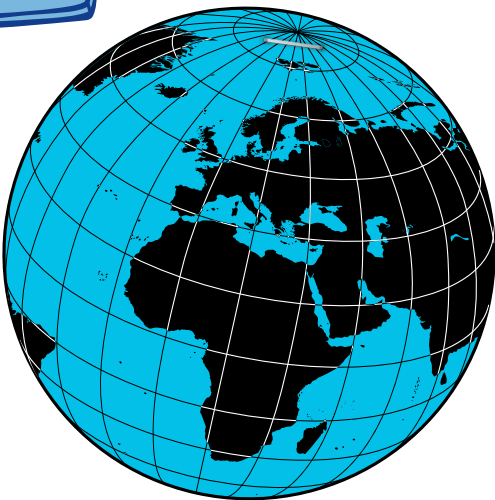




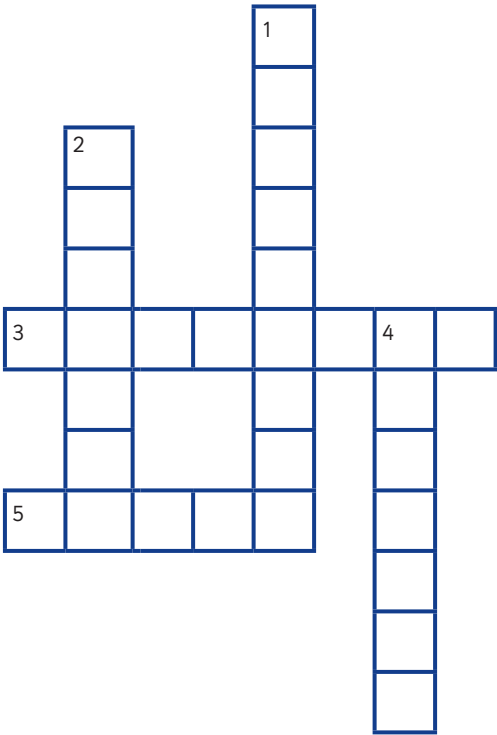
WHERE ON EARTH IS SPAIN?



1 Read the sentences and decide whether they describe *parallels* or *meridians*.

- a They are lines of latitude. _____
- b They are lines of longitude. _____
- c The equator is one. _____
- d They are semi-circular. _____
- e They go vertically from the North Pole to the South Pole. _____
- f They go horizontally around the Earth. _____
- g They divide the Earth into segments. _____
- h They are circular. _____

