

3 Write the name of the cell structure next to the description of its job in the cell.

- a

It stores substances in a cell.

vacuole
- b

It contains all the cell structures and helps to give the cell shape.
- c

It controls the substances that go in and out of the cell.
- d

It controls the cell and contains all the genetic information.
- e

It supports the cell and provides strength.
- f

It helps the plant change light energy into food.

4 Read the text and choose the correct answer for each gap.

How do plants move?

All (a) ..... things can move. Although plants are not as obvious as animals, they move quite a bit. The flowers on a plant (b) ..... to light and can open during the day and close at (c) ..... . Leaves can also move and turn towards the sun, (d) ..... means that they get extra light to make food. Some flowers, like sunflowers, even seem to follow the sun.

Most plant movements are invisible to the naked eye; we need a (e) ..... to see them. The underside of a plant leaf is covered with tiny holes, called stomata. These open and close to (f) ..... substances in and out. Smaller still are the movements inside the plant. Plants, like humans, have a transport system that moves important substances around. The next time you see a plant, watch closely. It (g) ..... be moving before your very eyes!



- a

non-living / living / organism

e

thermometer / microscope / calculator
- b

want / respond / bring

f

allow / block / decide
- c

morning / evening / night

g

must / shouldn't / might
- d

which / when / who



5 Complete the table.

	Composition	Function	Example
Cell	Single cell		Muscle cell
Tissue	Layers of cells		
Organ		They have a specific job to do in the body	
System	Different organs working together		Circulatory system

6 Write and draw to make a fact card about a living thing. Work with a partner and take turns to guess.

Who am I?

Appearance:

Number of cells:

Source of energy:

7 Find the words. Then, write definitions for the words (a–e) listed below.

~~cell~~ cytoplasm living thing multicellular nucleus  
organ organism system tissue unicellular

m	u	l	t	i	c	e	l	l	u	l	a	r	q	b
c	u	h	l	i	v	i	n	g	t	h	i	n	g	z
e	y	n	p	h	v	b	o	i	d	u	d	v	c	q
y	o	t	i	b	o	b	r	b	n	o	j	f	m	l
v	r	u	o	c	a	e	q	f	r	s	g	h	k	x
b	g	t	m	p	e	y	z	b	g	w	d	l	w	s
v	a	t	h	u	l	l	n	n	c	z	b	t	u	y
x	n	r	i	d	x	a	l	h	e	j	r	e	y	s
c	i	o	t	s	x	f	s	u	l	z	l	q	w	t
u	s	t	o	i	s	g	t	m	l	c	e	y	k	e
o	m	j	j	u	t	u	v	o	u	a	l	b	s	m
o	r	g	a	n	f	c	e	n	a	x	r	a	f	j

a living thing: \_\_\_\_\_  
\_\_\_\_\_

b cell: \_\_\_\_\_  
\_\_\_\_\_

c multicellular: \_\_\_\_\_  
\_\_\_\_\_

d organism: \_\_\_\_\_  
\_\_\_\_\_

e cytoplasm: \_\_\_\_\_  
\_\_\_\_\_



8 Amanda is looking through the newspaper at the adverts.  
Choose the best organism for each advert.

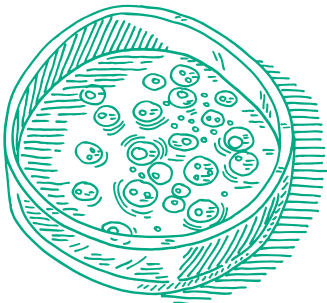
1

**Roommate wanted**

Must make own food, have a cell wall and be multicellular.

WANTED

- a Mushroom
- b Flower
- c Bacteria



2

**Small space available**

Must be microscopic and unicellular.

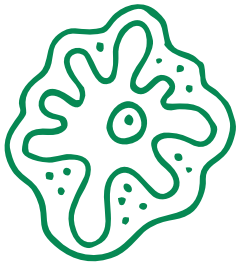
- a Giant kelp
- b Bacteria
- c Jellyfish

3

**Help wanted**

Organism recycling. No plants allowed.  
Should be multicellular.

- a Mushroom
- b Flower
- c Bacteria



4

**Lost pet**

Name: Squishy.

No cell wall. No spinal column. Great swimmer!

- a Jellyfish
- b Lion
- c Flower



9 Circle the odd one out. Write an explanation.

a cell / tissue / organ / kingdom

A kingdom is different because it's a form of classification. The others are all parts of an organism.

c spider / Venus flytrap / lizard / cow

b platypus / ostrich / lion / snake

d nucleus / cell wall / vacuole / cytoplasm

10 Read the text about the weird and wonderful organism, the lichen. Write the correct word in each gap, then answer the questions.



