

# GEOGRAPHY

## The Earth. Air and water.



### 1 Read. Complete the text with the words in the box.

water    hydrosphere    plants    solid    atmosphere    oxygen    gas    oceans

Plants, animals and people need air and water to live. Life on the Earth is possible because of the **atmosphere** and the **hydrosphere**.

The (1) \_\_\_\_\_ is the air around the Earth. The air has a lot of **nitrogen** (78%) and **oxygen** (21%). The rest (1%) is **water vapour**, **carbon dioxide**, **ozone** and other gases.

Animals and people need (2) \_\_\_\_\_ to breathe. Plants need nitrogen to grow and carbon dioxide to make food.

The atmosphere protects us from dangerous radiation from the Sun.

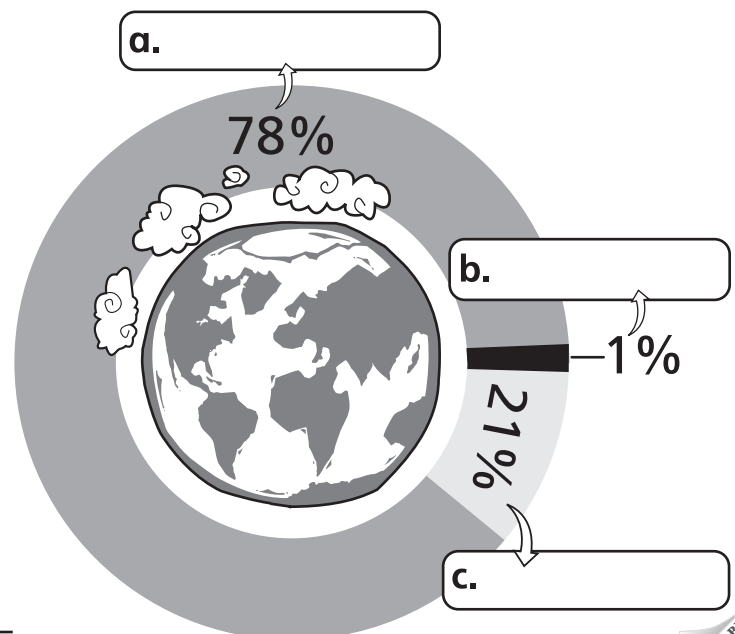
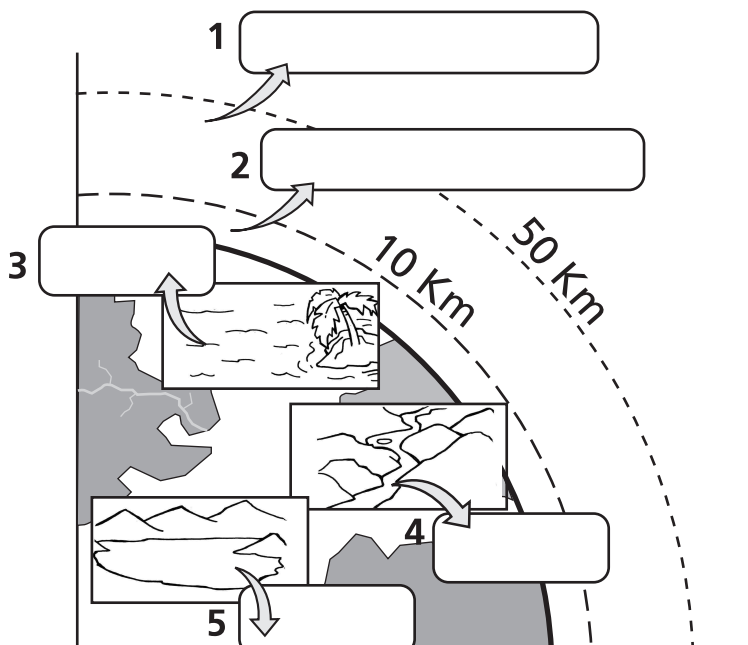
There are two main parts in the atmosphere:

- The **troposphere** is the air near the Earth's surface. Animals and (3) \_\_\_\_\_ live in the troposphere.
- The **stratosphere** starts about 10 km above the Earth's surface and finishes at about 50 km. The **ozone layer** is in the stratosphere.