2 Complete the crossword using words from the unit.



DOWN

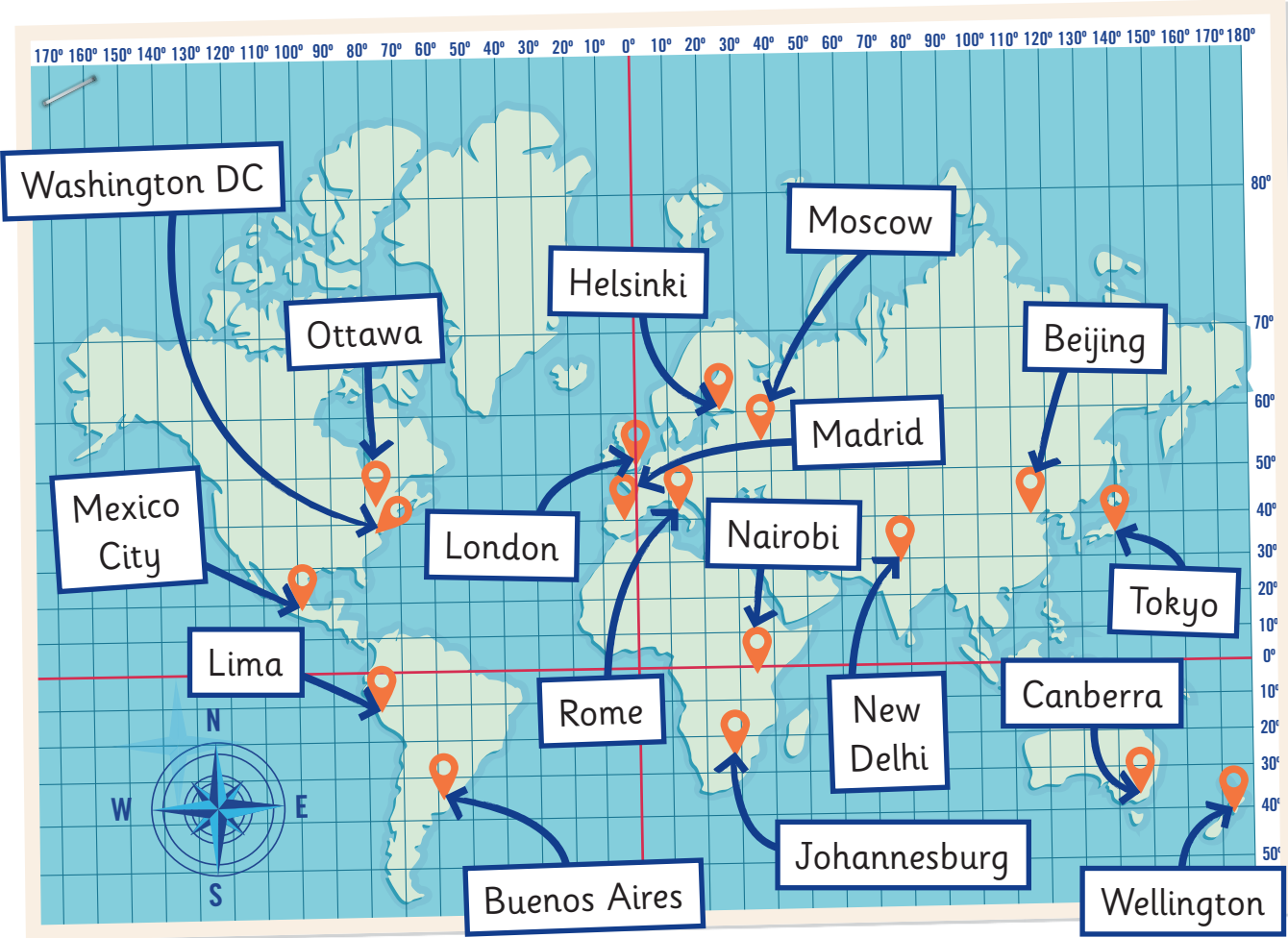
- 1 Meridians measure this.
- 2 This parallel is at 0°.
- 4 Latitude and longitude are measured in these.

ACROSS

- 3 Parallels measure this.
- 5 The ... Meridian is at 0°.



