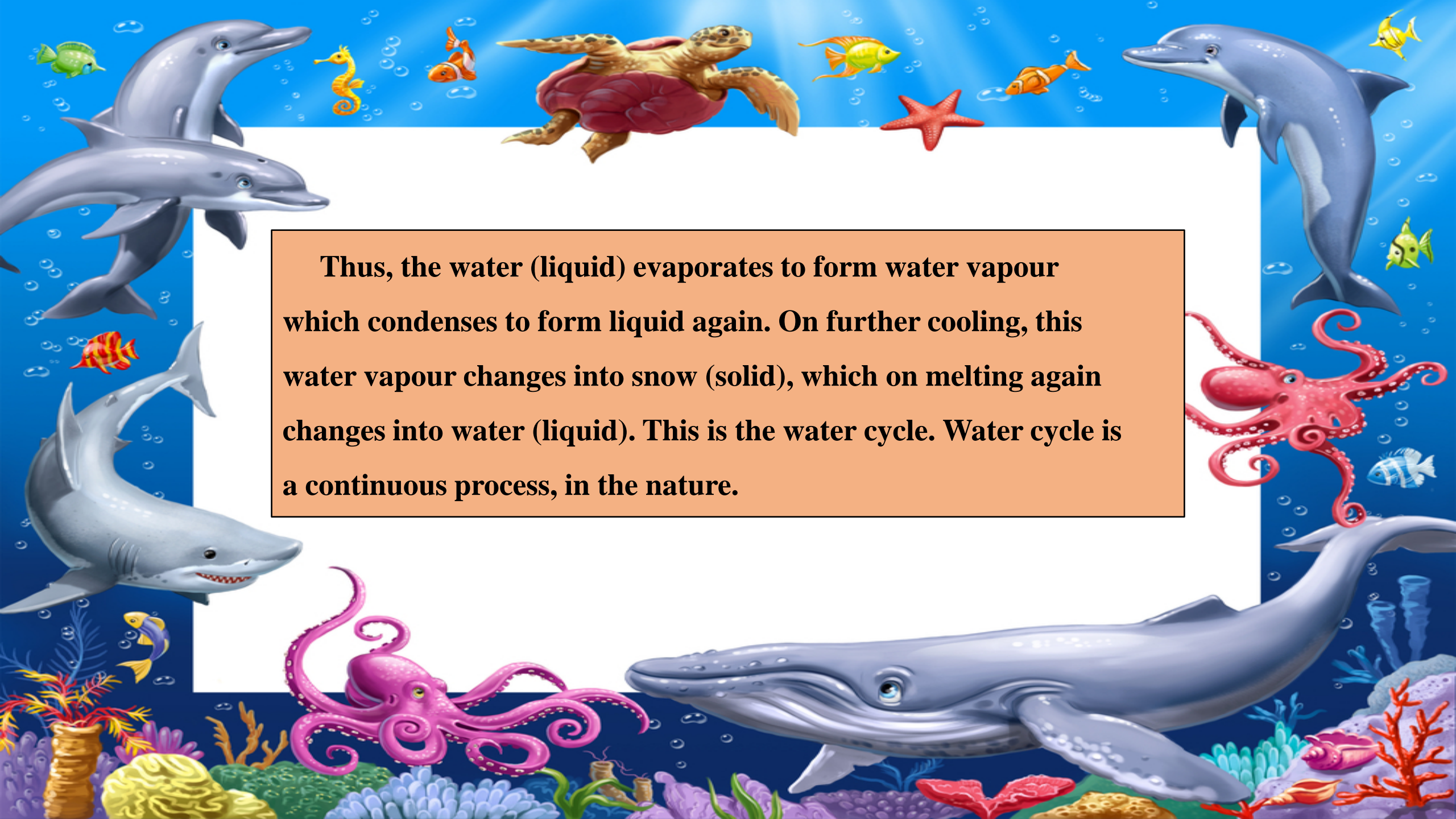


In hilly areas, where it is very cold, water vapour freezes and takes the form of snow.



When the rays of sun fall on snow, it melts and changes into water. This water flows down the hills and mountains in the form of river. The river later falls into the sea.





