Collins



Second Edition

Science 1 Around You

Student Book



Living World

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Science Around You Student Book



Unit Our senses

Lesson 1: The sense organs

Humans have five **sense organs**. We use each sense organ for a different **sense**.

We use our **eyes** to see. This is our sense of **sight**.

We use our **ears** to hear. This is our sense of **hearing**.

We use our **nose** to smell. This is our sense of **smell**.

We use our **tongue** to taste. This is our sense of **taste**.

We use our **skin** to feel. This is our sense of **touch**. Our bodies are covered in skin

I am learning about my senses.

Key words

sense organ

عضو الحاسة

eyes

عيون

ear

الأذن أنف

nose

tongue

اللسان

• skin

جلد

We often use more than one sense at the same time, such as smell and taste.

1 Dook at the picture. Identify the sense and sense organs the children are using. Describe how they are using them.

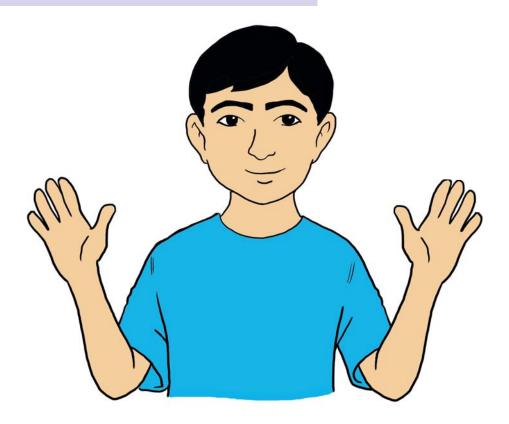
	Which senses of	and sense organs do you us	e when you eat an orange?
3	Which senses a	nd sense organs do you use	e when you cross a road?
4	Describe to	a partner one way you have	e used each of your five
	-	nd explain how it was usefu	•
			Investigation
Ι.			– investigation 🧪 🗀
{	_	ects inside or outside your	classroom. Choose three
*	_	and identify the senses you	classroom. Choose three
;	of the objects	and identify the senses you	classroom. Choose three
	of the objects Complete the	and identify the senses you table.	classroom. Choose three used to examine them.
	of the objects Complete the	and identify the senses you table.	classroom. Choose three used to examine them.
	of the objects Complete the	and identify the senses you table.	classroom. Choose three used to examine them.
	of the objects Complete the	and identify the senses you table.	classroom. Choose three used to examine them.

Investigation



6 a Label the sense organs in the diagram. Use words from the box.

skin nose ears eyes



b Say what each sense organ does.

The nose		

The tongue

The skin

The ears

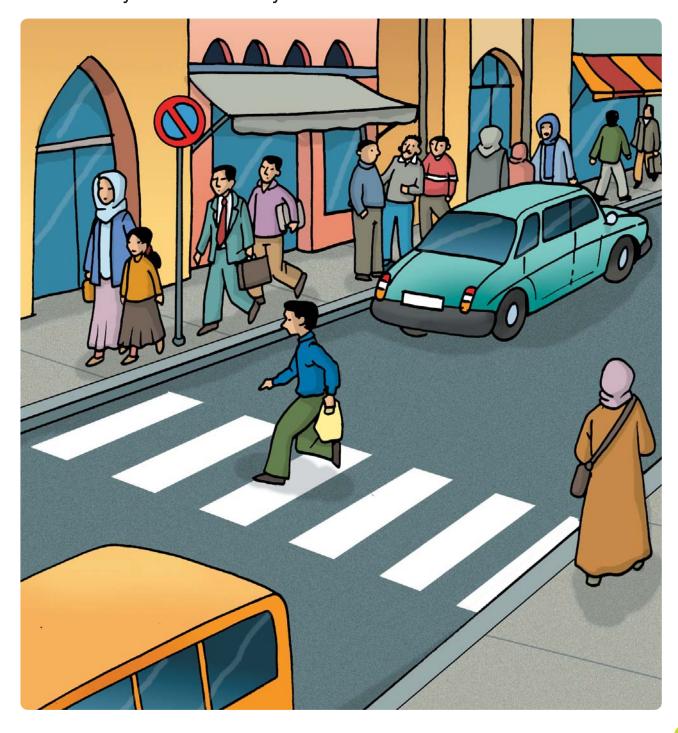
The eyes

Lesson 2: Sight and hearing

Our eyes give us sight and allow us to see things. Our ears let us hear things. Our senses can warn us about danger and help keep us safe. I am learning about sight and hearing.

Key words

- sight
- لنظر
- hearing لسمع
- 1 What can the people in the picture see? What can they hear? Describe how your senses help to keep you safe when you cross a busy road.



Unit 1 • Our senses

2	How do you use	your senses when you are talking to your friends?
3	Which senses do	you use when you play music? How?
4	Can you use mo	re than one sense at the same time?
		Investigation
	a Listen to eigl	Investigation Investigation of the different sounds. Draw or write down what you
	hear. Use thi	· · · · · · · · · · · · · · · · · · ·
	Sound 1	
	Sound 2	
	Sound 3	

Sound 4	
Sound 5	
Sound 6	
Sound 7	
Sound 8	

b Use a hand lens to look at four objects. What can you see? Draw or write it in the table.

Object	What is it?	What can you see?
1		
2		
3		
4		

Lesson 3: Taste, touch and smell

We taste things with our tongue and smell things with our nose. We use all of our body to feel things such as whether it is hot or cold, or if something is rough or smooth.

Our senses can warn us about bad things, such as the smell of fire or the taste of sour milk.

What is the boy eating? Does it look good to eat? What can he smell?

I am learning about taste. touch and smell.

Key words

- taste
- تذوق
- touch
- حاسة الشم smell
- feel



- 2 Phink of three things that smell good. Think of three things that smell bad. Compare how they smell.
- 3 What can you feel without touching it?

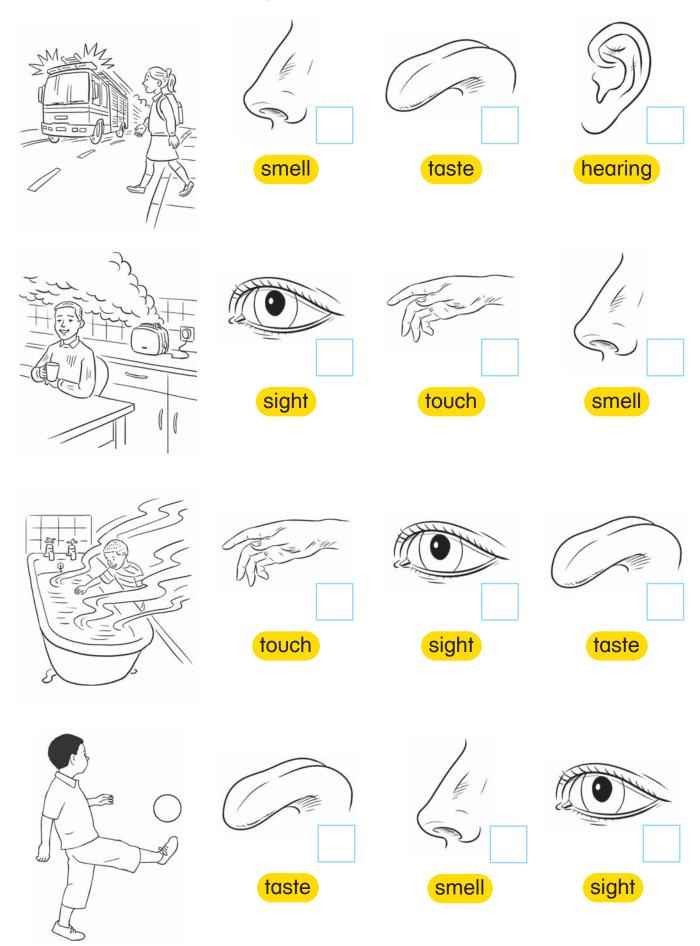
Investigation



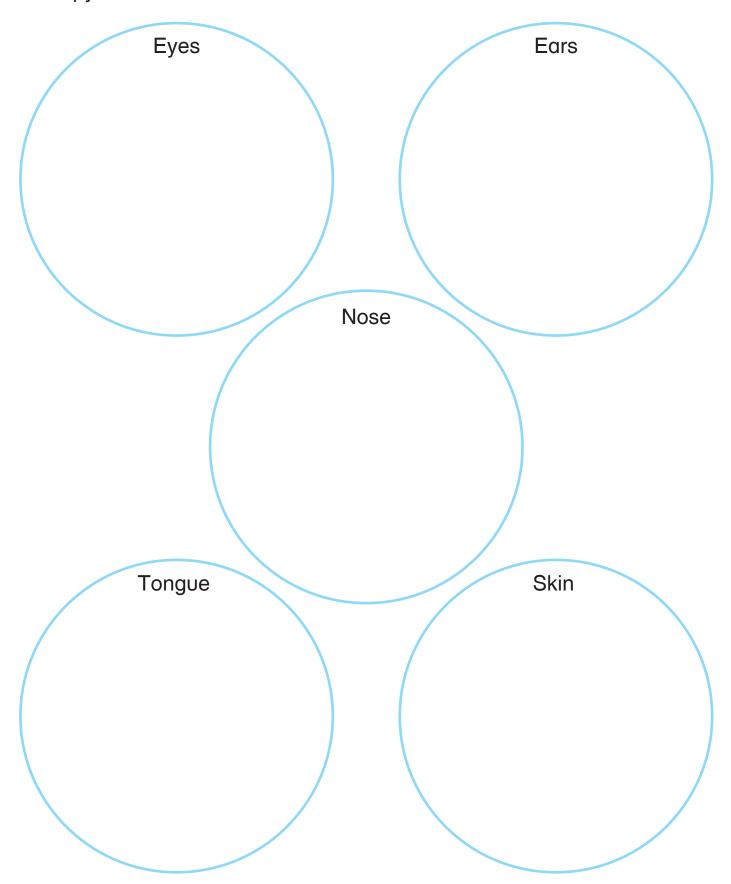
4 Your teacher will give you four pots. Smell each pot and draw a picture of the fruit that you think is inside it.