3 Use the map to find the cities with the geographic coordinates below.



- a

52° N, 0° W
- b

39° N, 77° W
- c

35° S, 58° W
- d

26° S, 28° E
- e

36° N, 140° E
- f

60° N, 25° E
- g

29° N, 77° E
- h

42° N, 12° E

4 Use the map from activity 3 to give approximate coordinates for these cities.

- a

Mexico City
- b

Lima
- c

Ottawa
- d

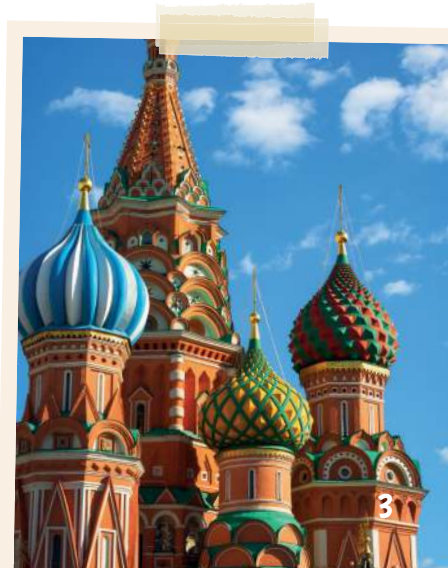
Nairobi
- e

Canberra
- f

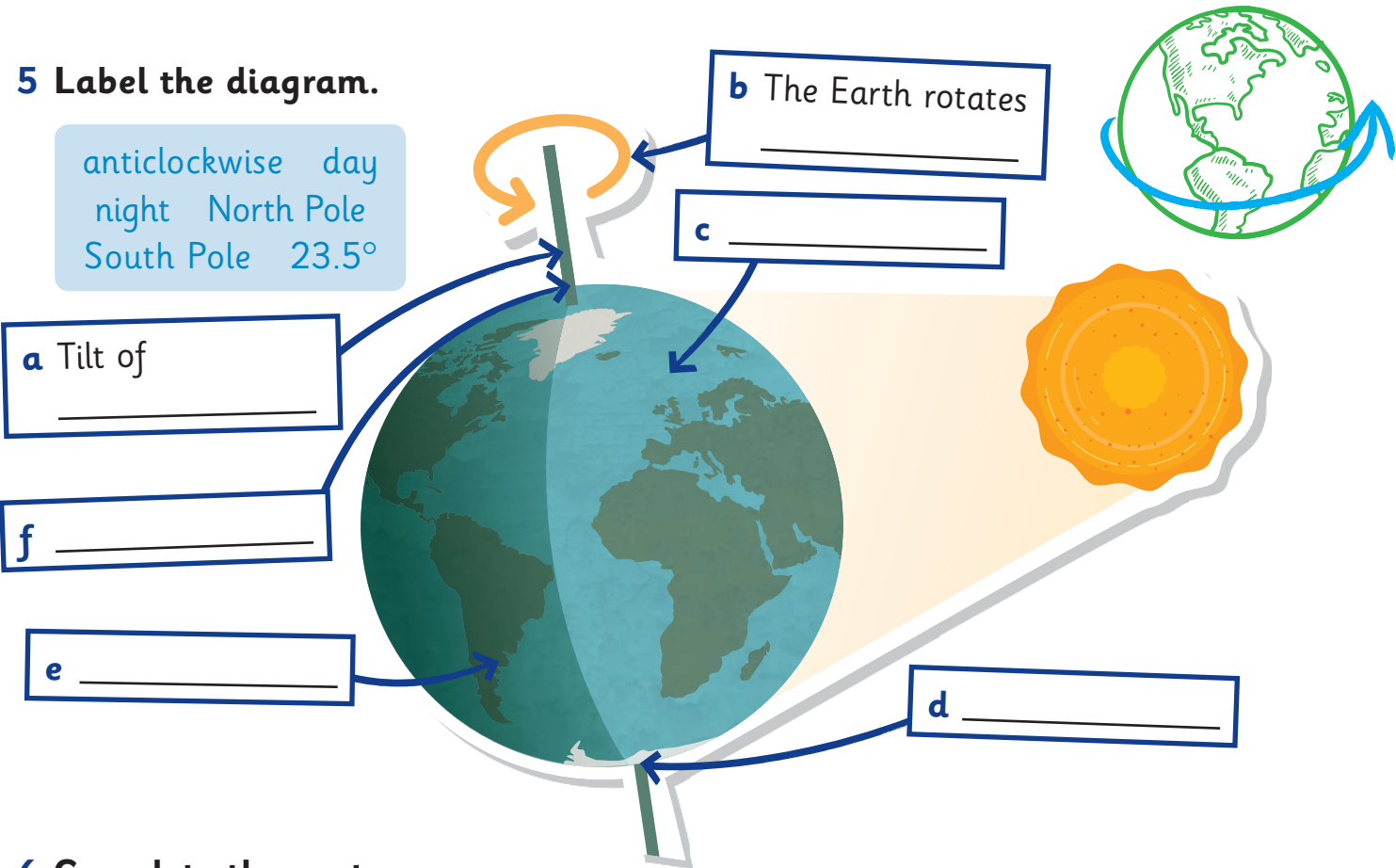
Beijing
- g

Moscow
- h

Wellington



5 Label the diagram.

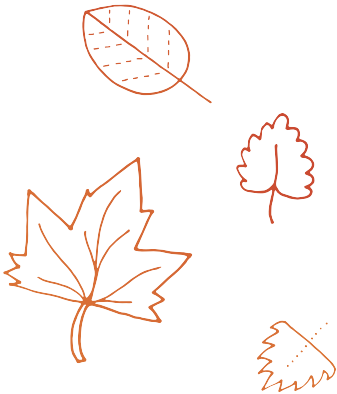


6 Complete the sentences.

- a The Earth is _____ on its axis.
- b The movement of the Earth on its axis is called _____.
- c It is tilted at an _____ of 23.5°.
- d It takes the Earth _____ to complete one rotation.
- e Rotation causes _____ and _____.

7 Read the sentences and write the correct season for the Northern Hemisphere.

- a 13 October: It is autumn.
- b 23 February: _____
- c 3 August: _____
- d 27 April: _____
- e 20 June: _____
- f 22 September: _____



8 Match the events to the dates.

a The summer solstice takes place on ☐

b The winter solstice takes place on ☐

c Spring begins on ☐

d Autumn begins on ☐

e Summer begins on ☐

f Winter begins on ☐

g The extra day in a leap year takes place on ☐

☐ 21 December

☐ 21 September

☐ 29 February

☐ 21 March

☐ 21 June



9 Complete the text. Use the words in the box.

Ancient Greeks visible disappear eclipse
 flat observations shadow spherical

The **(a)** _____ were the first to discover that the world is not **(b)** _____. The philosopher Aristotle made two important **(c)** _____.