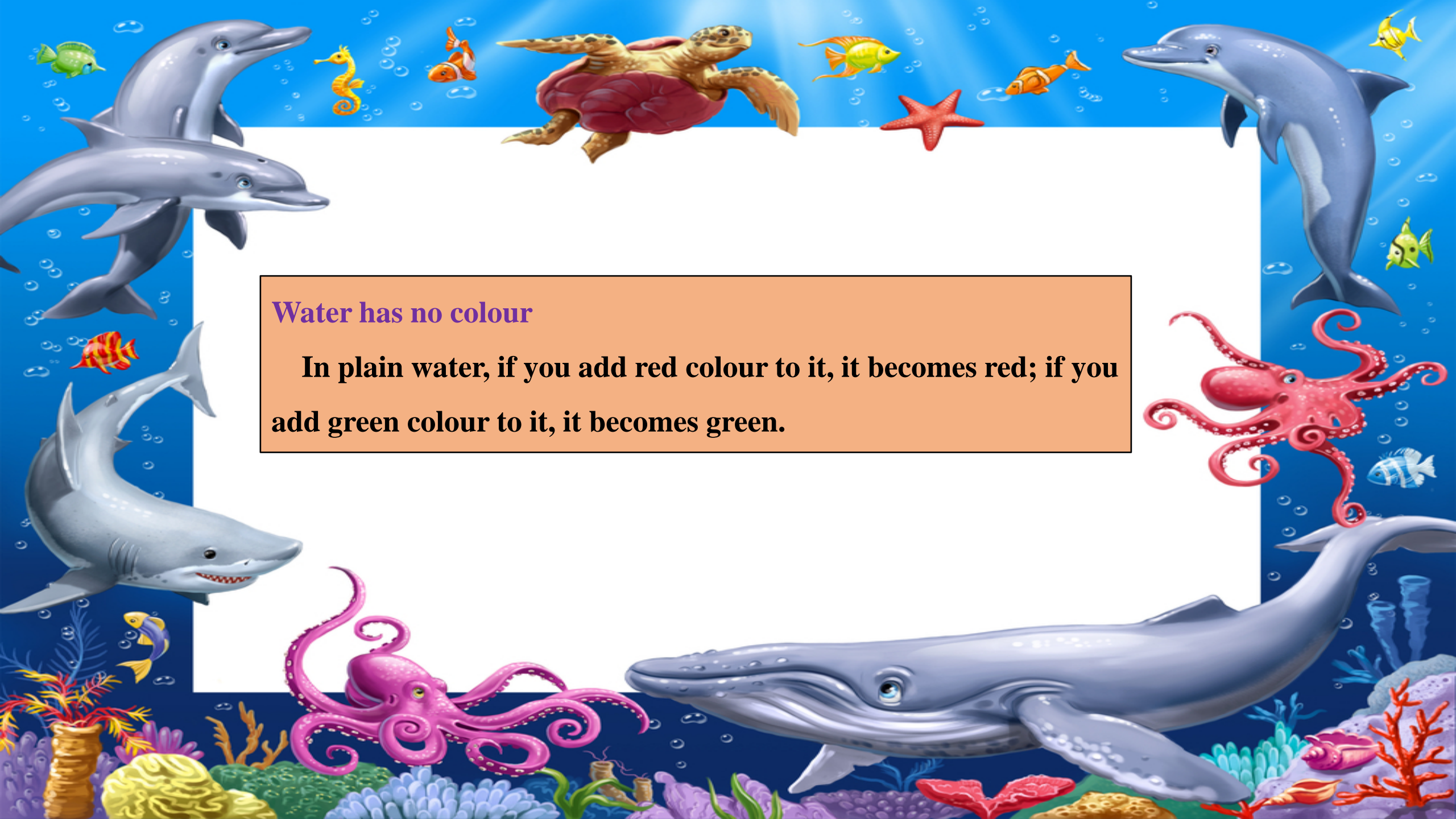
Thus, the water (liquid) evaporates to form water vapour which condenses to form liquid again. On further cooling, this water vapour changes into snow (solid), which on melting again changes into water (liquid). This is the water cycle. Water cycle is a continuous process, in the nature.



