Unit 9

EARTH

Water and Air

Flowing of water in the river
Never stop (2X)
From where the source originated
Let's learn (2X)

Fresh air blowing (2X)
Its movement can be felt
Gives effect to the life
Let's investigate together

Water and air are the basic sources of life.
Where does water originate from?

Natural Sources of Water

What are the natural sources of water on our earth?

Rain

Water droplets that fall to the earth from clouds.

Lakes

A large area of water that is surrounded by land.

Seas

A large part of the earth's surface that is covered with salt water.

The natural sources of water on our Earth are **rain**, **rivers**, **lakes**, **seas**, and **springs**.

Springs

A place where underground water flows out to the earth's surface.

Rivers

Rains that fall to the earth form streams of water called rivers.

HOTS

What would happen if there is no water on Earth?

I Investigate » Making a Bubble Map on Natural Sources of Water

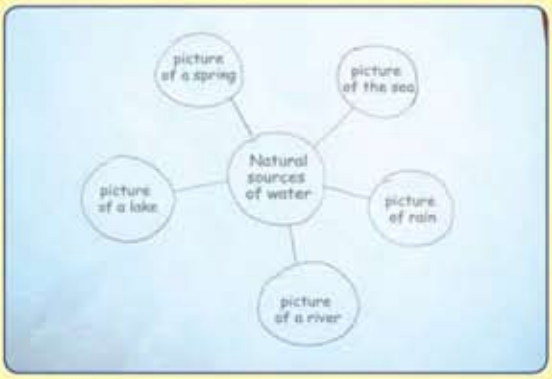
Apparatus and Materials

- Pictures of natural sources of water from various media
- scissors Caution
- coloured paper
- glue

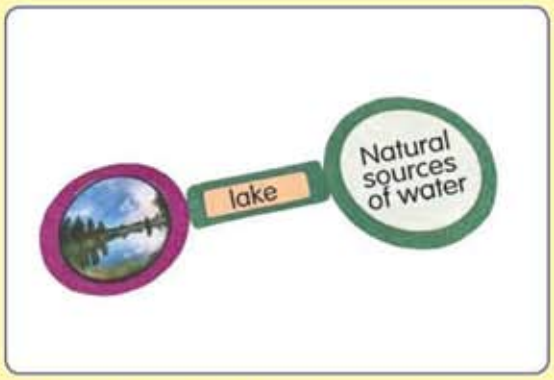
Paired Activity

Steps

1. Collect pictures of natural sources of water.



2. Draft out your bubble map.



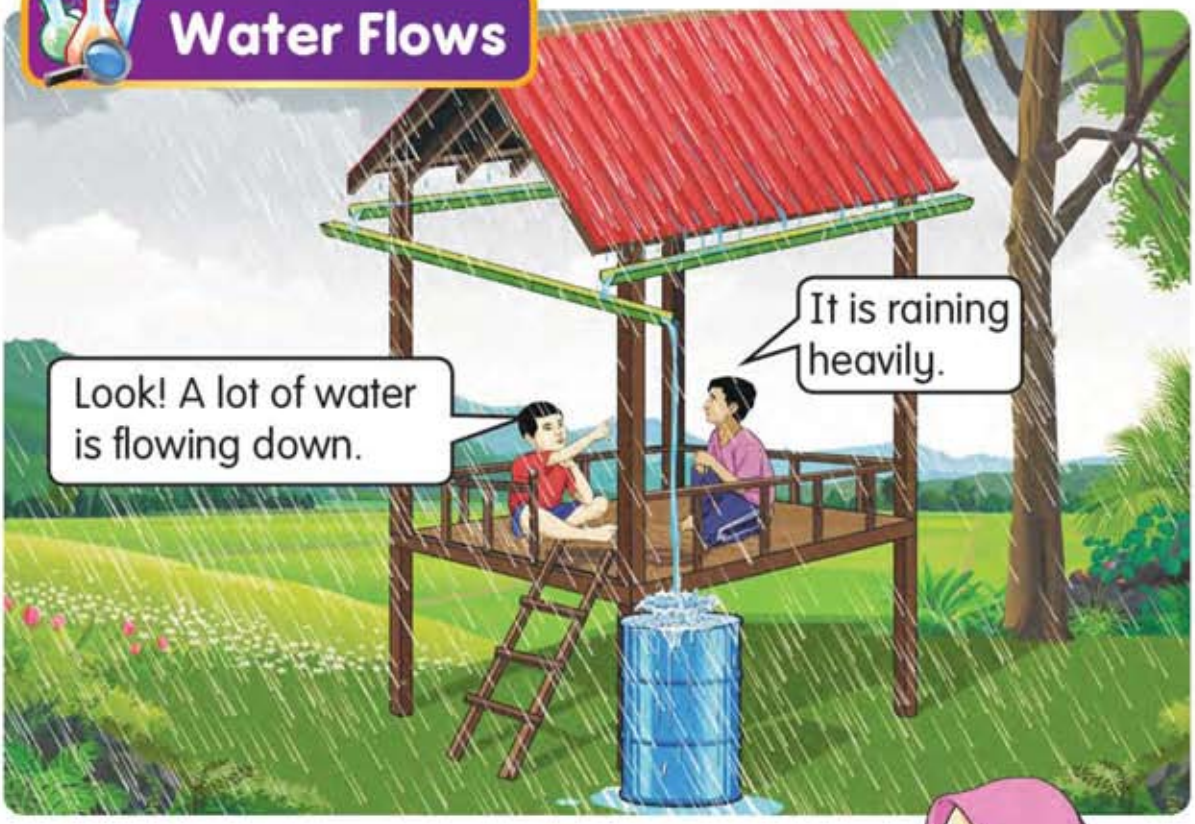
3. Paste the pictures accordingly to form a bubble map.