While looking at ships disappear over the horizon, he noticed that the first part of the ship to **(d)** _____ was the hull. When the hull was out of sight, the mast was still **(e)** _____. This meant that the surface of the Earth is not flat but curved.

He also noticed that during a lunar **(f)** _____, the Earth casts a circular **(g)** _____ on the Moon. This was more proof that the Earth was **(h)** _____, not flat.



10 Match to make true sentences.

a Astronomers use telescopes

b Galileo Galilei was the first person

c Johannes Kepler improved the telescope

d The first telescopes were made

e The Hubble Telescope is a space

at the beginning of the 17th century.

by adding a better lens to it.

telescope which was built by NASA.

to study other planets.

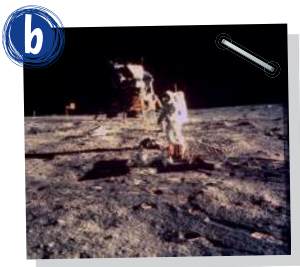
to use a telescope to observe the planets.

11 Label the pictures with the words in the box.

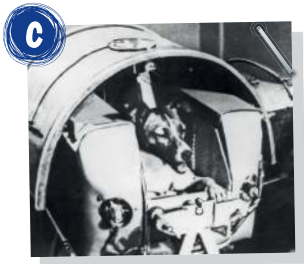
American
first animal in space
Laika
first woman in space
Sputnik Neil Armstrong
Valentina Tereshkova
first satellite in space
Russian
first man on the moon



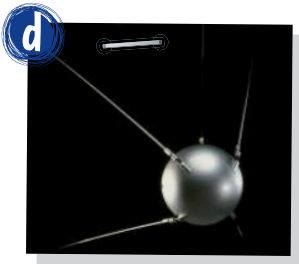
Name: Yuri Gagarin
Nationality: Russian
Fact: first man in space



Name: _____
Nationality: _____
Fact: _____



Name: _____
Nationality: _____
Fact: _____



Name: _____
Nationality: _____
Fact: _____



Name: _____
Nationality: _____
Fact: _____

12 Read the diary and write the missing words.
Write one word on each line.



Example Today we went on a school trip
a to the astronomy museum. I _____
b very excited about the trip _____
I am fascinated by astronomy and
space exploration.

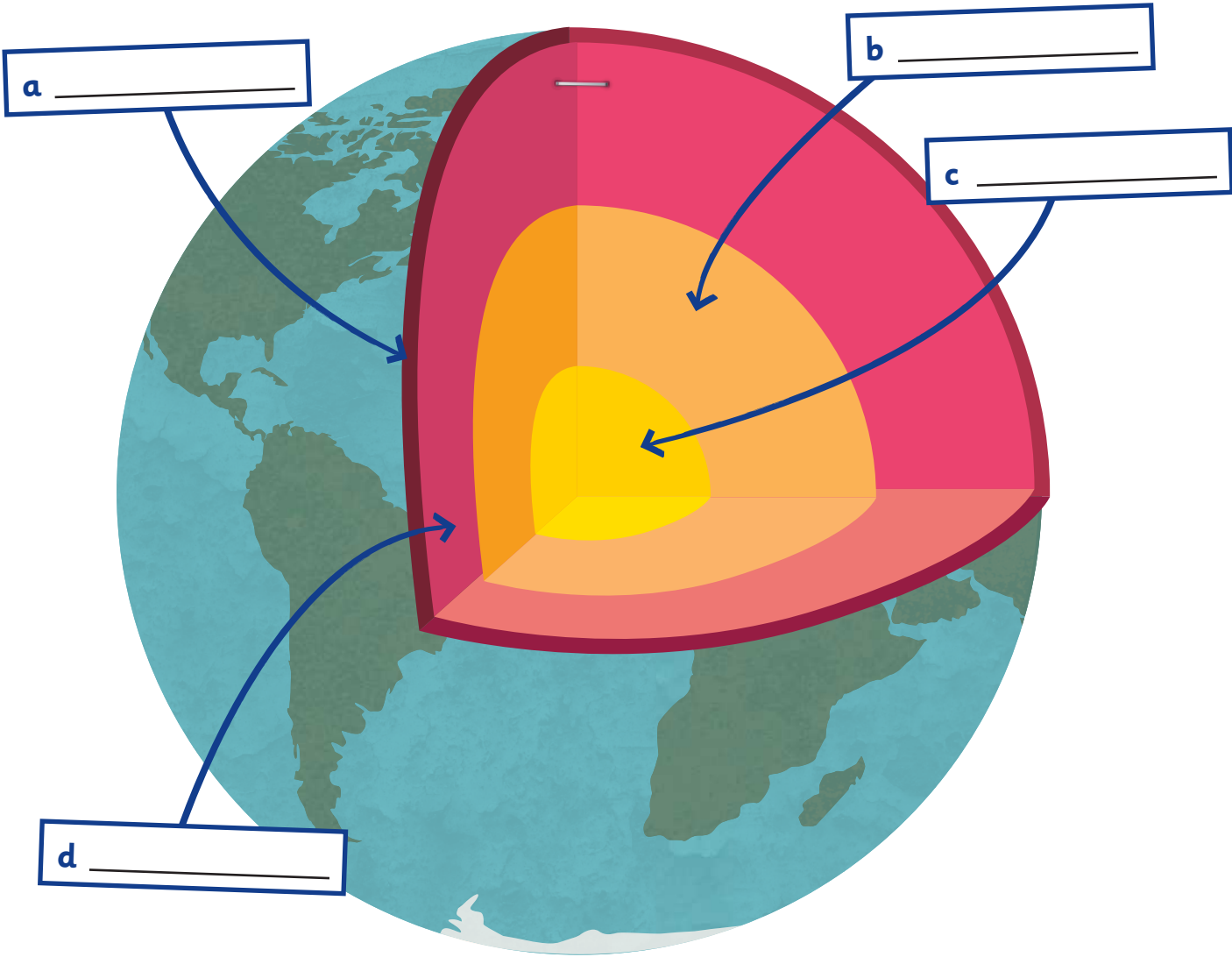
c We travelled to the museum _____
bus. When we got there, we were welcomed
by a guide called Grace. She gave us a tour
d of the museum and _____ us lots of
different facts about the exhibits.

