FROGS





Teacher's Notes

Introduction

The Wildwood Animal Workbooks for Key Stage 2 include Badgers, Otters, Frogs and Wolves. Each workbook follows a standardised pattern so that children can select different animals to study but still cover the same themes.

The activity sheets are appropriate for use either as an introduction before a visit or as follow up work. Each activity sheet is designed to link in with and support National Curriculum Programmes of Study for different subjects, including Science, Literacy, Numeracy and Art. There are also Key Stage 1 workbooks covering the same animals to aid differentiation.

Activity Sheets

The following list gives details of the activity sheets contained in the workbook, including the relevant National Curriculum P.O.S and the learning objectives which each sheet covers.



Adaptation

SUBJECT: Science

P.O.S: Sc2 - Living things in their environment

LEARNING OBJECTIVES: To understand that different animals are found in different habitats.

To understand that animals are suited to the environment in which they are found.



Food Chains and Teeth

SUBJECT: Science

P.O.S: Sc2 - Living things in their environment

LEARNING OBJECTIVES: To understand that most food chains start with a green plant.

To identify the structure of a food chain of a specific animal.

To identify important features of an animal's mouth in relation to its diet.



Teacher's Notes



Food Chains and Diet

SUBJECTS: Science & Numeracy

P.O.S: Sc2 - Humans and Other Animals

Ma4 - Processing, representing and

interpreting data.

LEARNING OBJECTIVES: To understand that different animals have

different diets.

To present evidence about foods eaten by

an animal in a suitable bar chart.



Habitats and Homes

SUBJECT: Science

P.O.S: Sc2 - Living things in their environment

LEARNING OBJECTIVES: To identify different types of habitats.



Tracks and Signs

SUBJECT: Science

P.O.S: Sc2 - Living things in their environment

LEARNING OBJECTIVES: To identify frogs according to observable

features.



Human Impact and Conservation

SUBJECT: Science

P.O.S: Sc2 - Living things in their environment

LEARNING OBJECTIVES: To recognise ways in which

living things and the environment need

protection.



Teacher's Notes



Myths and Legends

SUBJECT: Literacy

P.O.S: En2 - Myths, Legends & Traditional Stories

LEARNING OBJECTIVES: To understand the difference between

myths and legends and fact.



Quiz

SUBJECTS: Literacy & Science

P.O.S: En2 - Reading for information

Sc2 - Living things in their environment

LEARNING OBJECTIVES: To scan texts to find information.



The Wildwood Frogs

SUBJECTS: Art

P.O.S: Exploring and developing ideas

LEARNING OBJECTIVES: To record from first hand observation.



Life Cycle

SUBJECT: Science

P.O.S: Sc2 - Living things in their environment

LEARNING OBJECTIVES: To understand that adults have young and

that these grow into adults which in turn

produce young.



Teacher's Notes



Activity

SUBJECT: Literacy

P.O.S: En2 - Reading strategies

LEARNING OBJECTIVES: To recognise words and show understanding

of their meanings.



<u>Art</u>

SUBJECTS: Art & English

P.O.S: Investigating and making art, craft and

design

En2 - Nonfiction and nonliterary texts.

LEARNING OBJECTIVES: To develop control of tools and techniques

in art and design.

To understand the structural and

organisational features of instructions.



Glossary

SUBJECTS: Science & English

P.O.S: Sc2 - Life processes and living things

En3 - Spelling

LEARNING OBJECTIVES: To develop understanding of scientific

vocabulary.

To have a secure understanding of the purpose and organisation of a glossary.

Please note that throughout the pack, underlined words appear in the glossary.

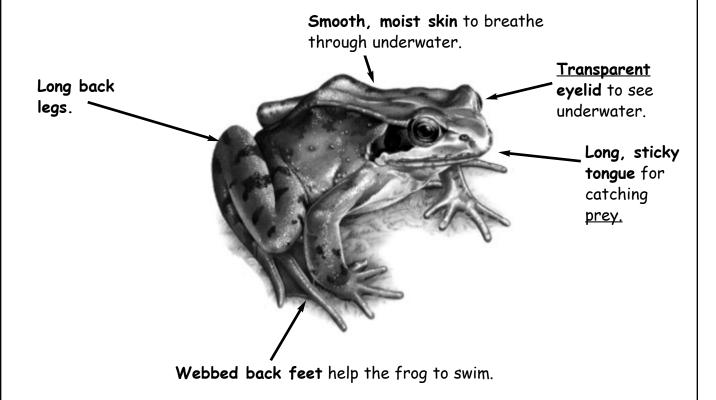


Life on Land and in Water

Frogs are <u>amphibians</u>. The adult frogs live on land but they return to the water to lay their eggs. The baby frogs (<u>tadpoles</u>) live in the water until they have grown and changed into small frogs called <u>froglets</u>.

The only kind of frog that has lived in Britain for hundreds of years is the common frog which has green, yellow or brown skin.

Frogs have many features that help them to move around, catch food and breathe on land and in water.



Question: A frog's biggest muscles are in its long back legs. Why do you think this is?

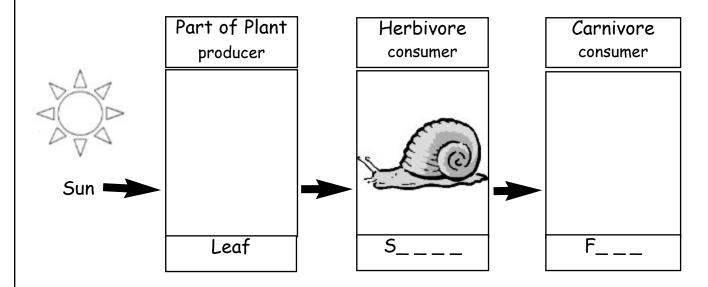
Question: Why does the common frog have green-brown blotchy skin?