4. Share your bubble map with your classmates.

Question

State the natural sources of water on earth.

Water Flows



I Investigate » Investigate Direction of Water Flow

Apparatus and Materials


food colouring


beaker


tray

Group Activity

Steps

1. Put six drops of food colouring into 250 ml of water and stir it.

2. Pour the coloured liquid into a tray.

3. Put the tray on the table.

4. Raise one side of the tray.

5. Observe the direction of the coloured liquid flow in the tray.
6. Sketch your observation.

Question

How did the liquid in the tray flow when one side of the tray was lifted?

Liquid flows from a **high place** to a **low place**.

Natural Direction of Water Flow

Rivers and waterfalls flow from high areas to low areas. Then, they flow to the sea.

9.1.3

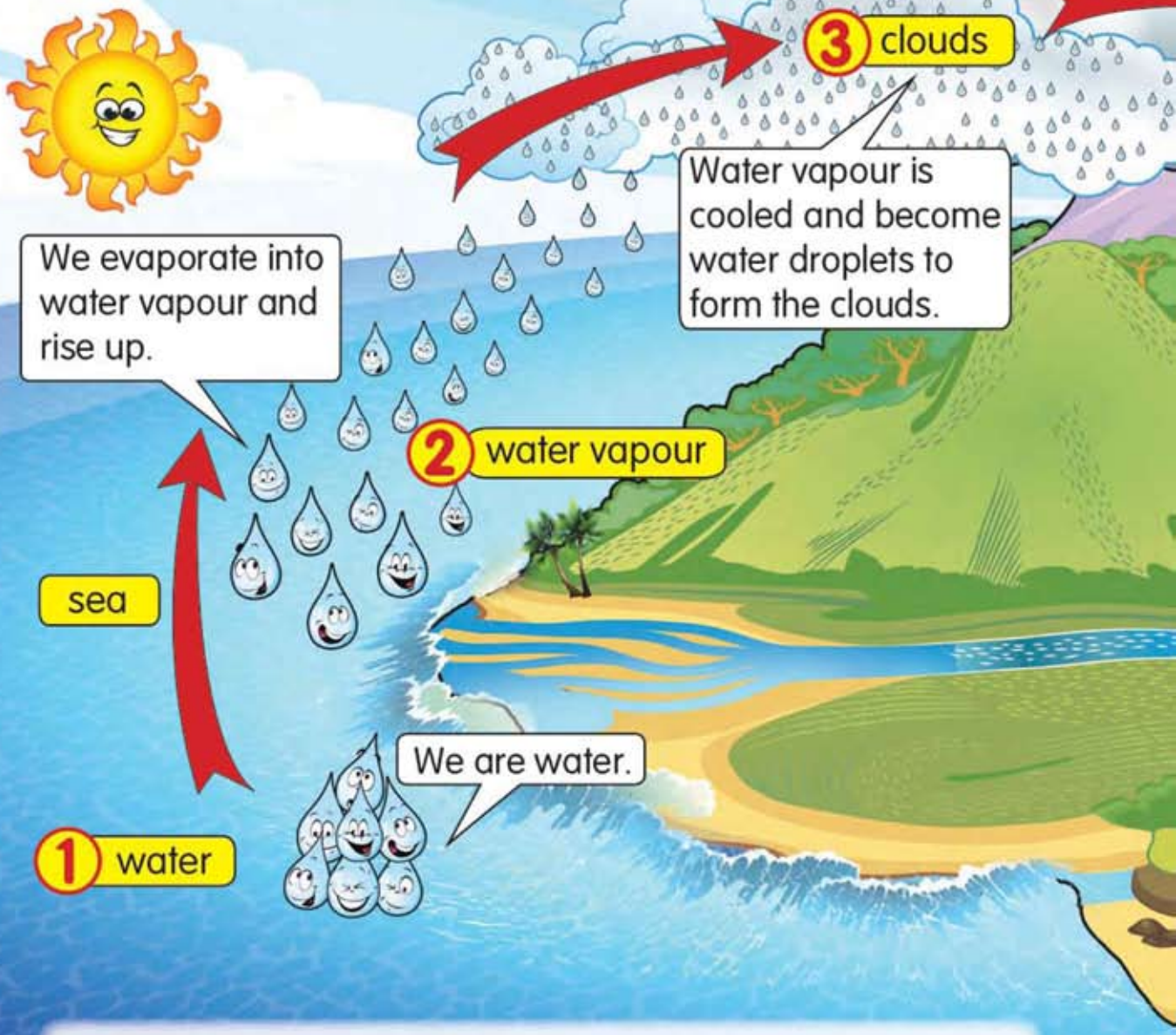
Teacher's Notes

- Search on YouTube videos on the formation of waterfall.

Activity Book
Pages:
66-67

Natural Water Cycle

How is a natural water cycle formed?