e The most interesting thing I _____
was that one of the first living things to
travel into space was a dog! I also found
f out that nobody _____ walked on
g the Moon since 1972. _____ does
nobody want to go there? I know that I do!

2

WHAT'S THE DIFFERENCE BETWEEN ROCKS AND MINERALS?

1 Label the diagram of the geosphere.



2 Read the descriptions. Use the labels from activity 1 to write the correct words on each line.

- a This is the centre of the geosphere. It is also the hottest layer. _____
- b This is the top layer of the geosphere. It is thinner than the other layers. _____
- c This is the thickest layer of the geosphere. _____
- d This is the layer around the inner core. _____

3 Answer the questions. Write full sentences.

a Which layer of the Earth is made of magma?

The mantle is made of magma.

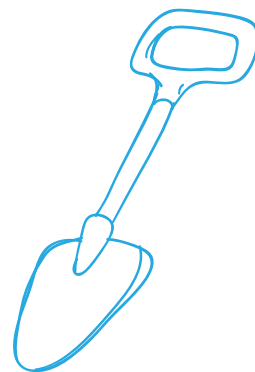
b Which layer of the Earth has temperatures of up to 5,500°C?

c This is the layer of rock we all live on.

d What is made of the crust and the top part of the mantle?

e Which rock is made of quartz, feldspar and mica?

f How many minerals is marble made of?



4 Are these objects minerals or rocks?

a



b



c



d



e



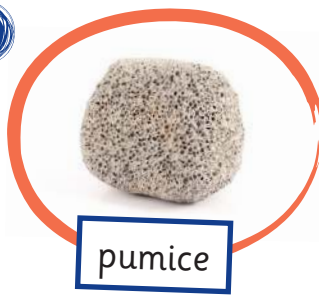
f



5 Read the descriptions and decide if they describe *sedimentary, igneous or metamorphic* rocks.

- a** These rocks can be formed by volcanic eruptions. _____
- b** These rocks are formed by sediments that settle at the bottom of lakes, seas and oceans. _____
- c** These rocks are originally sedimentary or igneous rocks. _____
- d** The sediments are compressed over millions of years and solidify. _____
- e** These rocks are formed by the magma in the Earth's mantle. _____
- f** These rocks are transformed over time by intense heat and pressure. _____

6 Classify the rocks as *sedimentary, igneous or metamorphic*.

a**b****c****d****e****f****g****h****i**

7 Write one use of each of these rocks.

a



chalk

b



granite

c



slate

d



marble

a We use chalk to draw on a blackboard.

b

c

d

8 Which minerals would you be able to scratch with these minerals?

a



Calcite can scratch ...