Most people confuse lichens with moss (the bushy green stuff on trees), (a) but beware, these two organisms are very different! Lichens are a complex living thing. (b) \_\_\_\_\_ are made up of two different organisms: a fungus and an alga. These organisms live together in a symbiotic relationship, each benefitting (c) \_\_\_\_\_ the other. The fungus is the central part, giving the lichen (d) \_\_\_\_\_ of its characteristics and providing the organism's structure. The algae can photosynthesise, so they provide the food. There are two different types of algae that live in a lichen. (e) \_\_\_\_\_ one is coloured: green algae and blue-green algae.

Besides their beauty, lichens (f) \_\_\_\_\_ important for our planet. Like plants, (g) \_\_\_\_\_ convert carbon dioxide to oxygen. So, without the help of lichens, Earth would be (h) \_\_\_\_\_ little less airy!

- i Are lichens the same as moss? Why / Why not?  
\_\_\_\_\_
- j What is a symbiotic relationship?  
\_\_\_\_\_
- k Can lichens make their own food? How?  
\_\_\_\_\_
- l Which of the five kingdoms does lichen belong to? Explain your answer.  
\_\_\_\_\_

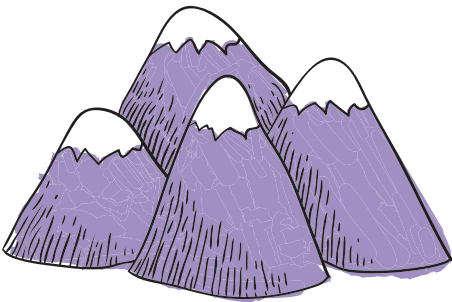
11 Write whether the sentences describe *living things*, *non-living things* or *both*.

- |                                                                  |                          |
|------------------------------------------------------------------|--------------------------|
| a Things that do not need nutrients.                             | <u>non-living things</u> |
| b Things that breathe.                                           | _____                    |
| c Things that produce waste.                                     | _____                    |
| d Things that do not breathe air.                                | _____                    |
| e Things that are made up of cells, tissues, organs and systems. | _____                    |
| f Things that can move.                                          | _____                    |
| g Things that are classified into kingdoms.                      | _____                    |

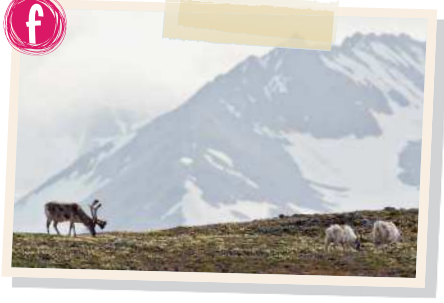
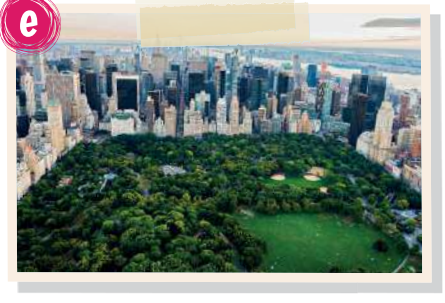