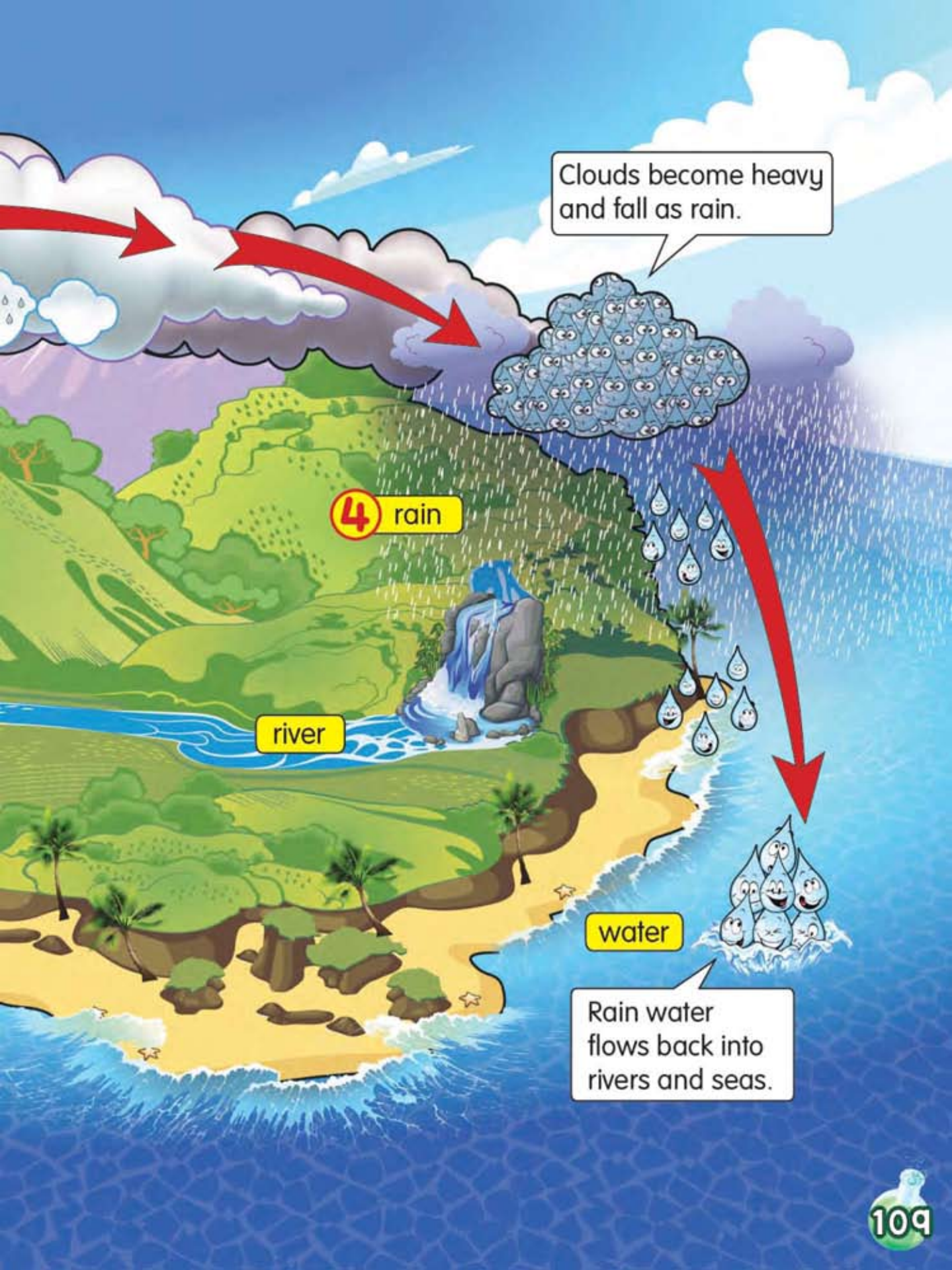
Natural water cycle is a continuous cycle that supplies water to living things and to cool down the earth.

Teacher's Notes

- Search on YouTube videos on the natural water cycle.