PROPERTIES OF WATER

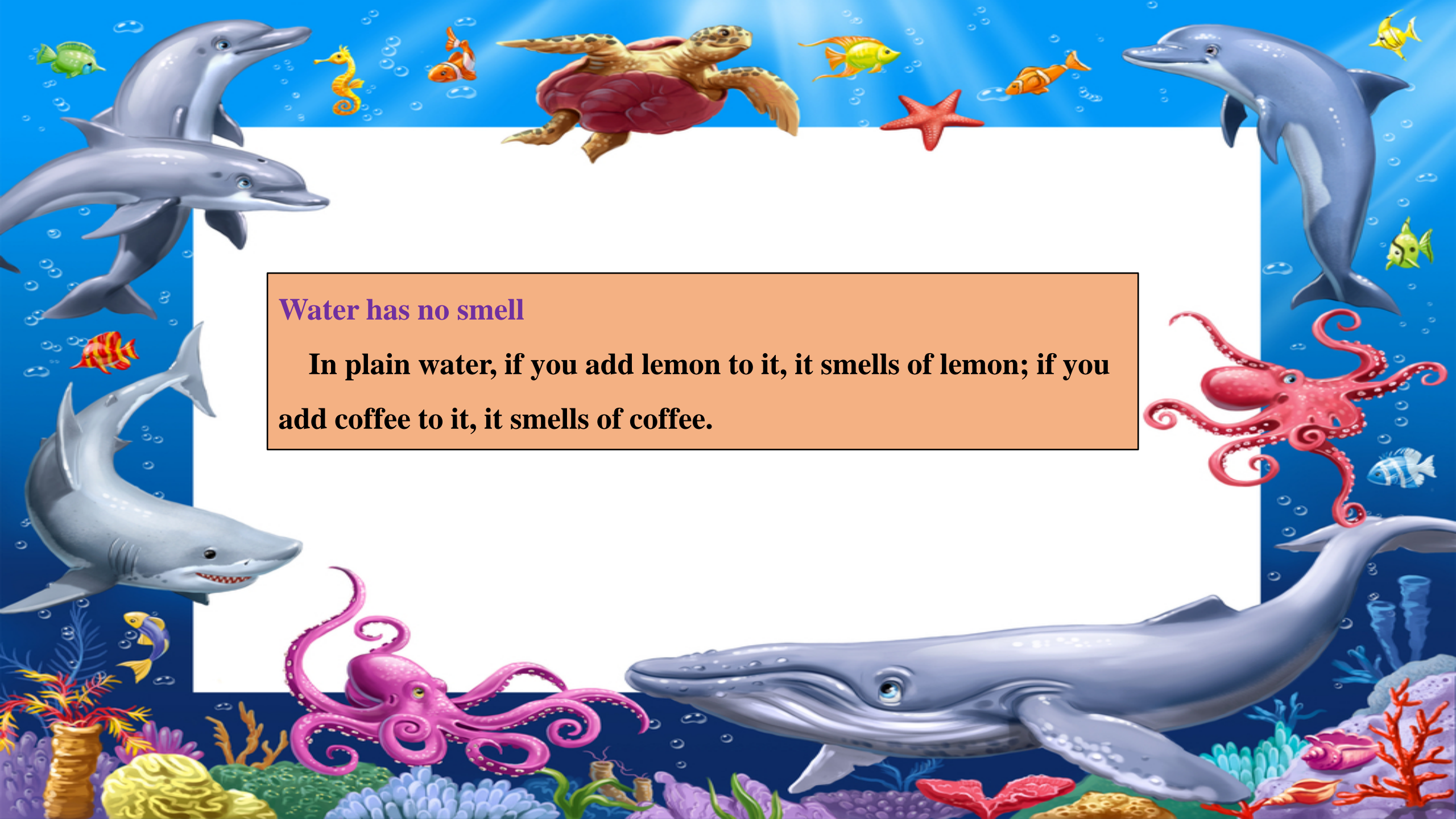
Water has no shape

The shape of water changes according to the container.