1	2
3	4
3	4
3	4
3	4
3	4

5 Tick (\checkmark) the sense that you would use in each situation.



6 Look at the words your teacher has written on the board. Copy them into the correct circles.



Lesson 4 Review: My senses

Our sense organs let us see, hear, smell, taste and feel things. Our senses are very important. They tell us about the world around us. Our senses tell us about good things such as the taste of delicious food and the sound of music.

I know about my sense organs.

Key words

sense organ

عضو الحاسة

1 Which sense organs are the family in the picture using?

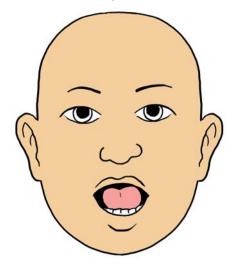


2	What can their senses tell them about different thing	s on the	beach?
3	Which parts of the body help you see?		
	Which parts of the body help you hear?		
	Which parts of the body help you smell?		
	Which parts of the body help you taste?		
	Which parts of the body help you touch?		
	What have you learned?		
	In this unit you found out about the sense organs and senses in everyday life.	how we	use our
	How sure are you about what you have learned? Circle your answers.	sure	not sure
,	 I know that our senses are sight, hearing, smell, taste and touch. 		
'	 I can match up each sense with its sense organ. 		
,	I know that our senses keep us safe.		
,	I know that we sometimes use more than one sense at a time.		
,	 I can describe what things look like, sound like, smell like, taste like and feel like. 		
,	I can identify some things by using my senses carefully		

Assess yourself

1 Look at the picture of the face. Draw a line between the sense words in boxes and the sense organ in the picture.

sight



smell

taste

hearing

- 2 Circle two senses to make this sentence correct.
 When you cross a road, you should look / smell and touch / listen to stay safe.
- 3 Circle two words to make this sentence correct.
 When people get older / babies they sometimes lose their sight / touch so they need more help.
- 4 Which sense organ is being used in each sentence? Write A, B, C or D.









- The painting looks beautiful.
- The flowers smell nice.
- I can hear the baby crying.
- That cactus feels prickly.

Unit 2 How we grow and change

Lesson 1: Our bodies grow

As we grow, all parts of our body grow bigger until we reach adulthood. Some children grow faster than other children.

1 — Look at Shaikha and Budoor. Who is taller? Who is shorter? Who has grown faster?

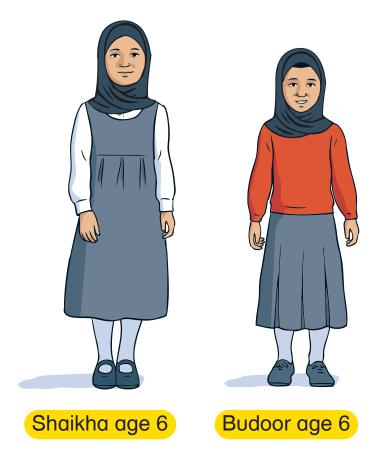
body grows.

I am learning how my

Key words

measure

- grow
- طول taller •
- قصر shorter •
- hand span اتساع اليد
- compare يقارن



- 2 Look at your friends. If someone has grown faster, will they be taller or shorter?
- 3 Do you think we grow at the same speed all the time?

Unit 2 • How we grow and change

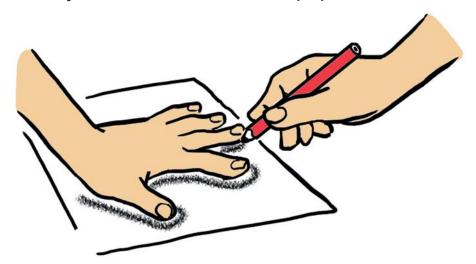
vvnen d	o you thin	к we gro	w taster	?		
					Troversations	
						ation 🔎
picture	of yourse	ne ways elf in the	you are middle c	cnanging of this box	and growing and create	g. Draw a a mind map.

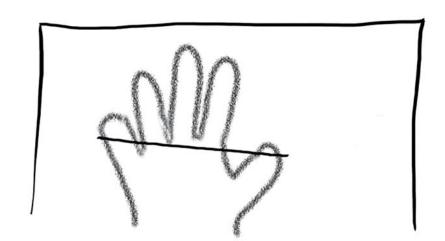
Investigation



6 Measure your hand span. Compare it with your classmates' hand spans.

Put your hand on a sheet of paper and draw round it.





		***		•	
Compare	your hand	span with	the rest	of your	group.

Who has the biggest hand span?

Who has the smallest hand span?

Does the oldest person have the biggest hand span?

Lesson 2: Our bodies change

We change in many ways as we get older. One way of knowing that we are growing up is when our clothes and shoes become too small for us!

1 Talk about the changes to our bodies as we get older.

I am learning that we change as we get older.

Key words

- bigger
- کبر
- longer

أطول



2 Look at the picture. Which parts of the baby's body looks big?

When I was three	How I look now
When I was three	How I look now
When I was three How do our legs change	
How do our legs change	is we get older?
How do our legs change	
How do our legs change	is we get older?
How do our legs change	is we get older?
How do our legs change	is we get older?
How do our legs change	is we get older?

Investi	gation

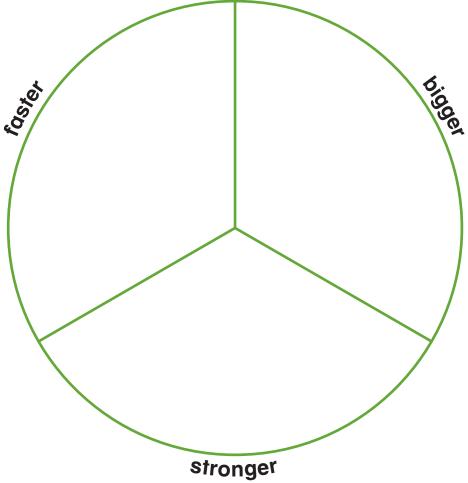


	Stick your baby photo and the photo of how you look today in the space below.			
Make a list	et of all the change es.	es you can id	entify betwee	n the

Investigation



8 This diagram names three ways you have grown and changed. Draw or write three things you can do now because you are bigger, stronger and faster than when you were a baby.



stronger
How are you bigger?
How are you stronger?
How are you faster?

Lesson 3: What can we do?

As we get older we can do more things and look after ourselves. We learn how to dress and feed ourselves. We get stronger and become more independent.

1 Look at this picture of a family.
Draw a circle around the head of the oldest person.

Draw a tick (\checkmark) next to the youngest person.

Put two ticks $(\checkmark \checkmark)$ next to the second youngest person.

I am learning that we can do different things at different ages.

Key words

learn

يتعلم

talk

يتحدث

walk

يمسي

یتحدث speak



What can the grandfather do that the baby cannot do?		
What can the boy do that his grandparents cannot do?		
How is the sister different to the grandmother?		
When do we stop growing?		

Lesson 4 Review: How our bodies change

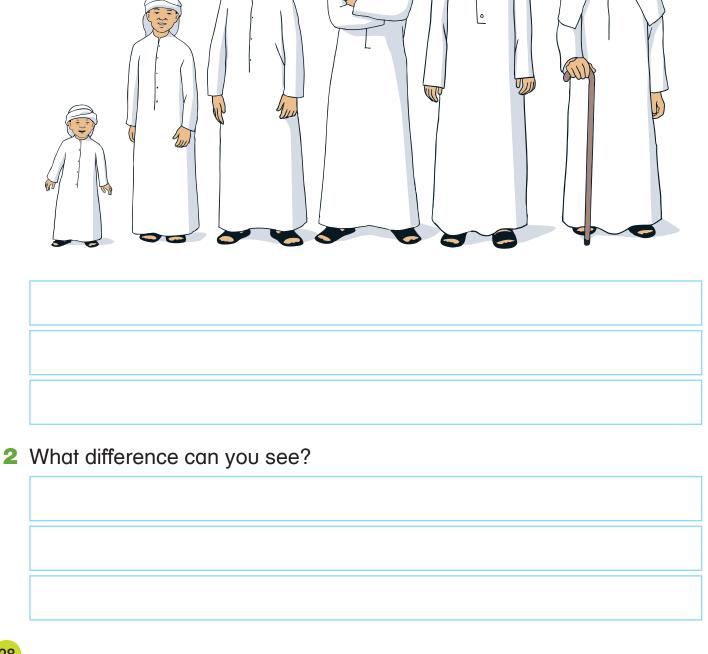
People change as they get older. They learn to do different things at different ages.

1 Make a list of some things that are the same about the people in the picture.

I know how our bodies grow and change.