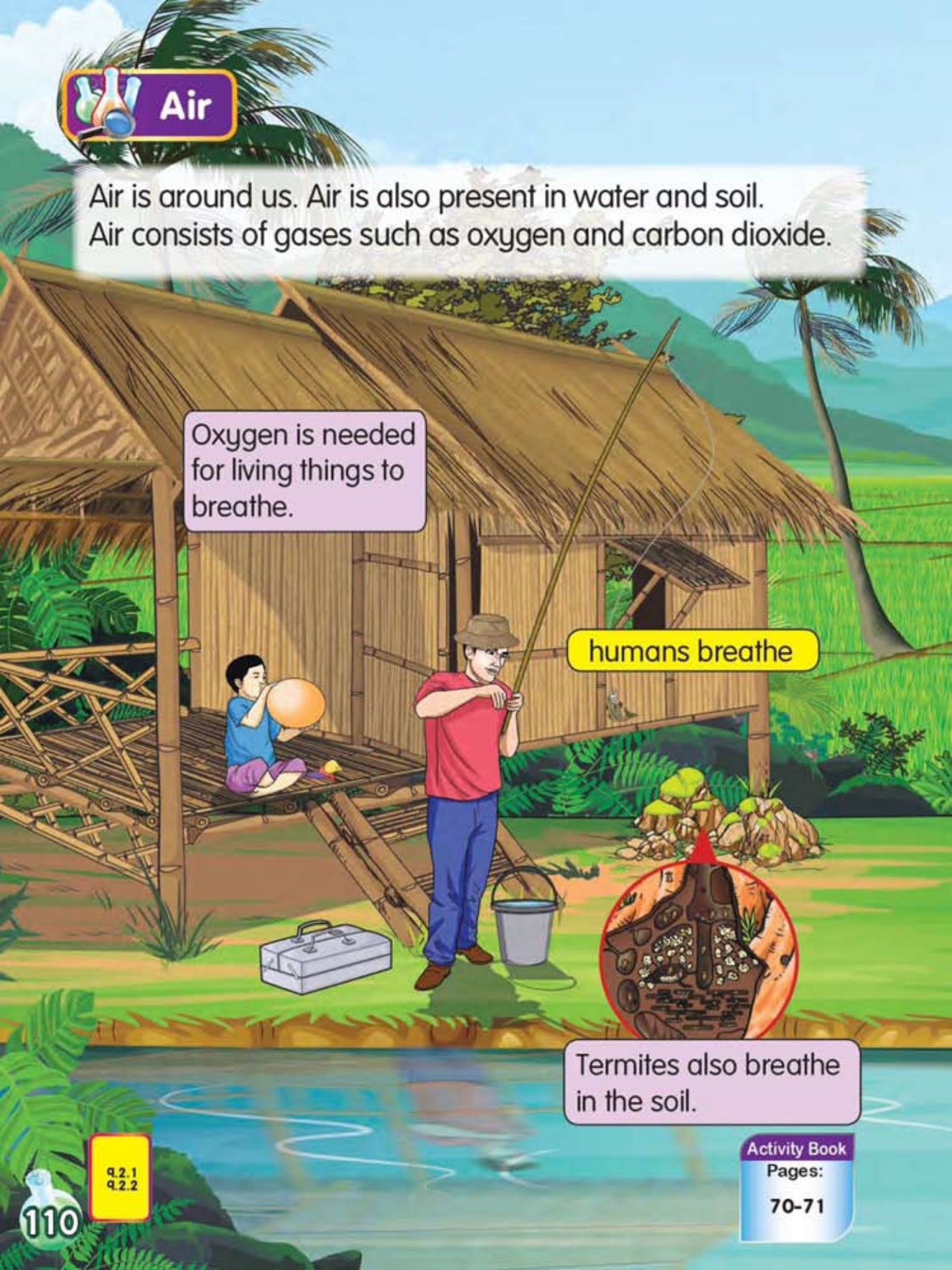
9.1.4
9.1.5

Activity Book
Pages:
68-69


Clouds become heavy and fall as rain.
4 rain
river
water
Rain water flows back into rivers and seas.