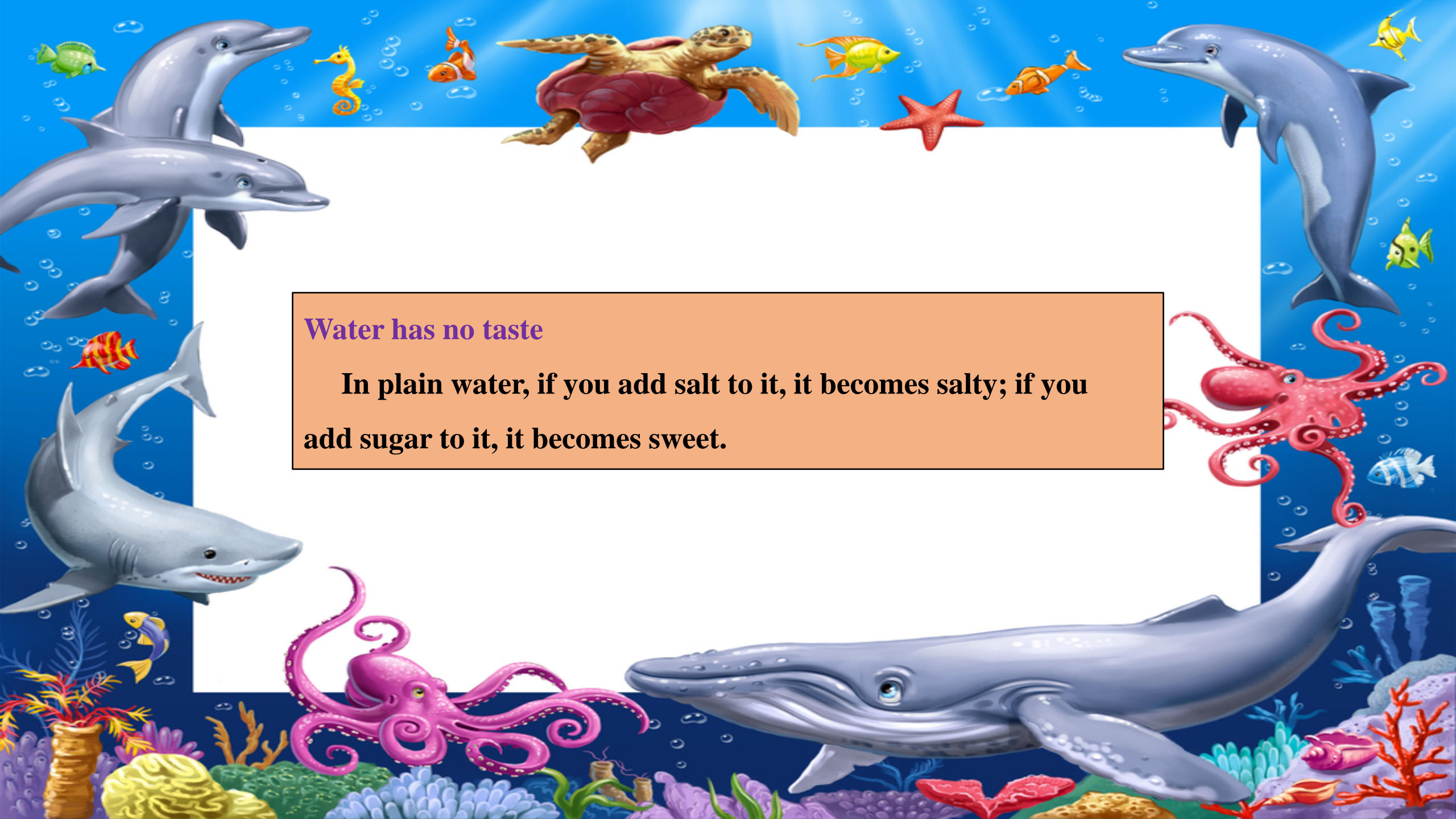
Water has no colour

In plain water, if you add red colour to it, it becomes red; if you add green colour to it, it becomes green.