b



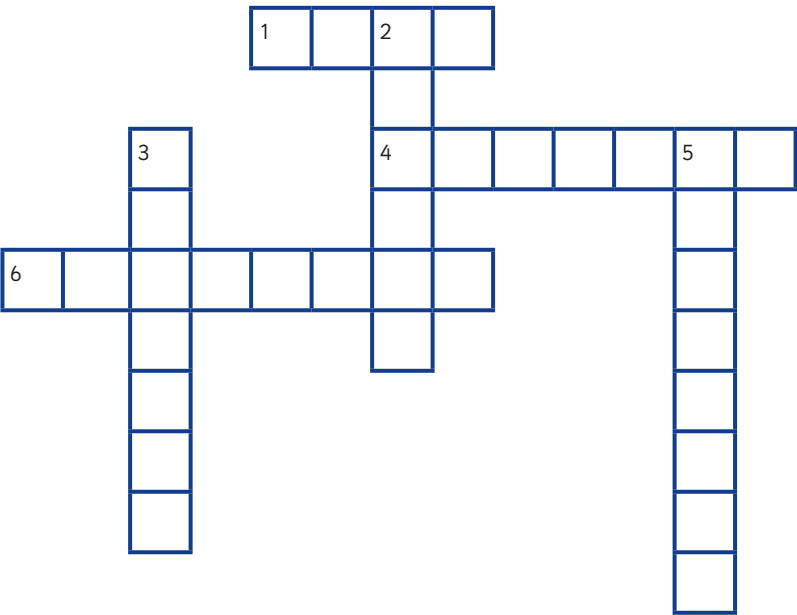
Fluorite can scratch ...

c



Quartz can scratch ...

9 Complete the crossword using words from the unit.



ACROSS

- 1 This is the softest mineral on the Mohs scale.
- 4 On the Mohs scale, each mineral can ... the one before it.
- 6 When a mineral crystal breaks into different parts with uneven surfaces, we call this ...

DOWN

- 2 This is another way of saying 'shininess'.
- 3 This is the hardest mineral on the Mohs scale.
- 5 When a mineral crystal breaks into different parts with flat surfaces, we say that it has good ...

10 Match the minerals to their uses.

- quartz
- copper
- mica
- gypsum



11 Look and read. Choose the correct words and write them on the lines.
There is one example.

atmosphere

talc

inner core

lithosphere

igneous

These solid materials form naturally. They are made up of minerals. rocks

a These are solid substances which form naturally. Rocks are made up of them. _____

diamond

b This is the solid part of the Earth. _____

quartz

marble

c This is the thickest layer of the geosphere. It is made up of magma. _____

mantle

minerals

d This is the top layer of the geosphere. It is the layer we live on. _____

mica

e This is made up of the crust and the top part of the mantle. _____

f Limestone and sandstone are examples of this type of rock. _____

crust

rocks

g These rocks are formed by the magma in the Earth's mantle. _____

cleavage

h This refers to the shininess of a mineral. _____

slate

i This is the hardest mineral on the Mohs scale. _____

lustre

j This is the softest mineral on the Mohs scale. _____

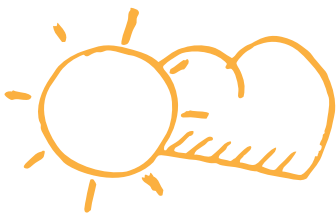
sedimentary

geosphere



3

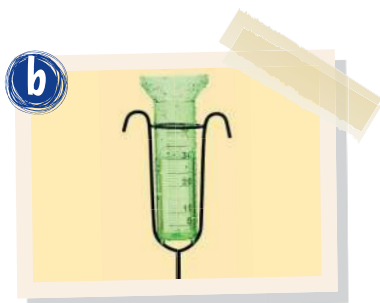
IS IT SUNNY EVERYWHERE?



1 Identify the weather instruments. Explain what they measure.



wind vane



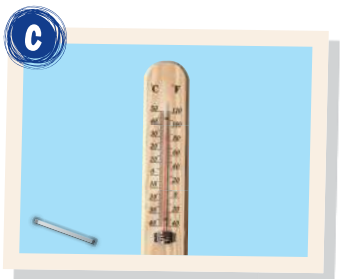
a We use a wind vane to measure
wind direction.

b

c

d

e



2 Identify the different forms of precipitation.



3 Look at the weather map and complete the weather forecast.



- a In the north of the peninsula, it will be rainy and there will be _____. The temperature will be _____.
- b In the east of the peninsula, it will be _____ and there will _____. The temperature will be 16°C.
- c In the south of the peninsula, it will be _____. The _____ will be 16°C.
- d In the west of the peninsula, it will be _____ and there will be _____. The temperature will be 11°C.