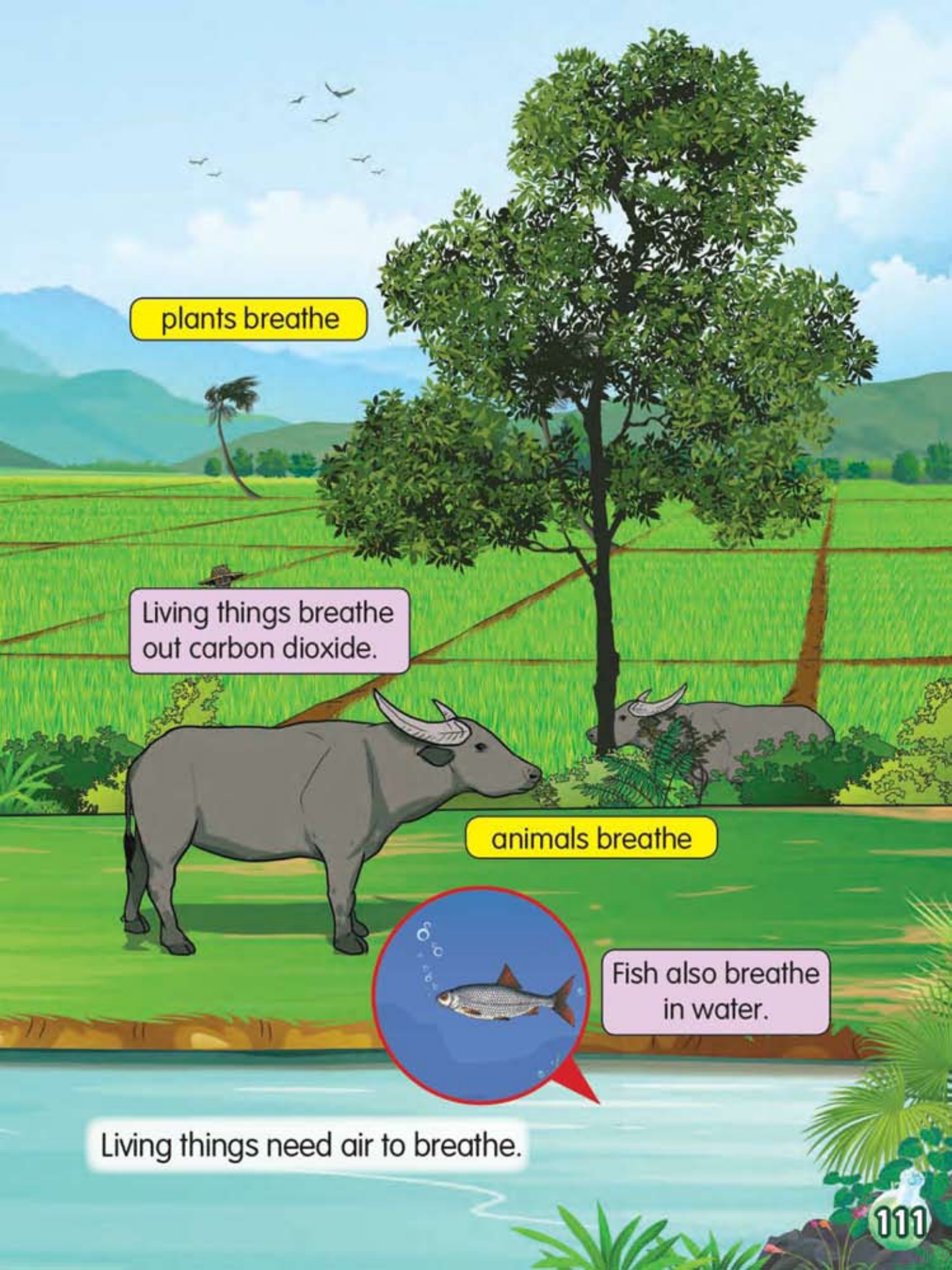
Air

Air is around us. Air is also present in water and soil.
Air consists of gases such as oxygen and carbon dioxide.