2

ECOSYSTEMS



1 Identify the ecosystems and write an example of each.



2 Write the living and non-living components of a savannah ecosystem in the correct category. Can you add any more?

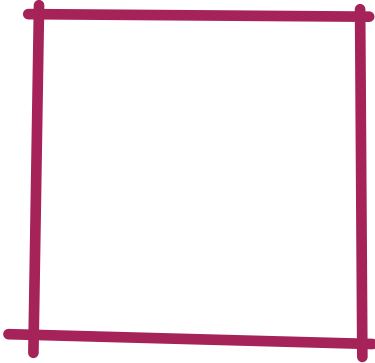
rocks   trees   grass   zebra



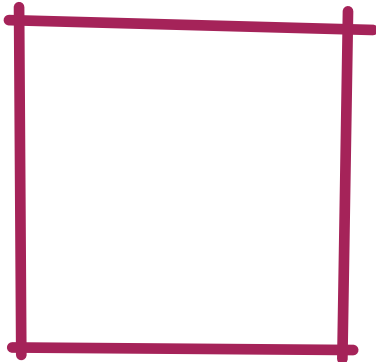
Biotic factors	Abiotic factors

3 Draw an example for each word.

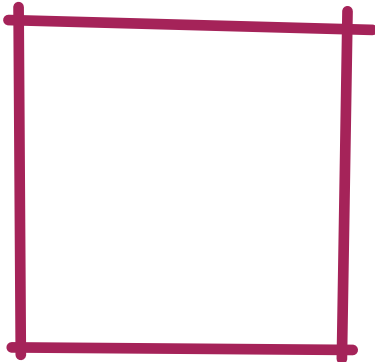
a individual



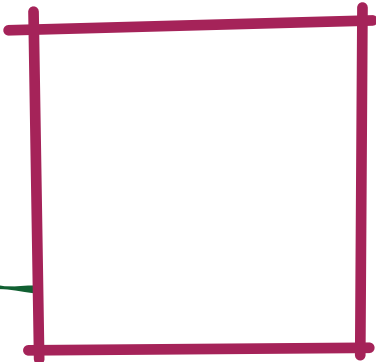
b population



c community



d ecosystem



4 How important are abiotic factors in an ecosystem? Consider the effect of the following actions:

a A family visits a river. It is hot and the children want to swim. They build a small wall in the river with rocks to make a pool.

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b There is a terrible storm, causing a boat to sink to the bottom of the lake. It is full of oil that is slowly leaking.

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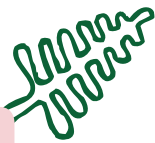
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c After a big rainstorm, there is a landslide on the side of a mountain. Everything is covered in mud.

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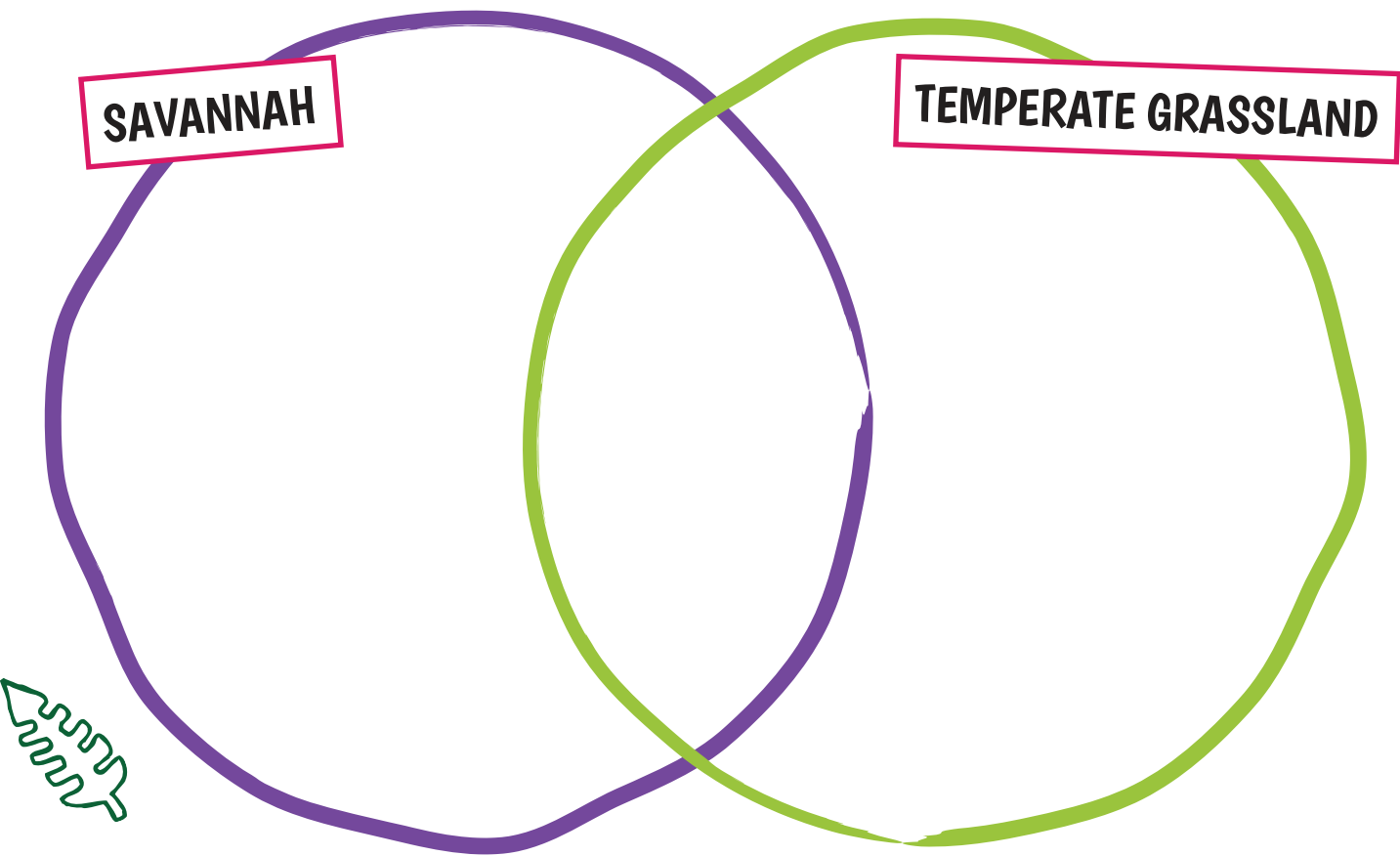