4 Read the sentences and decide whether they describe *weather* or *climate*.

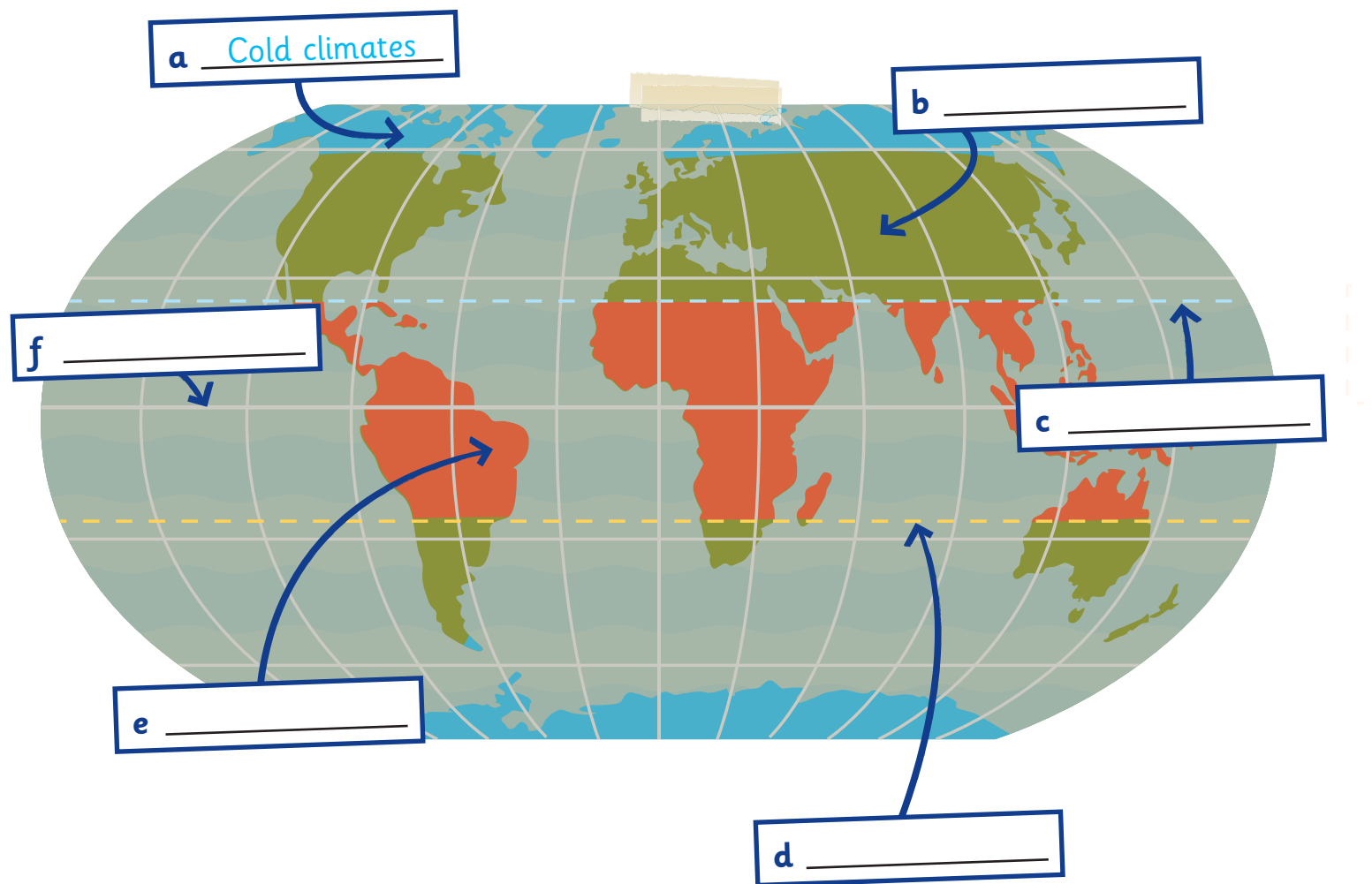
- a I heard on the radio that it is going to rain tomorrow. _____
- b Summer is very warm in the south of Spain. _____
- c It does not rain a lot in August. _____
- d Did you hear the storm last night? _____

5 Use the words in the box to complete the sentences.

- a Areas closer to the equator are normally _____.
- b Not all parts of the Earth receive _____ at the same _____.
- c The Earth is heated _____.
- d Areas close to the poles are normally _____.
- e Areas of high _____ have lower temperatures.
- f Areas near seas are _____ in the summer and warmer in the _____.