q.2.1
q.2.2

Activity Book
Pages:
70-71

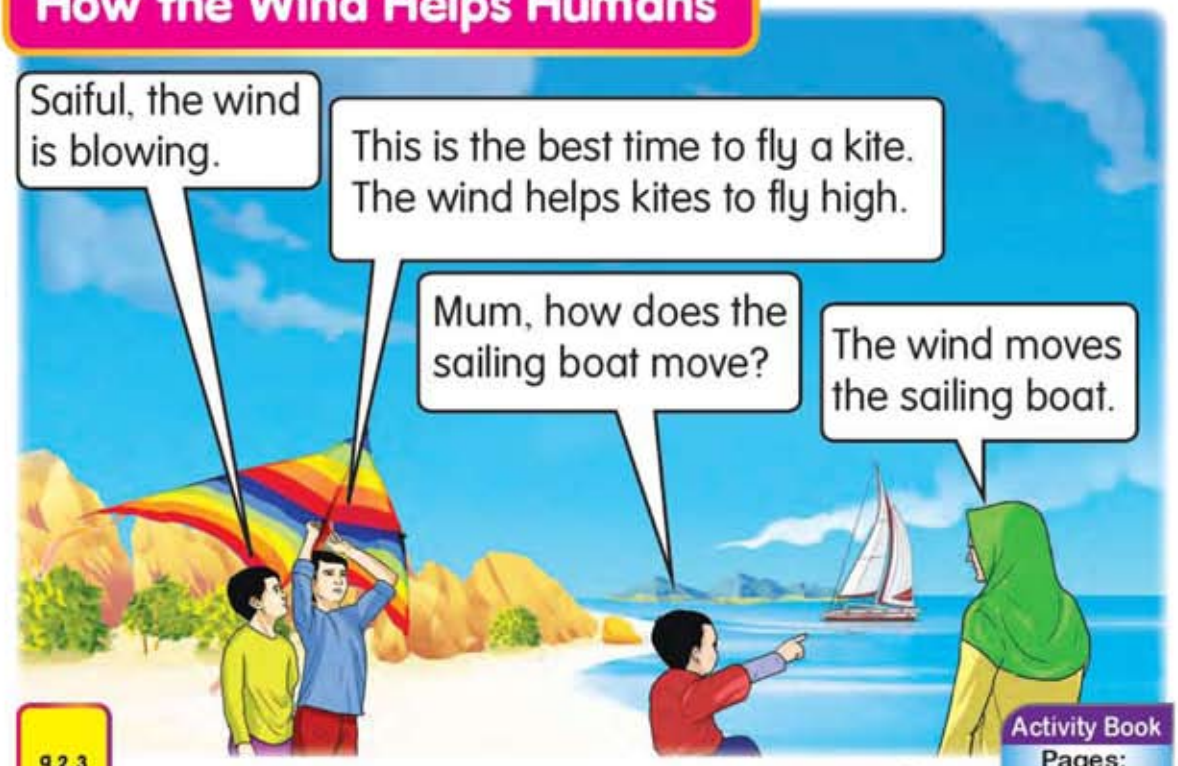

plants breathe
Living things breathe out carbon dioxide.
animals breathe
Fish also breathe in water.
Living things need air to breathe.

Moving Air

What is moving air? Moving air is known as wind. Wind cannot be seen but can be felt.

Do you know that the wind affects humans in many ways?

How the Wind Helps Humans



9.2.3
9.2.4

Activity Book
Pages:
73-75

The wind can fly a kite and move a sailing boat.

State how the wind helps humans in the following situations.

Effects of Strong Winds

What are the effects of the wind in this situation?

Teacher's Notes

- Strong winds affect the environment and humans in many ways such as causing storms and big waves.

Designing a Wind Rocket

1. Draw the shape of a rocket and cut it.

2. Colour it.

3. Cut a straw. Use adhesive tape to seal the top of the straw. Paste it on the paper rocket.

4. Insert a long straw into the short straw.
5. Test the wind rocket by blowing into the straw.

HOTS

Try to create another type of model that also uses moving air.

Activity Book
Pages:
72, 76

9.2.5
9.2.6

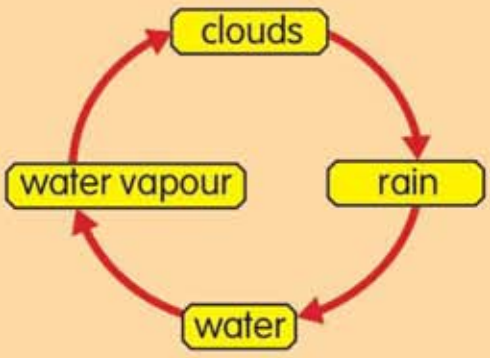