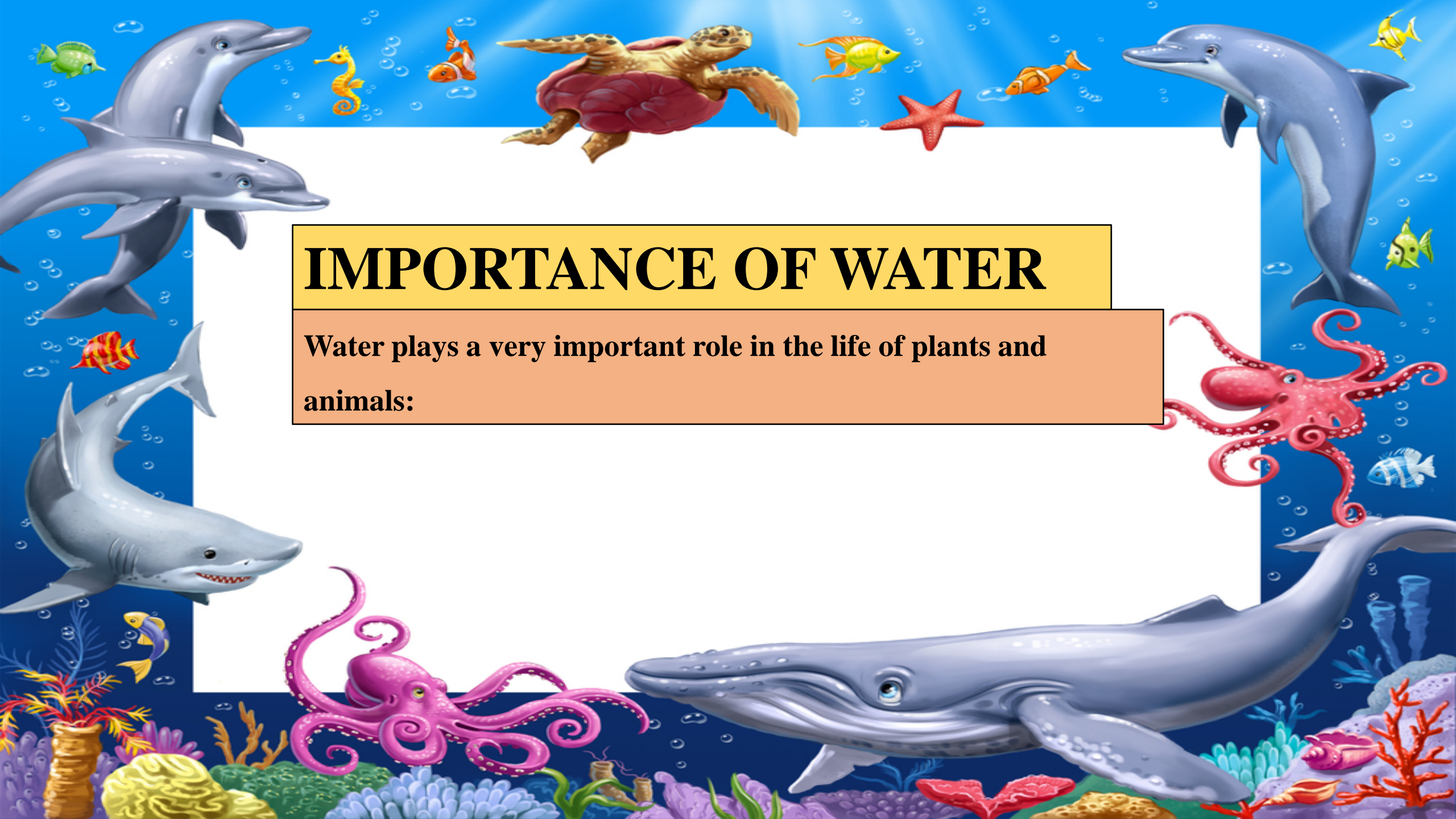
Water has no smell

In plain water, if you add lemon to it, it smells of lemon; if you add coffee to it, it smells of coffee.