Key words

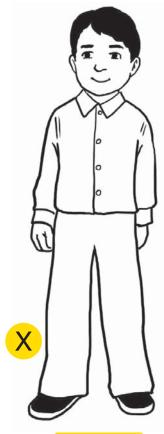
grow



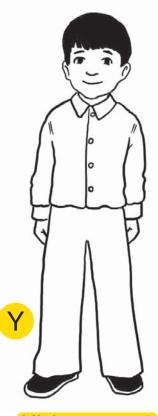
3	How have you changed since you were a baby?		
4	What will you be able to do when you are an adult the do now?	nat you c	annot
	What have you learned?		
:	In this unit you found out about the we change as we	grow.	
	How sure are you about what you have learned? Circle your answers.	sure	not sure
(I know that children grow.		
	I know that some children grow faster than others.		
	 I know that babies grow faster than older children. 		
•	 I know that when I grow, I get taller and my hands get bigger. 		
•	I know that when we become adults we stop growing.		
•	 I know that our body shape changes as we get older. 		
,	I know that as we grow older we learn to do more things.		
'	I can describe what people can do at		

Assess yourself

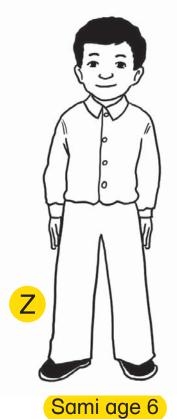
1 Look at the picture of the boys.



Ali age 6



Hisham age 6



- Who is taller than Z?
- Who has grown faster than Y?
- Who is shorter than X?
- 2 Circle **one** word that could be used to complete the sentence.

Babies have big com

compared to the rest of their body.

feet heads arms legs hands

- 3 Complete the sentences about Faisal's baby sister. Circle your answers.
 - Her legs are **longer** / **shorter** than mine.
 - She cannot walk / sleep.
 - When she is 2 she will be able to run / read.



4 Faisal's mother is talking. Complete her sentences with the words in the box.

little growing taller









Unit 3 Living and non-living things

Lesson 1: Living or non-living?

The things around us may be living or non-living. Living things may be animals or plants. All living things feed, grow, move and have young.

There are many different types of living things. We can sort all living things into groups. The two main groups are plants and animals. If something is alive, it is a plant or an animal.

I am learning how living things are different from non-living things.

Key words

living

عبش

non-living

غير حي (جماد)

animal

حيوان

plant

نبات

Which things in the picture are living? Which are non-living? What do living things need to stay alive?



What are the differences between living and non-living things?

3 Look at these pictures.









Which of these things are living?

4 Compare these two pictures.





- a How are they the same?
- **b** How are they different?
- c What can the bird do that the statue cannot do?
- 5 Is a wooden gate a living thing? Why do you think this?

Unit 3 • Living and non-living things

Stick some of them in the spaces below. Label each picture 'living' or 'non-living'.		
living / non-living	living / non-living	living / non-living
living / non-living	living / non-living	living / non-living
living / non-living	living / non-living	living / non-living

Lesson 2: Fish, birds, mammals

Fish, birds and mammals are three different types of animals. Fish have scales, fins and gills. Birds have feathers, beaks and wings. Mammals have fur or hair and do not lay eggs.

1 — Look at the animals. Put them into pairs.

I am learning about fish, birds and mammals.

Key words

- bird
- عصفور
- fish
- سمك
- mammal













Unit 3 • Living and non-living things

	The objection of the state of t
2	Why is a dugong a mammal?
	viriy is a dogorig a mammar:
2	The penauin eagnet fly. Explain how you know it is a bird
3	The penguin cannot fly. Explain how you know it is a bird.
	Investigation 🔎 🗀
4	Draw a fish, a bird and a mammal. Label the features.
1	

Lesson 3: Odd one out!

Animals can be sorted into more groups such as reptiles, amphibians, insects and spiders. Reptiles are cold blooded, they have scaly skin and lay their eggs on land.

Amphibians are cold-blooded, they spend part of their life in water and lay their eggs in water.

Insects have six legs and three body segments.

Spiders have eight legs and two body segments.

I am learning how to sort animals into groups.

Key words

- bird
- عصفور
- spider
- عنكبوت

fish

- للمك
- insect

mammal

- حشرة الثديات
- reptile
- الزواحف

1 Sort these animal pictures into different groups.



















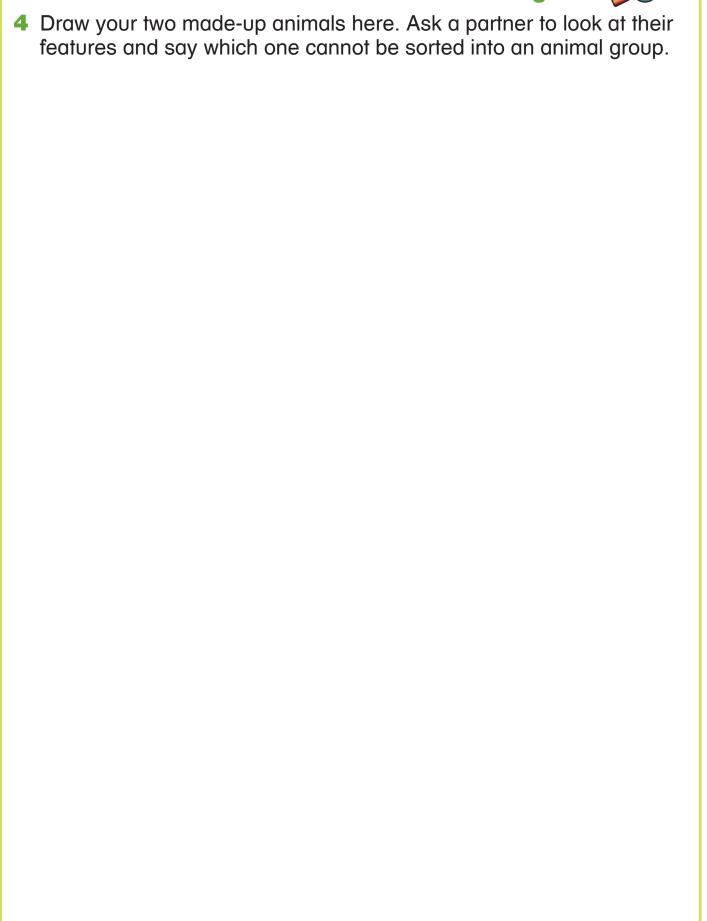






Unit 3 • Living and non-living things

2	Compare two of the animals. List what is the same about them and what is different.
3	Look at these groups of animals. Tick the odd-one-out in each group and say why it is different.
	Why is it the odd one out?
	Why is it the odd one out?
	Why is it the odd one out?



Lesson 4 Review: Living things

Plants and animals are living things. We can sort them into different groups.

Look at the picture carefully and then answer the questions about it.

I can sort living things into groups.

Key words

- living
- non-living

غير حي (جماد)



Name five things which are living.

2 Name five things which are non-living.

9 -	 9		

Name a plant and an animal. How do you know which are plants?
Find the birds. How can you tell they are birds?
Find a mammal, a spider and an insect. How do you know which they are?
Toads lay eggs in water. Which animal group do they belong to?
Investigation
Investigation a Count how many times the fish moved its gills (or mouth) in one minute.
Record it here
b How many times did your partner breathe in one minute?
c Compare the two results. Who took the most number of breaths?

d What is the same about the way humans and What is different?	fish breath	e?
What have you learned?		
In this unit you found out about the differences between non-living things.	veen living	and
How sure are you about what you have learned? Circle your answers.	sure	not sure
 I can say if something is living or non-living. 	<u></u>	<u></u>
I can group living things as animals or plants.		
 I know that living things grow, they have senses, they move, and they produce young. 		
 I know that living things need to feed and breathe. 		
 I know that some animals live on land, some live in water, and some live in the air. 		
 I know that some animals are mammals, some are fish, and some are birds. 		
 I can describe some features of mammals, fish and birds. 		
 I know that there are also reptiles, amphibians, insects and spiders. 		
 I can describe some features of reptiles and insects. 		
• I can sort animals into their groups.		

Assess yourself

A	ssess yoursell	
1	Tick (✓) the living things. (Cross (X) the non-living things.
	The state of the s	
2	Draw a line to match each	animal with a fact about it.
	birds	do not lay eggs
	amphibians	can fly
	mammals	live near water
	insects	have six legs
3	How does a fish breathe?	

Unit 4 People and animals need energy

Lesson 1: Food

Food provides us with all the energy we need to do things such as moving, playing, talking and reading. We need to eat healthy foods in order to grow and stay well.

Healthy foods are things such as fruit, vegetables, bread, rice, fish and eggs. We should eat these every day. Foods like meat, milk and cheese are also good for us. Foods that have a lot of sugar, salt and fat in them are unhealthy. We should not eat these foods very often.

I am learning that I get my energy from food.

Key words

- food
- عام
- energy
- طاقة
- healthy
- عسي
- movegrow
- . .











Name some of the foods can you see in the pictures.

2	Name some other	er foods.
3	Which foods do	vou like?
	, and the same designation of	, 00 iii.0 i
		Investigation
	L Design a health	Investigation Investigation we week at your school.
ľ		hat you would like to eat each day.
	Sunday	
	Monday	
	Tuesday	
	,	
	Wednesday	
	Thursday	
	Which is your fo	avourite meal?

Unit 4 • People and animals need energy

5 Look at the pictures. Circle the healthy foods and drinks.



Lesson 2: What do I need energy for?

Energy makes things happen. Food is our source of energy and is also what helps us to grow and keep healthy.