5 Complete the sentences.

climate   fauna   flora   habitat   interact

- a Living things from the five kingdoms \_\_\_\_\_ with each other in an ecosystem.
- b The \_\_\_\_\_ is the general weather conditions of a region.
- c The living things in an ecosystem can be divided into \_\_\_\_\_ and \_\_\_\_\_.
- d The area or environment in which an organism normally lives is known as the \_\_\_\_\_.

6 Think of the similarities and differences between these two grassland ecosystems. Write them in the correct place.



7 Write whether the sentences describe *grasslands* or *forests*.

- a These require a rainy climate. \_\_\_\_\_
- b These contain few trees. \_\_\_\_\_
- c These are home to some of the largest fauna on land. \_\_\_\_\_
- d These are where over half of the species on Earth can be found. \_\_\_\_\_



8 Identify the ecosystems. Write a paragraph comparing and contrasting them.



a

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b

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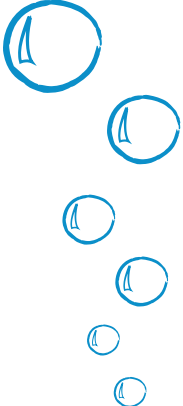



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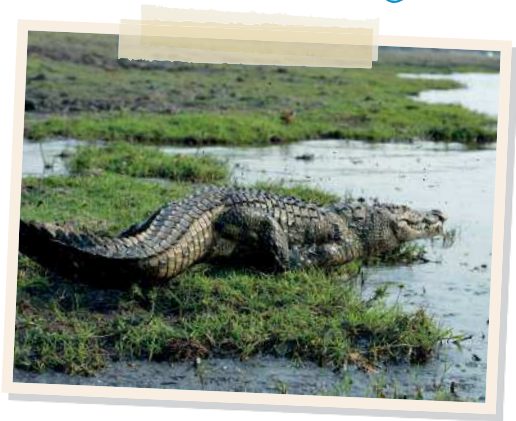
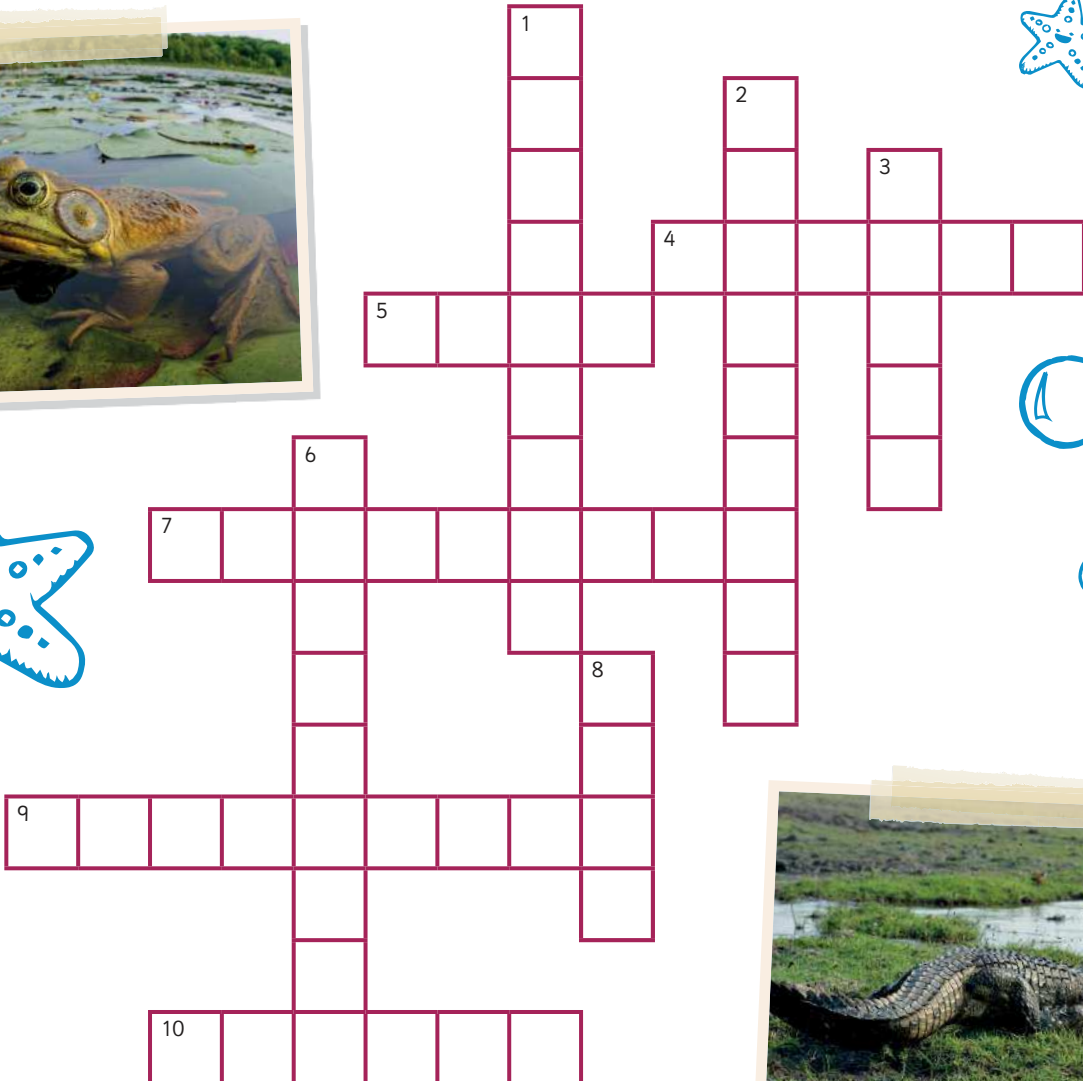
9 Where can you find living things with these adaptations? Write them in the correct ecosystem. Can you add any other adaptations?