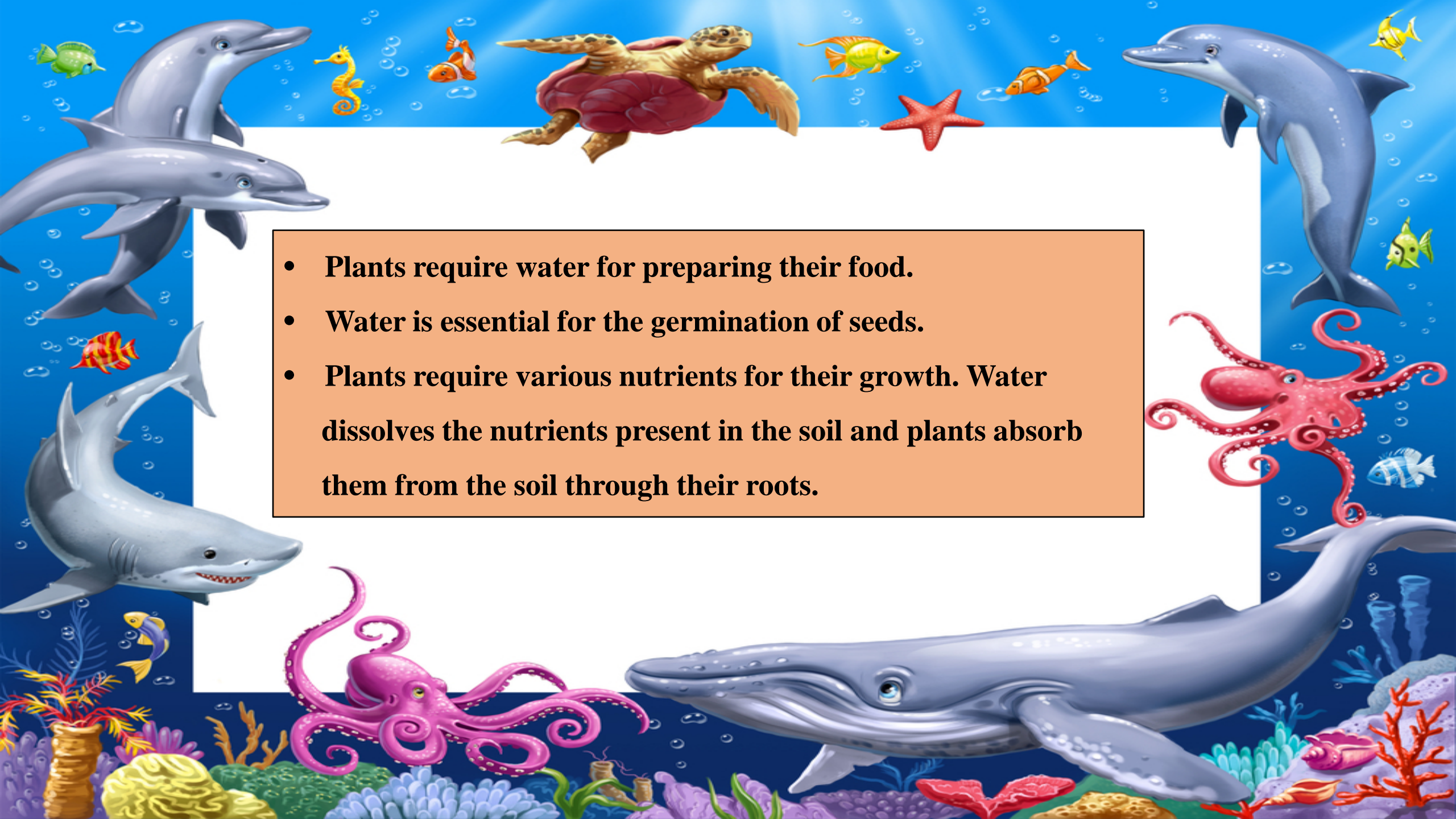
Water has no taste

In plain water, if you add salt to it, it becomes salty; if you add sugar to it, it becomes sweet.