Science Recreation HOTS

Wind Chimes

Use the materials around you such as decorative butterflies, beads, and ballast to produce wind chimes. Hang the wind chimes that you have produced outside your house.

I Remember

1. Natural sources of water are rain, rivers, lakes, seas, and springs.
2. The direction of water flow is from high areas to low areas.
3. Natural water cycle.



4. Air consists of gases such as oxygen and carbon dioxide.
5. Moving air is known as wind.
6. The wind helps to:
   - move a sailing boat
   - rotate a windmill
   - fly a kite
   - dry clothes on the clothes line.
7. Strong winds can cause big waves, threaten lives, and destroy properties.

I Answer

Answer all the questions below in your Science exercise book.

1. What are the natural sources of water as shown in the pictures below?

2. What is the direction of the water flow in the diagram below?

Tick (✓) the correct direction of the water flow.

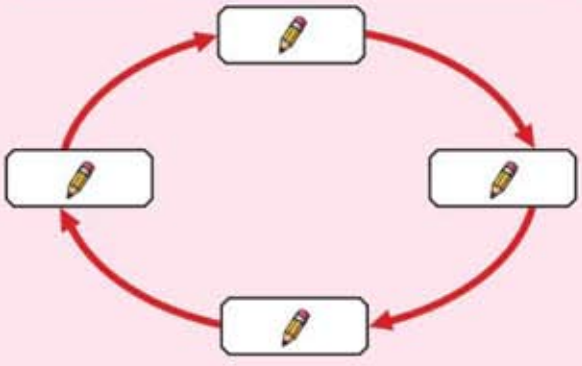
Q → R

S → Q

R → S

3. Complete the natural water cycle chart below with the correct words.

clouds | rain | water vapour | water



4. How does wind help humans? Give two examples.

5. Give one effect of a strong wind.