thick fur   nocturnal   spines   thick layer of fat   brown fur   white fur

Desert	Tundra
<hr/>	<hr/>
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10 Complete the crossword using words from the unit.





DOWN

- 1 A large animal with lots of teeth that lives in a freshwater ecosystem.
- 2 A large protist that lives in a marine ecosystem.
- 3 A body of freshwater that flows from one place to another.
- 6 Home to about a quarter of marine life.
- 8 Small body of water with a variety of aquatic life.

ACROSS

- 4 The largest ecosystem on Earth.
- 5 Amphibian that lives in a freshwater ecosystem.
- 7 Where land and water meet.
- 9 Invertebrate that can stick to the surface of rocks.
- 10 Coral reefs provide this for many marine animals.

## 11 Read the text about city animals and choose the correct answer.

### Left home for the city

As cities grow larger and natural places get smaller, more animals are moving into urban areas. Mice, rats and ants are very successful urban animals, but bigger animals, such as bears and coyotes are starting to move too.

In some places, bears look for food in rubbish bins rather than scavenging in forests. Coyotes have been spotted in every corner of the United States, including New York City. The ability of these animals to adapt is amazing. They have even learnt where to safely cross roads, so that they do not get run over by cars.

Scientists have found that city birds demonstrate *street smarts*. This means they have more knowledge to deal with an urban environment. Some can even open containers better than their wild cousins. Who knows what urban ecosystems will look like in the future and which animals will become our neighbours!



- 1 Animals are moving into urban areas because:
  - a cities are getting smaller.
  - b natural habitats are reducing in size.
  - c they prefer to be around people.
- 2 Bears look for food:
  - a in rubbish bins.
  - b in New York City.
  - c in taxis.
- 3 How have coyotes learnt to survive in cities?
  - a They have learnt to open containers.
  - b They have learnt to drive cars.
  - c They have learnt to safely cross roads.
- 4 Where have coyotes been seen?
  - a Only in New York City.
  - b On street corners.
  - c All over the USA.
- 5 City birds with street smarts:
  - a live longer than birds in natural habitats.
  - b know how to deal with living in the city.
  - c have difficulty finding containers.