altitude angle
colder cooler
sunlight
unequally
warmer winter

6 Label the climate map of the world.

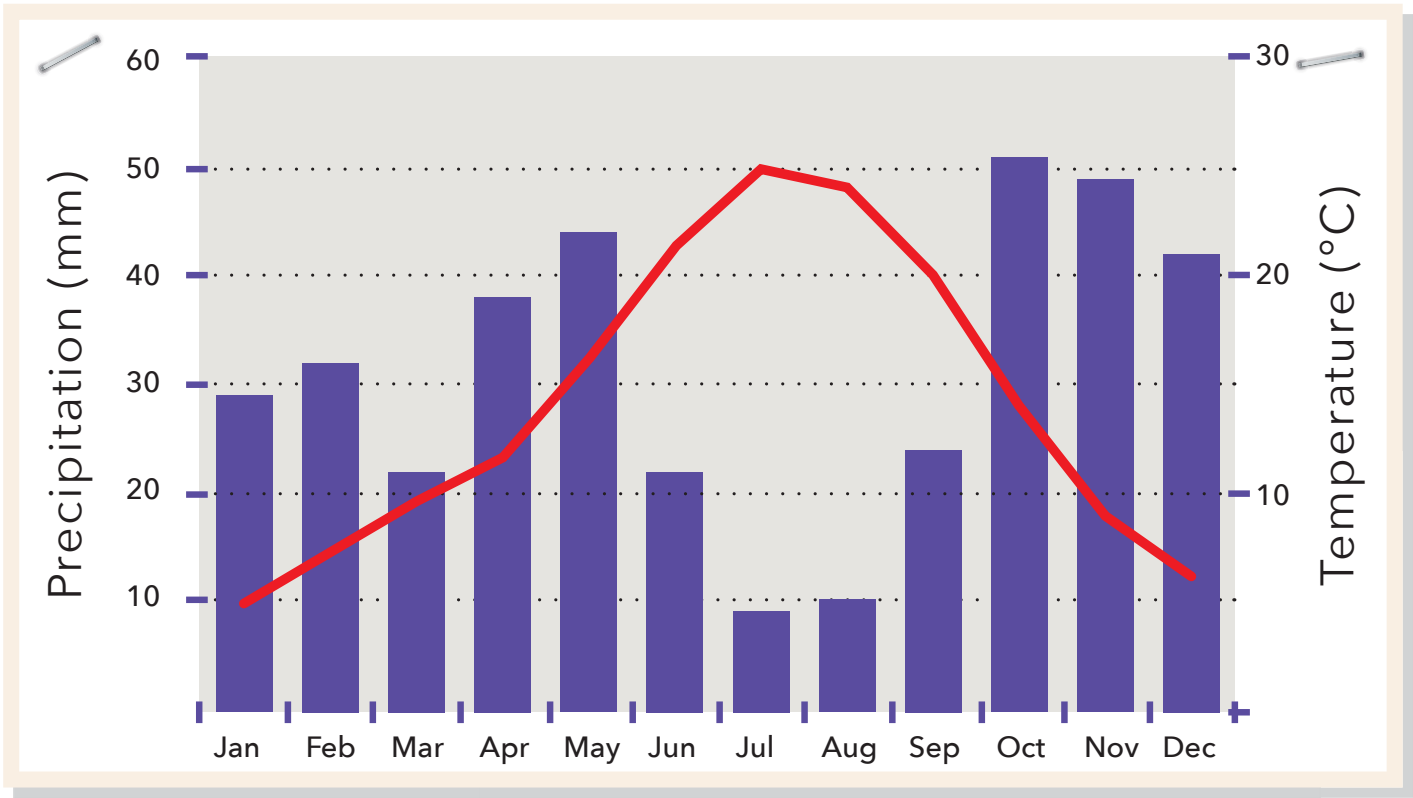


7 Circle the correct option.

- a Temperate climates are found between hot and cold climates. They have *cold / warm* winters and *cold / warm* summers.
- b *Hot / Temperate* climates are located between the tropic of Cancer and the Tropic of Capricorn. They are near the *South Pole / equator*. It is *warm in summer / all year round*.
- c Cold climates have very low temperatures *in winter / all year round* and *rain / snow* is common. Cold climates include the areas around the *poles / tropics*.



8 Look at the climate graph of Madrid and answer the questions below.



a Which is the hottest month in Madrid?

The hottest month in Madrid is July.

b Which is the wettest month in Madrid?

c Which is the coldest month in Madrid?

d Which is the driest month in Madrid?

e Which is the second coldest month in Madrid?

f Which is the second wettest month in Madrid?