1 Look at the pictures of Salem. What is he doing?

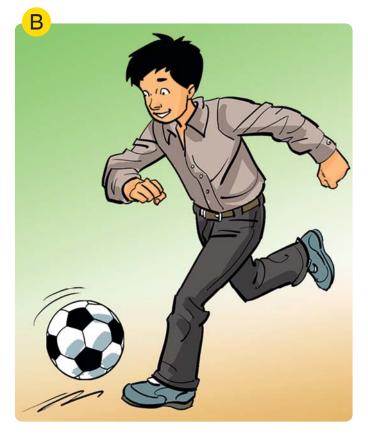
I am learning that food gives me energy to move and grow.

Key words

- energy
- طاقة
- movement







- 2 What time of day is it in the first picture?
- 3 Which meal gave Salem the energy to play football?



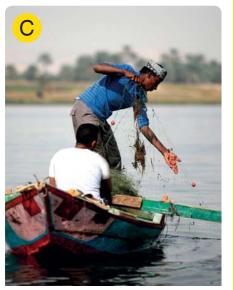
4 Draw your breakfast and three things you needed energy for on your way to school.

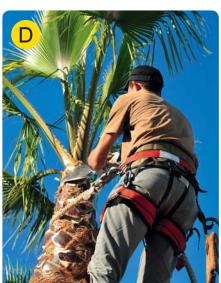
My breakfast	On my way to school I needed energy for
On my way to school I needed energy for	On my way to school I needed energy for



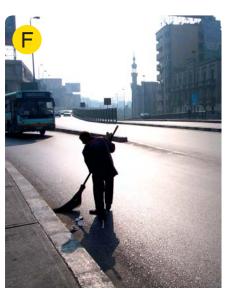












5 a What does each worker need energy for?

A	В
С	D
E	F

b Which jobs need lots of energy?



6 Your teacher will give you some pictures of food. Match the activities with the correct meal and stick them here.

Dinner menu	Breakfast menu	Lunch menu
rice bean stew grilled vegetables bread sweet pastries	bread bolied eggs cheese tea juice	salad falafel grilled meat yogurt drink
coffee		olives dates

Lesson 3: Animals need to eat

Some animals eat only plants, some eat only meat, some eat both. Every animal has a particular diet that it needs, in order to stay healthy. If it eats the wrong foods or too much food the animal may become unhealthy.

1 — Look at the pictures of the animals and discuss what they eat.

I am learning that animals need to eat.

Key words

- cat
- قطة
- horse

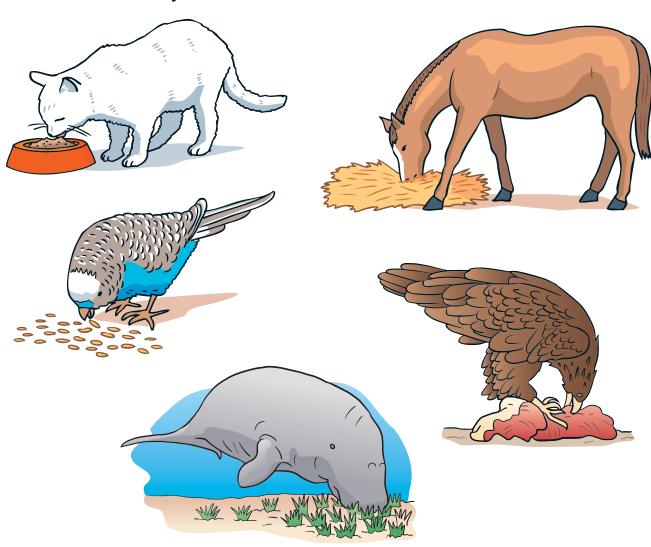
حصان

budgie

لبغبغاء

diet

حمية

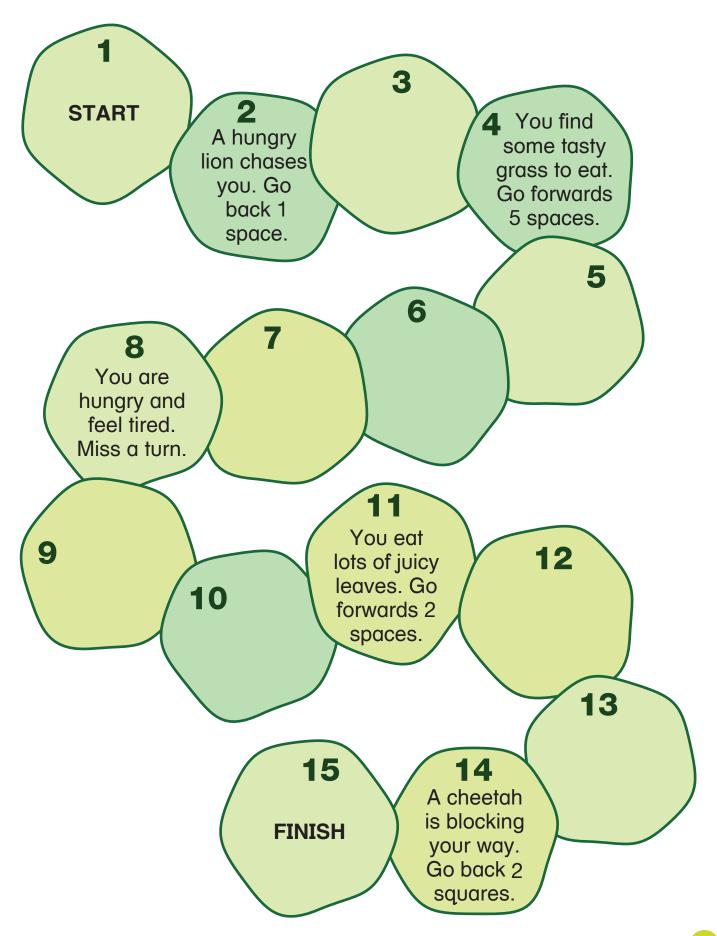


2 What might happen if an animal eats too much food?

Unit 4 • People and animals need energy

3	Sort the animals into two groups. Why have you chosen these groups?
	Investigation 🔎 🗀
4	Draw a picture of an animal that gets its energy from meat and an animal that gets its energy from plants.

5 You are a gazelle trying to reach the water hole. Spin the spinner and move your counter along the board.



Lesson 4 Review: Animal antics

Animals need energy to move around and to grow. They get their energy from the food they eat. Different animals eat different types of food. Animals can be grouped into those that eat meat and those that eat plants.

Talk about the animals in the pictures. How are the animals moving?

Choose from running,

hopping or flying.

I am learning that animals get their energy from food.

Key words

- run
- جری
- hop
- حجل
- fly
- لطيران

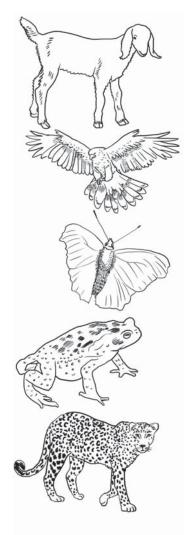


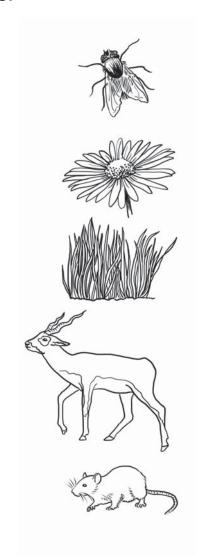


2 Where did the animals get their energy from?

3	What food do these animals eat?
4	Listen to the story your teacher will read to you. Write the name, or draw a picture, of the animals in the correct circle.
	Animals that eat plants
	Animals that eat meat

5 Draw a line to match each animal to the food it eats.





Complete this sentence:

Animals get their energy from

What have you learned?

In this unit you found out that people and animals eat food to get energy.

How sure are you about what you have learned? Circle your answers.

• I can say if something is living or non-living.

I can name some healthy foods.

sure not sure









 To be healthy, we should eat more of some foods than others.





I know that my energy comes from the food I eat.





 I know that a meal gives me the energy I need to do activity.





• I can describe things that I do that need energy.





• I know that some activities, like running and jumping, need a lot of energy.





 I know that animals need energy from their food in order to move.





 I know that some animals eat plants and some animals eat meat.





Assess yourself





1 Which man is using the most energy?



2 Is man A using energy?



Unit 4 • People and animals need energy

3	Where do we get our energy from?
4	What foods should you eat at breakfast to give you enough energy?
	This is because
5	Name two things we should eat less of to stay healthy.
6	Name two things we should eat more of to stay healthy.
7	Circle the odd one out.
	Why is it the odd one out?

Unit 5 Comparing animals

Lesson 1: Different animals

Animals are found all over the Earth. They live in very hot places and very cold places. The places they live are called habitats. Animals are adapted to the habitat they live in. For example, a fish is adapted to living and breathing in water.

1 Look at the pictures of the polar bear and the brown bear. How are they the same? How are they different?

I am learning to compare different types of animals.

Key words

- habitat
 موطن، مسكن طبيعي
- adapted تكيف، تأقلم
- huddle یحتشد، یتجمهر، یتجمع





Unit 5 • Comparing animals

2 Compare the arctic fox and the fennec fox.









3 Draw a diagram of your 'bear glove' investigation here.



4 Look at the picture of penguins huddling together. The penguins take it in turns to stand in the middle and around the edges of the huddle.



a How does this help to keep them warm?

b Draw, label and record your investigation here.