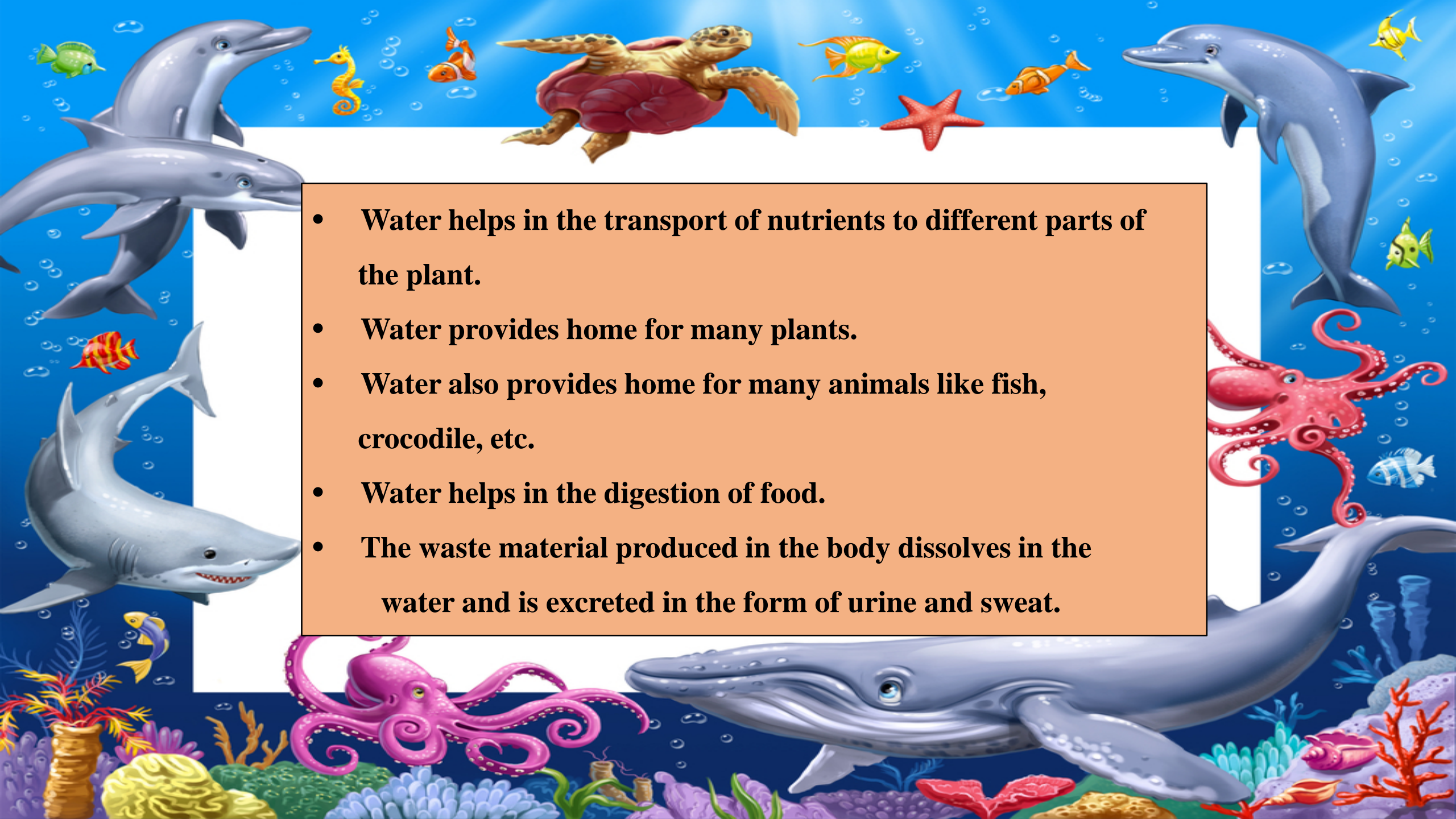


IMPORTANCE OF WATER

Water plays a very important role in the life of plants and animals:



- **Plants require water for preparing their food.**
- **Water is essential for the germination of seeds.**
- **Plants require various nutrients for their growth. Water dissolves the nutrients present in the soil and plants absorb them from the soil through their roots.**



- **Water helps in the transport of nutrients to different parts of the plant.**
- **Water provides home for many plants.**
- **Water also provides home for many animals like fish, crocodile, etc.**
- **Water helps in the digestion of food.**
- **The waste material produced in the body dissolves in the water and is excreted in the form of urine and sweat.**



HOW TO STORE DRINKING WATER

Following steps should be followed to store drinking water.

- Store drinking water in a clean utensil.
- Keep the utensil covered.
- Filter the water before you use it for drinking.



Fact File

- The cloudy nights are warmer because heat is not able to escape from the earth due to clouds.
- Collecting and storing rainwater is called rainwater harvesting.



Things to Remember

- Water is essential for life.
- Water is found in three forms — Solid, liquid and gas/water vapour.
- The process of change of liquid into water vapour, is called evaporation.
- The process of change of water vapour into liquid, is called condensation.
- The continuous process of change of different forms of water in nature, is called water cycle.

Thank
you