The (4) \_\_\_\_\_ includes all the water on the Earth: the (5) \_\_\_\_\_, rivers, lakes and the water vapour in the air. About 70% of the Earth is covered by water and 97% of the (6) \_\_\_\_\_ is in the oceans.

Water can be a **liquid**, a **solid** or a **gas**. When it is a (7) \_\_\_\_\_, it is **ice**. When it is a (8) \_\_\_\_\_, it is water vapour.

### 2 Label.



## The Earth. Air and water.



### Aim

- To study the atmosphere and the hydrosphere.

### Language focus

**Key vocabulary:** *air; water; atmosphere, hydrosphere, nitrogen, oxygen, water vapour, carbon dioxide, ozone (layer), radiation, troposphere, stratosphere, ocean, river; lake, solid, liquid, gas.*

**Key language:** *Plants need water to live. The atmosphere is the air around the Earth. The air has a lot of nitrogen. About 70% of the Earth is covered by water. Water can be a liquid, a solid or a gas.*

### Materials

- World map or globe.
- Worksheet.

### Warm-up

- Draw a circle on the board. Encourage the pupils to guess what it is. Continue drawing the continents and oceans until the pupils say *The Earth!* Say *The Earth is the planet we live on.* Elicit information about the Earth from the pupils. Ask them questions like *What is on the Earth? Is it big or small? What colour is it? Does it move?*

### Completing the Worksheet

#### Activity 1

- Show the pupils the world map or globe. Elicit the different parts of the Earth by asking questions such as *What can you see? Water and land (or continents). Where is the water? In the oceans (or seas), rivers and lakes. What is there in the oceans and continents? Animals, people and plants. What is around the Earth? Air.*
- Explain that *the Earth has got different parts.* One part is all the water. Another part is the air around the Earth. Explain that each part has got a name and write them on the board. *The hydrosphere is all the water. The atmosphere is the air.* NB Some pupils may be

familiar with the other two spheres or parts of the Earth, *the geosphere (or lithosphere) and the biosphere.*

- Draw the Earth and the Sun on the board. Explain that *the Sun is very hot* and that *the atmosphere around the Earth absorbs some of the Sun's radiation.* Without the atmosphere the Earth would be a very hot planet and we wouldn't be able to live on it. *The air in the atmosphere has nitrogen, oxygen and other gases* that we need to live. Without the atmosphere, we wouldn't be able to breathe.
- Get the pupils to read the text in Activity 1 in pairs. Encourage them to discuss with their partners which word from the box belongs in each gap and to write their answers in their notebooks. Monitor the activity and provide help with vocabulary if necessary (but encourage them to try to guess the meaning of words they don't know – many of the new words are similar to their equivalents in L1).
- Next, read through the text with the class. Draw pictures on the board to explain the text. Elicit the missing words from the pupils and correct as necessary. Make sure they all understand the meaning of the key vocabulary (in **bold** type). Pupils write the correct answers in the gaps on their worksheets.

**Answers:** 1-atmosphere; 2-oxygen; 3-plants; 4-hydrosphere; 5-oceans; 6-water; 7-solid; 8-gas

#### Extension activity/fast finishers

##### **Continents and oceans.**

Ask the pupils to write the names of the oceans in their notebooks. They can look at the world map or globe.

**Answers:** Pacific Ocean, Atlantic Ocean, Indian Ocean, Arctic Ocean.

#### Activity 2

- Tell the pupils to read the text in Activity 1 again and use the information in the text to label the picture and the pie chart.
- Answers:** 1-stratosphere; 2-troposphere; 3-ocean; 4-river; 5-lake  
a-nitrogen; b-other gases; c-oxygen

## Extension activity/fast finishers

### *True or false?*

Write some true/false sentences on the board, eg, *About 70% of the Earth is covered by water.* (T) *Only 30% of the water on the Earth is in the oceans.* (F) *The air in the atmosphere has nitrogen, oxygen and water vapour.* (T) *The stratosphere touches the Earth.* (F) *Plants and animals live in the stratosphere.* (F) Ask the pupils to copy them in their notebooks and then decide if they are true or false.