Number of minutes	5	10	15	20	25	30
Temperature of the middle can						
Temperature of the outer can						

c What do you notice about the temperatures?

d What does this tell you about why penguins huddle together?

Lesson 2: Animals on the move

Different animals move in different ways. The way an animal moves depends if it lives in water or on land and how it catches or searches for food.

Look at the animals. What are they doing?





I am learning how different animals move.

Key words

- fly الطيران
- climb يتسلق
- swing تأرجح
- jump
- يقفز run
- slither







2 The grebe is a water bird. Describe the different ways it moves. Which parts of its body does it use for each type of movement?

How do these animals	move? Tic	ck (✓) the bo	xes.	
Animal	Walks	Slithers	Flies	Othe
The second secon				
ELLOW STATE OF THE				

Lesson 3: How animals change

All animals change as they grow. Some animals change shape as they grow. Some animals, such as frogs or butterflies, have different types of bodies at different stages of their lives.

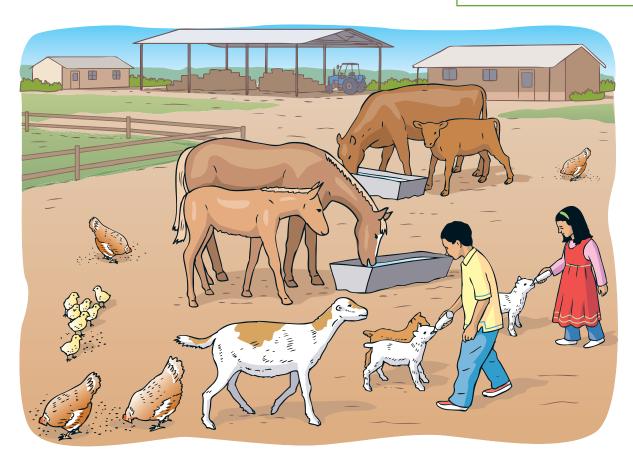
I am learning how animals change as they grow into adults.

Key words

- young
- صغير
- old

کبیر

دورة الحياة life cycle •



- 2 How many young animals can you see?
- 3 How many older animals can you see?
- 4 How can you tell if the animals are young?

5	Name some animals that look very different when they are young from when they are adults. Say how they change.		
6	Stick photos (or draw) your life cycle models here.		

Lesson 4 Review: Animals

Some animals, such as turtles, are able to move and feed themselves as soon as they hatch. Other animals, such as birds, need to be looked after by their parents.

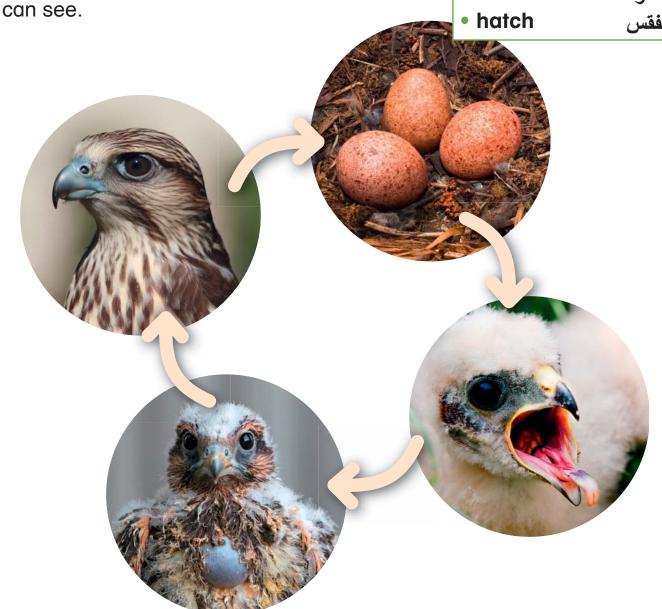
1 Dook at the pictures and say what you

I know that animals need to eat and that they change as they grow older.

Key words

egg

chick



2 How does the young bird get the food it needs to grow?

3	How does the young bird change as it grows?				
4	The adult bird hunts for its food. What senses will it use?				
5	Compare two different animals. Choose one from Abu Dhabi and the other from a cold habitat. Draw and label them here.				

What have you learned?

In this unit you found out about how animals move and change as they grow.

How sure are you about what you have learned? Circle your answers. sure not sure I can say if something is living or non-living. I can describe how different animals move. I know that all young animals change as they grow. I know that some young animals look like small adult animals, but some look very different from the adults. I know that birds hatch from eggs as chicks, then grow and change. I know that frogs and toads come from eggs as tadpoles, then grow and change.

as caterpillars.
 I know that some young animals need to be looked after by parents, but some can find food themselves.

I know that butterflies first come from eggs

 I know that animals use their senses to find food.



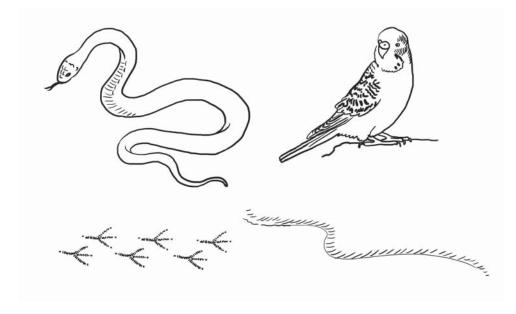




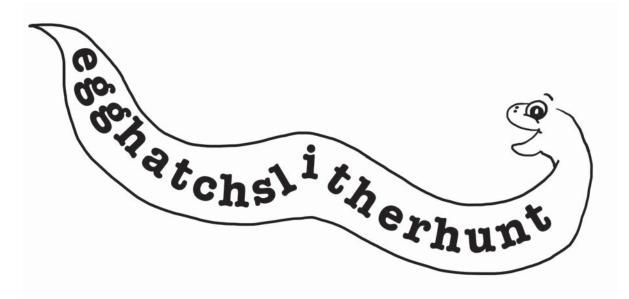


Assess yourself

1 Draw lines from the animal to the tracks it makes.



2 Find one snake word and circle it.



- 3 Complete the sentences by underlining the correct word choice.
 - Young cats are called chicks / kittens / lambs.
 - Many insects have legs / eggs / wings, but some do not.



Lesson 1: Deserts

A desert is a place where it does not rain very often. Deserts can be hot or cold. The animals and plants that live in deserts are adapted to suit their habitat.

1 — Look at the pictures. What can you see?

I am learning about a desert habitat.

Key words

desert

صحراء

habitat

موطن، مسكن طبيعي

- تكيف، تأقلم adapted •
- dry

حفاف









2 What animals are found in hot and cold deserts? Choose one animal and say how it survives.

3 Describe some features of animals that survive in deserts.
Investigation 🔎
4 How are hot deserts and cold deserts similar? How are they different? How are penguins and camels suited to survive in their habitats? Draw pictures to illustrate this.

	JInvestigation 🔎 🖵
5 Draw a hot desert scene. Describe the character and the animals and plants that live there.	aracteristics of the habitat

Lesson 2: Oceans

An ocean or a sea is a very large body of water. Animals and plants found there are adapted to live under water.

1 — Look at the pictures. What can you see?

I am learning about an ocean habitat.

Key words

sea

- بحر
- ocean
- محبط
- marine
- بحر ي
- العشب البحري seaweed •







2 Name some plants and animals that live in the sea.

3 How are sea animals suited to living in their habitat? Give two examples.

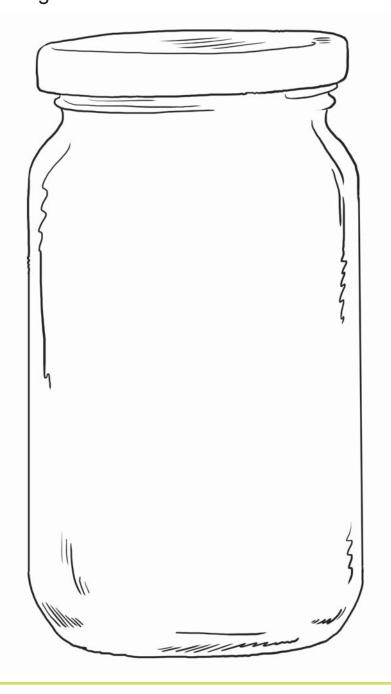
Unit 6 • Habitats

4	Where do most sea plants and animals live? Why do they live there?

Investigation



5 Make your own ocean jar. Label the plants and animals. Make sure they are in the right zones.



Lesson 3: Forests

There are many different kinds of forests around the world, for example, there are tropical rainforests, temperate rainforests and mangrove forests. Each of these types of forest has different habitats that affect the plants and animals that live there.

1 Why is this a good habitat for some animals?

I am learning about a forest habitat.

Key words

- forest
- غابة
- jungle
- أدغال
- creepers النباتات المتسلقة camouflage
- shade



2 Name some animals and plants that live in the rainforest.

Unit 6 • Habitats

3	What do animals need, so they can survive in the rainforest?
4	What features do the parrot and monkeys have, that allow them to survive in the rainforest?
	Investigation
ţ	Choose a rainforest animal and find out how it lives and survives. Draw a picture and describe its characteristics here.
Ì	
ľ	

	Investigation
6	Choose an animal from a rainforest habitat. Could it survive in an ocean or desert habitat? Write your answer here.

Lesson 4 Review: Habitats

Different animals and plants live in different habitats.

1 — Look at the pictures. Where do these animals and plants live?

I know about different habitats.

Key words

forest

غابة

ocean

desert

landscape

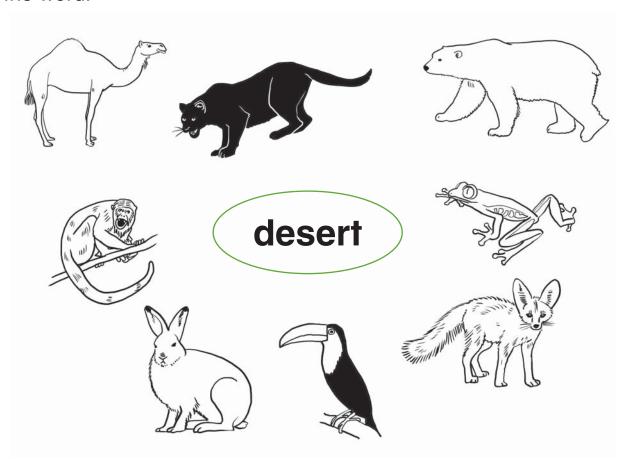


2 Look at the dolphin and fox. Where do they live? What features help them survive?

3	Look at the white bear. Where does it live? How do yo	ou know	?
4	Where do all these animals live? How did you decide	e?	
	,		
	What have you learned?		
	In this unit you found out about different habitats and animals and plants that live in them.	some of	the
	How sure are you about what you have learned? Circle your answers.	sure	not sure
'	I know that a desert is a very dry region.		
	I know that there are hot deserts, as in the UAE, and cold deserts such as Antarctica.		
	I know that a habitat is the place where an animal or plant lives.		
•	I know that animals and plants need special features to survive in desert habitats.		
•	I know that a rainforest is a forest of trees and plants in a hot, wet part of the world.		
	I can name some of the animals that live in a rainforest habitat.		
	I know that animals and plants in an ocean habitat have special features to live in the water.		
•	I can name some of the animals that live in an ocean habitat.		
(I can name and describe some of the animals and plants that live in desert habitats.		

Assess yourself

1 Which animals live in the desert? Draw a line from the animal to the word.



Which habitat do the other animals live in?

2 Choose an animal. What helps it to survive in its habitat?

The animal I have chosen is a

This animal has

This helps it to survive by

3 Circle the ocean words.

marine octopus sabkha mountain fox dugong

Unit Plants

Lesson 1: Plants all around

Plants are living things. Plants need water and light to grow and be healthy. Non-living things do not need water or light. Plants grow in many different places.

1 — Look at this picture. How many small plants can you see? How many big plants can you see?

I am learning about plants and where they grow.

Key words

- stem
- grow
- leaf



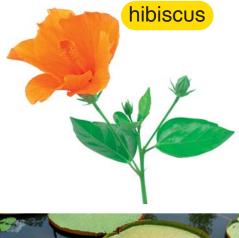
- 2 Where are the plants growing?
- **3** Where else do plants grow?

4 Look at these pictures. Which plants have brightly coloured flowers? Which plant has the most flowers? Which plant has fruit?











	$oldsymbol{oldsymbol{oldsymbol{oldsymbol{\square}}}}$ Investigation $oldsymbol{oldsymbol{\square}}$ $oldsymbol{oldsymbol{\square}}$
5 Draw one of the plants you have observe	
6 Decord volve colony investigation Draws	Investigation
6 Record your celery investigation. Draw we the start, after 10 minutes and then again	vhat the stem looks like at
	vhat the stem looks like at
	vhat the stem looks like at
	vhat the stem looks like at
	vhat the stem looks like at
	vhat the stem looks like at
	vhat the stem looks like at
	vhat the stem looks like at
	vhat the stem looks like at
	vhat the stem looks like at

	Investigation 🔎 $lacksquare$
7 Draw a picture of your plant. Add labels and different parts	
leaf	flower
etom	root
stem	root

Lesson 2: Plants need soil, water and light

Plants and seeds need soil, water and light to grow. Plants grown without light are often tall, thin and pale. Without water, plants droop or wilt. If they do get enough water they will die. Roots grow down into the soil and hold the plant firmly in the ground.

I am learning about plant growth.

Key words soil water light seed

1 — Look at the pictures of the plants. How are the plants the same? How are the plants different?



2 What do plants need to live?

Unit 7 • Plants

3	What do you think made the plants g	grow like this?
_		Investigation 🔎
4	Plant some bean seeds.	
	a Draw a picture of your seed.	
]
	b Plant your seed in some soil.	
	• Dut your plant in a cumpy place of	and water it event day
	c Put your plant in a sunny place of	and water it every day.
	100 min	

• Predict what your plant will look like when it has grown. Draw it here.



Lesson 3: Plant parts

All flowering plants have the same parts even though they may look different. They have leaves, roots, a stem, flowers, fruit and seeds. Not all plants produce flowers.

Look at the picture of a plant and name the parts.

I am learning about the parts of a plant.

Key words

leaf

- stem
- root
- flower زهرة ورقة
- fruit فاكهة



- Use the Keys words to label the parts of the plant.
- 3 Some plants are good to eat. Which parts can we eat?

4	What do the different parts of a plant do?

5 Go on a nature walk. Record the plants your teacher shows you.

Plant	1	2	3
Number of leaves			
Draw the leaf			
Describe the leaf			
Draw the flower			
Describe the flower			
Is the plant tall or small?			

Unit 7 • Plants

6	Draw an accurate picture of your leaf.
	Complete this sentence to describe your leaf.
	My leaf is

Lesson 4 Review: Plants

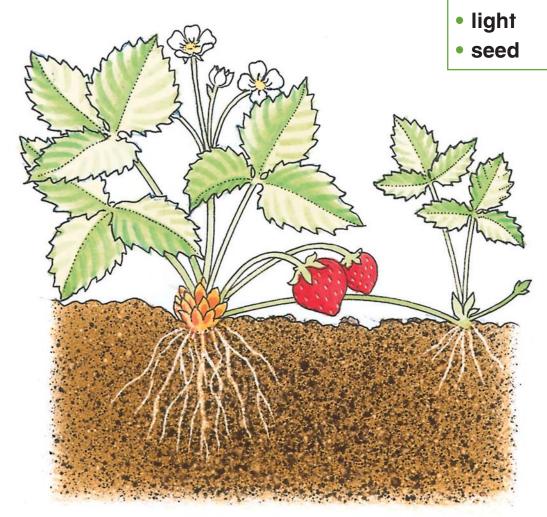
Plants may look different but they all have the same parts and need the same things to grow.

1 — Look at the plant and name as many parts as you can. Add labels to the picture.

I can name the parts of a plant and say what they do.

Key words

- soil
- تراب
- water
- الماء
- ضوء

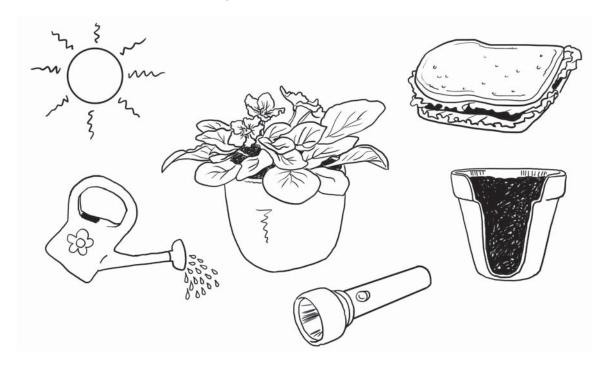


What do plants need, to grow?

3	How could we make the plants grow better?		
4	How do plants get the things they need to grow? Whethem to do this?	nich parts	s help
	What have you learned?	باد وارد او د	Ub a consider
	n this unit you found out about different plant parts a How sure are you about what you have learned?	na wnat	rney do.
	Circle your answers.	sure	not sure
•	I know that plants are alive.		
•	I can name the different parts of a plant.		
•	I know that each part of a plant has a job to do.	\odot	
•	I know that soil is a special material that plants grow well in.		
•	I know that to be healthy a plant needs light and water.		
•	I know that a bean plant grows from a bean seed, and a sunflower plant grows from a sunflower seed.		
•	I know that all plants have the same parts, but these may look very different.		
•	I have looked at and described some different types of a leaf and flower.		

Assess yourself

1 Link the plant to the things it needs. Draw lines.



- 2 True or False? Circle your answers.
 - Plants eat soil.
 True / False
 - Plants need soil so they can turn green.
 True / False
 - Water travels from the leaves to the roots.
 True / False
 - Roots help plants to stay in the ground.
 True / False
- 3 Label the diagram of the plant. Use the words in the box.

fruit stem flower leaf root



Unit 8 Growing plants

Lesson 1: Plants grow

We can measure plant growth in different ways. We call the stem of a tree its trunk. As a tree grows, a new layer of wood is added to the trunk every year. This growth can be seen in the trunk and branches of a tree as tree rings.

I am learning that all plants grow.

Key words

- grow
- tree rings
- rings حلقات جذوع الأشجار جذع
- trunk

1 — Look at the pictures of trees. Say what happens as they grow.









2	What happens to the trunk of the tree as it grows?
3	How can we measure how much a tree is growing?
4	Look at the rings in the tree trunk. How do you think they form?
	Investigation 🔎
5	Light investigation

Lesson 2: Plant roots

A plant's roots grow under the ground. The roots help to keep the plant in the soil. They also take in water and nutrients, which the plant turns into food.

Plants have different kinds of roots. Some plants have fibrous roots. These have many branches and spread out like the branches of a tree. Other plants have tap roots. A tap root is a single main root that grows straight down. The tap root may have smaller branches growing off it. Some tap roots, such as carrots, are edible.

I am learning about different plant roots.

Key words

root

- جذر
- nutrients

المواد الغذائية

- fibrous root
- جذور الصنوبر tap root •
- الصالحة للأكل edible •

1 — Look at the pictures. Talk about the different parts of the plants.



2 Label the roots of each plant. Say if they are a fibrous root or a tap root.

3	Name some plant roots that we co	n (eat.	
4	Why are roots important for a pla	nt?		
				_
_			Investigation 🔎	
Ę	Draw the roots of two different p	olai		
	Plant 1		Plant 2	

Investigation



6 Grow some beans in a bag. Record your investigation here. Use a ruler to measure the root growth.

Day	Root measurement	Shoot measurement	Bean plant drawing

Lesson 3: Plants change

The flowers on an adult plant form fruit. These fruit contain seeds. The seeds need water and warmth to start growing. Seeds grow into adult plants and the plant life cycle begins again.

1 Say what you can see in the pictures.

I am learning how plants change as they grow from a seed to an adult.

Key words

flower

- bud • fruit • seed • ripen

2 Label the five stages in a plant's life. Use the words from the box.

adult plant flower fruit germination seeds

3 What do seeds need to grow?

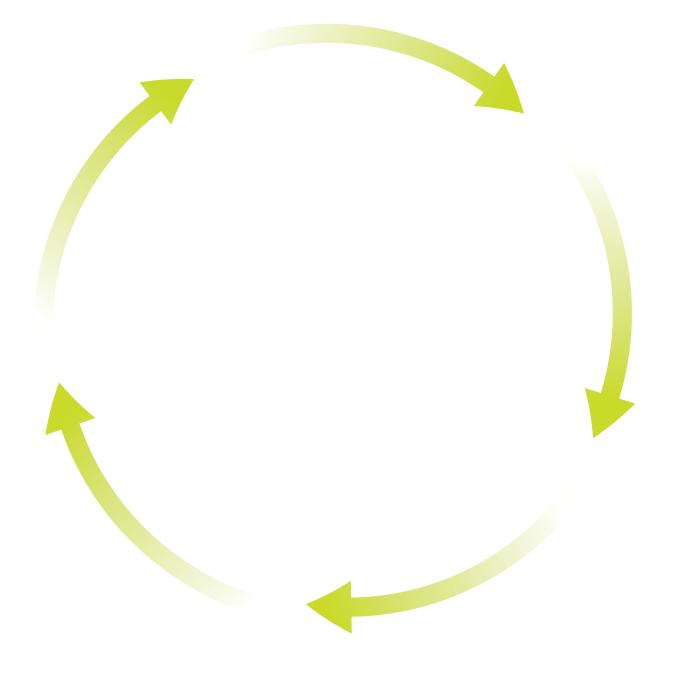
Unit 8 • Growing plants

	o all fruits change colour as they ripen? Give an example of two fruit nat change colour.
	Investigation 🔎
5	Draw pictures of the fruit you tasted. Tick the fruit you liked best. Which senses did you use?





6 Stick the pictures of the tomato plant life cycle in the space below. Put them in the correct order.



Add labels.

Say how the fruit of the tomato plant changes colour as it grows.

Lesson 4 Review:

How plants grow

Plants have roots to take in water. They need this water to grow. The fruit of a plant contain seeds. Seeds grow into new plants.

1 Look at these pictures of plants. Label the roots. Say if they are fibrous roots or tap roots.

I can describe how plants grow.

Key words

- root
- جذر
- seed

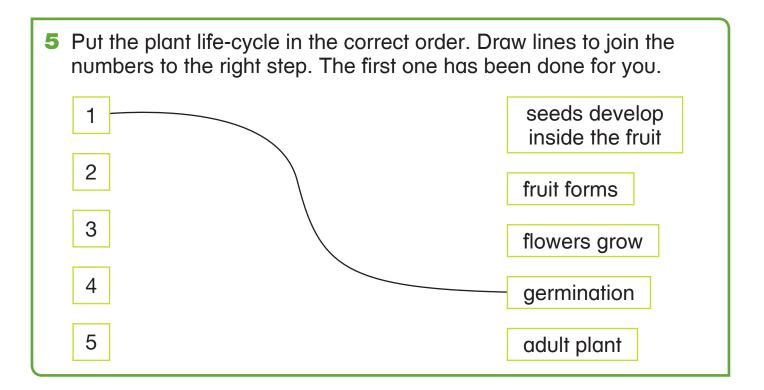
بذرة



2 Name a fruit that changes colour as it ripens.

3 How do plants	change as the	ey grow?		
Assess your	rself			
1 Which three r		at? Circle your	answers.	
tomato	carrot	radish	sunflower	
	sweet pot	ato tree		
2 Draw a fibrou the box.	s root in	3 Draw the b	a tap root in	
4 How do we fir	nd out the age	of a tree? Tic	k (✓) the right answer.	
 Counting ri 	ngs in the tree	e trunk.		
 Measuring 	height.			
 Counting th 	ne number of I	oranches.		

Unit 8 • Growing plants



Lesson 5: Flowers

Different plants have different flowers. The petals of a flower are often brightly coloured. Some flowers have a pleasant smell. The flowers of a plant grow into fruit.

1 — Talk about the flowers in the pictures.

I am learning about flowers from different plants.

Key words

- زهرة flower •
- مشرق، ساطع bright
- عاسة الشم smell •
- petals تويجية نبات











2 Where are the petals on a flower?

Unit 8 • Growing plants

3	Why do plants have flowers?	
4	How are plastic flowers different from real flowers?	
5	Draw a diagram of a flower.	
\lceil	petal	stamen
		stem

Lesson 6: Fruits, seeds and vegetables

Seeds come in a variety of shapes and sizes. Plants grow from seeds. Seeds are surrounded by a protective covering, the seed coat. The seed absorbs water, and eventually the seed coat bursts and the tip of the root of the new plant emerges.

A vegetable is a plant, or part of a plant, that we can eat. Vegetables can be stems, leaves, roots, flowers, fruits or seeds.

I am learning that different plants have different fruits and seeds.

Key words

seed

بذرة

skin

جلد

fruit

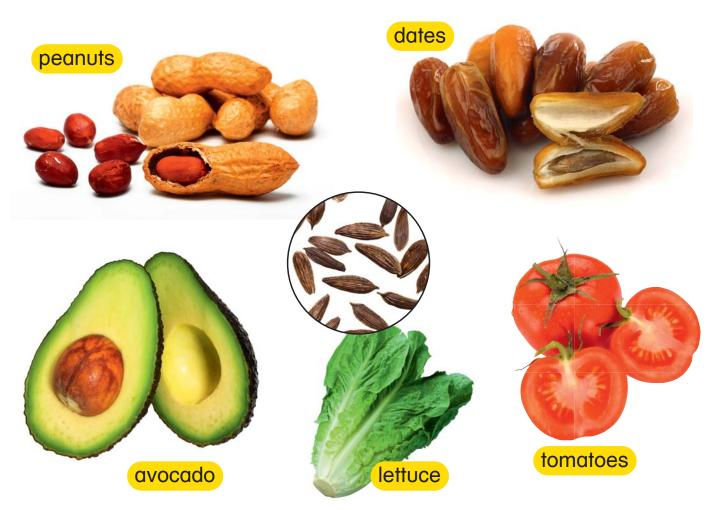
عاكهه

nut

جوز، بندق

سروات vegetable •

1 Palk about the seeds in the photographs.



2 Why do plants need seeds?

Unit 8 • Growing plants

3	Why do seeds contain stored food?				
4	How are the seeds in the photographs different?				
5	Seeds have a tough skin. What job does the skin do?				
6	Is a coconut a fruit or a seed? Why?				

Investigation	
---------------	--

7 Draw and record your stem, leaf, root and flower vegetables.		

Lesson 7: Seeds grow into plants

Seeds grow into the type of plant that made them.

1 — Look at the pictures. Identify the shoots. How could you measure them?

I am learning how seeds make new plants.

Key words

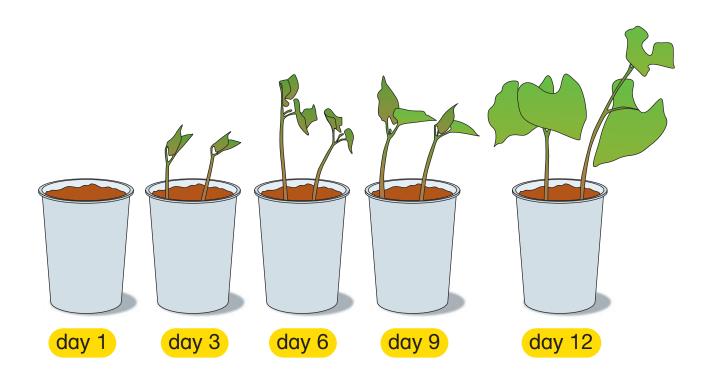
measure

مقياس

height

الطول من الأسفل الى الأعلى

- الطول (عرضي) length •
- compare يقارن



2	How do the leaves change as the bean plant grows?

3	What changes happen as the seed grows? Write a sentence about each change you can see.				
4	What will the plant look like on day 20? Draw a picture to show what you think will happen.				

Unit 8 • Growing plants

Record the	e bean seedlings		Investigo	ation 🔎
Plant number	How many days since the seed was planted	Number of leaves	Height of stem	Length of root

Investigation



7 Draw a diagram to show the stages in the growth of a seed.

Lesson 8 Review: Flowers, fruits and seeds

Different types of plants have different flowers, fruits and seeds.

1 — Look at the pictures of the flowers. Say how they are alike. Say how they are different.

I know that plants make fruit and seeds.

Key words

flower

زهرة

seed

بذرة

fruit

فاكهة



4	Why do some seeds grow better than others?

What have you learned?

In this unit you found out about how plants grow. How sure are you about what you have learned? Circle your answers.

I know that all plants grow.

- I know that some plants grow to be taller than others.
- I know that tree trunks get fatter, and there is a new ring of wood each year.
- I know that roots suck up water from the soil for the plant.
- I know that we can eat some roots.
- I have compared different types of flowers.
- I know that when flowers die, fruits form.
- I know that we can eat many, but not all, types of fruit.
- I know that fruits have seeds.
- I have planted a seed in soil and watched its growth.
- I can describe the stages in a plant's life.

sure not sure





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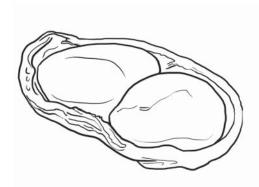
Assess yourself

1 Draw lines to link the words to the right part of the pictures.

petal

seed

tough skin





- 2 Complete the sentences about Khaled's flowers.
 Circle your answers.
 - My flowers have a lovely smell / shell.
 - The petals / seeds are brightly coloured.
 - The flowers attract / repel insects.
- 3 Complete the sentences with the word fruit or seed.
 - A peach is a
 - You will find one inside a cherry.
- 4 Name two things that a seed needs before it can germinate.

A seed must have

and

before it can germinate.

adapted

Adapted is something that has changed to suit conditions or needs.



animal

حيوان

An animal is any living being except a plant or a human being.



bigger

أكبر

Bigger is something which is larger.



bird

A bird is an animal with two legs, two wings, and feathers.





bud

A bud is a small, tight swelling on a tree or plant, which develops into a flower or a cluster of leaves.



budgie

A budgie is a type of bird. The full name for budgie is budgerigar.



camouflage

التمويه

Camouflage is hiding by having the same colour or appearance as the surroundings.



cat

A cat is any of the family of mammals that includes lions, tigers and domestic cats.



chick A chick is a young bird.



climb To climb is to move upwards.



compare Compare is to look at things together and see in what ways they are different or similar.



creepers

النباتات المتسلقة A creeper is a plant with long stems that wind themselves round things.



desert

كتكوت

يتسلق

The desert is a region of land with very little plant life, usually because of low rainfall.



diet

Diet is a person or animal's usual food that they eat.



dry

Dry is a lack of water.



حفاف

صحراء

ear

الأذن

to see.

The ears are the parts of your body on either side of your head with which you hear sounds.



edible

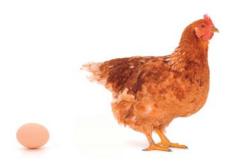
الصالحة للأكل

Edible is a food that is fit to be eaten.



egg

Eggs are laid by birds, insects, fish, reptiles and amphibians. The young animals hatch from these.



energy

طاقة

Energy is the physical ability to do active things; the power which drives machinery.



eyes

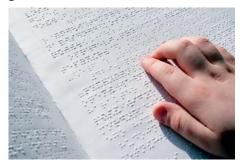
Eyes are the sense organs that allow us



feel

الأحساس

To feel is to examine something by touching it.



fibrous root

A fibrous root is a root system made up of lots of branching roots.



fish

A fish is a creature living in water that has a spine, gills, fins, and a scaly skin.



flower

ز هر ة

fruit

فاكهة

The flower is the part of a plant containing the reproductive organs from which the fruit or seeds develop. The fruit is the part of a plant that develops after the flower and contains the seeds; many fruits are edible.





fly
To fly is to move through the air either with

grow

نبت

To grow is to increase in size or amount.





food
A food is any substance consumed by an animal or plant to provide energy.

habitat موطن، مسكن طبيعي A habitat is the natural home of a plant or animal.





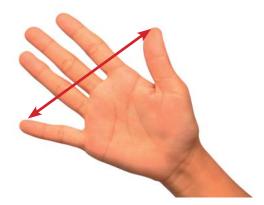
أغلبة A forest is a large area of trees growing close together.

hand span

اتساع اليد

Hand span is the widest distance between your thumb and smallest finger.





hatch

يفقس

To hatch is when a baby bird or reptile breaks out of its shell.



horse

hop

A horse is a large animal with a mane and long tail, on which people can ride.

healthy

height



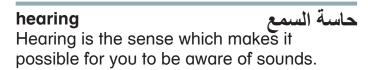
To be healthy is to be fit and well.





huddle

الله عنجمهر ، يتجمع To huddle is to sit or stand close to each other, often for warmth.







الطول من الأسفل الى الأعلى

The height of an object is its measurement from the bottom to the top.





An insect is a small creature with six legs, and usually has wings.

jump

بقفز

To jump is to spring off the ground using your leg muscles.



jungle

أدغال

A jungle is a dense tropical forest.



landscape

الطبيعة

Landscape is the view over an area of open land.



leaf

ورقة

A leaf is the flat green growth on the end of a twig or branch of a tree or other plant.



learn

يتعلم

To learn is to gain knowledge or a skill through studying or training.



الطول (عرضي) Length is the horizontal distance from one end of an object to the other.



life cycle

دورة الحياة

The life cycle of an animal or plant is the series of changes it goes through during its life.



light

ضوء

Light is brightness from the sun, fire, or lamps, that enables you to see things; a lamp or other device that gives out brightness.



living

Living is to be alive.



longer

أطول Longer means its length is greater than the thing it is being compared with.



mammal

الثديات Mammals are animals that give birth to live babies and feed their young with milk from

the mother's body.



marine

بحري Marine is something found in or produced by the seg or coors by the sea or ocean.



measure

To measure is to find out how big something is.



move

To move is to go to a different place or position. To move something means to change its place or position.



movement

حركة

Movement is the action of moving.



non-living

Non-living means not growing or breathing.

غير حي (جماد)



nose

The nose is the part of your face above your mouth which you use for smelling and breathing.



nut

A nut is a fruit with a hard shell and an edible centre.



nutrients

المواد الغذائية Nutrients are minerals required by plants and animals for growth.



ocean

The oceans are the five very large areas of sea on the Earth.



old

Old is used to give the age of someone or something as in '5 years old'.



petals

A petal is the coloured outer parts of a flower.



plant

A plant is a living thing that grows in the earth and has stem, leaves, and roots.



reptile

A reptile is an animal such as a snake or a lizard, which has scaly skin and lays eggs.

الز و احف



عضو الحاسة

ripen

To ripen is to become ready to eat.



root

A roots is the part of a plant that grow under the ground.



run

To run is to move quickly, leaving the ground during each stride.



sea

Sea is a large area of salt water which covers most of the Earth's surface.



seaweed ناضج

seaweed العثب البحري Seaweed is an algae that grows in the sea. Seaweeds do not have flowers or roots.



seed

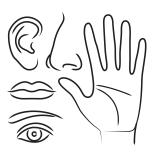
A seeds is the small, hard parts of a plant from which new plants can grow.



sense organ

يجري

A sense organ is a structure in animals and humans that is specialized for receiving stimuli and transmitting them as nervous impulses to the brain.



shade

Shade is an area of darkness and coolness which the sunlight does not reach.



ظل

shorter

قصر

Shorter is a comparative word of short; smaller height or distance.



sightSight is the ability to see.

النظر



Skin is the natural outer covering of your body, an animal or a fruit or vegetable.



slither
To slither is to move by sliding along the ground in an uneven way.



smell

حاسة الشم

Smell is the sense that gives you the ability to smell things (sense their aroma).



soil
Soil is the top layer on the surface of the earth in which plants grow.



speakTo speak is to use your voice to say words.

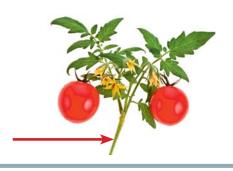


spider
A spider is a small creature with eight legs that spins webs to catch insects for food.



stem

The stem is the long thin central part of a plant above the ground that carries the leaves and flowers.



swing

If someone or something swings in a particular direction, they turn quickly or move in a sweeping curve in that direction.



talk

To talk is to say things to someone.



taller

أطول

Taller is a comparative word of tall; a larger height.

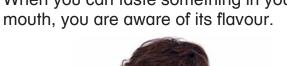


tap root

الصنوبر The tap root is the main root of a plant.



تذوق taste When you can taste something in your





tongue

اللسان

The tongue is the soft part in your mouth that you can move and use for tasting, licking, and speaking.



touch

Touch is the sense that gives you the ability to tell what something is like by touching (feeling) it.



tree ringsحلقات جذوع الأشجارA trees rings are a ring of wood made in one year's growth.



A trunk is the main woody stem of a tree or plant.



vegetable

خضروات A vegetable is a plant which is used as food.



walk

يمشي To walk is to move along by putting one foot in front of the attention in front of the other on the ground.



water

الماء

صغير

Water is a clear, colourless, tasteless, and odourless liquid that is necessary for all plant and animal life; you water a plant or an animal, you give it water to drink.



young

A young person, animal, or plant has not lived very long and is not yet mature; offspring.