Food Chains and Eating

Can you draw and fill in the gaps of this froggy food chain?

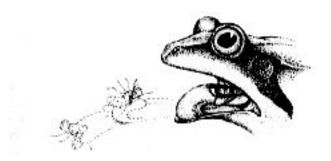


Fast Food!

Let's have a look at how frogs catch and eat their food. Remember, frogs don't have any teeth, so they can't chew their food.



Frogs have long tongues which are attached to their mouths at the front. When a tasty insect comes past, the frog will flip its tongue out and in again, faster than the blink of an eye.



The end of the tongue is very sticky so the unlucky insect gets stuck to it and then swallowed whole!





Food Chains Diet

Feeding Time

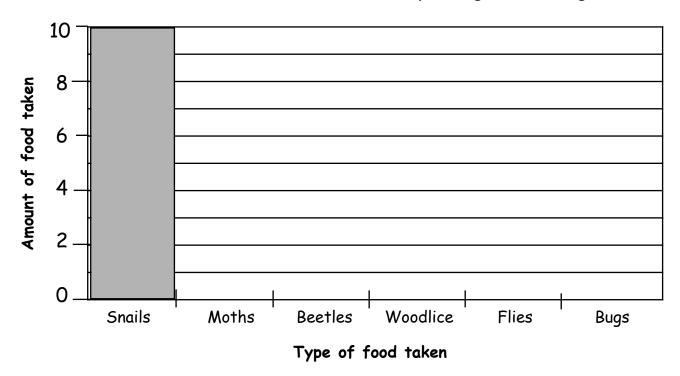
Frogs are <u>carnivores</u> which means they only eat meat. They are <u>predators</u> and every night in the summer they set out to stalk their <u>prey</u>. They will eat passing small creatures in the daytime too but it's too dangerous to hunt actively before it gets dark. During the winter months frogs <u>hibernate</u> in the muddy bottoms of ponds and don't eat anything but when the weather gets warmer they like to eat a variety of small creatures. Slugs and snails seem to be their favourite, probably because these tend to live in dampish places, like frogs.

Amounts of different types of food taken (by one frog over two nights).

	Snails	Moths	Beetles Woodlice		Flies	Bugs
	(D) 4		-St		THE.	-st
Numbers taken	10	8	5	6	1	2

Can you complete the bar chart below using the information from the table? (To help you, snail numbers have been done for you).

Amounts of different foods taken by a frog over two nights







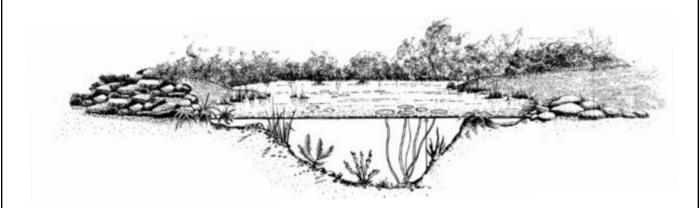
Habitats and Homes

Frogs need two very different <u>habitats</u>, which are close to one another, so that they can complete their <u>life cycle</u>.

- 1. Dry land with lots of places to hide from <u>predators</u>, plenty of small creatures to eat and a place to <u>hibernate</u>.
- 2. A pond to lay their eggs in and where their tadpoles can grow.

Can you label where you think the frogs would do the following things on the picture below?

- <u>Hibernate</u>
- Lay eggs
- Hunt for food



Hibernation

When the weather starts getting colder in the autumn, frogs start looking for suitable places to <u>hibernate</u>. This could be under an old log, in stone walls, compost heaps or sometimes at the bottom of a pond.



Frogs have to <u>hibernate</u> because they are <u>cold-blooded</u>. Question: What does cold-blooded mean?



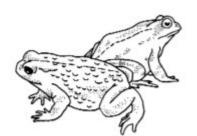


Tracks and Signs

Spot the Difference

Here are some handy hints to help you tell the difference between frogs and their rather similar cousins, toads.

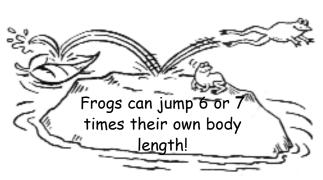
- 1. Frogs have smooth, moist skin and toads have dry lumpy skin.
- 2. Frogs have an obvious hump on their backs near their bottoms and toads have level backs with no obvious hump.
- 3. Frogs have a brown patch behind each eye and toads don't.



Frogs and toads often lay their eggs at night.



Frog <u>spawn</u> is a different shape to toad <u>spawn</u>.



Toads tend to crawl rather than jump.

You are more likely to find frogs than toads in southern England. In Scotland there are more toads than frogs.

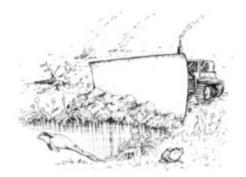
Frogs are attracted to water by the smell of <u>algae</u> which provides food for their tadpoles so ponds with lots of <u>algae</u> are good places to be a frog detective!





Frogs and Humans

Over the years lots of ponds have disappeared due to pollution and because they have been drained.



Another problem facing frogs is the amount of traffic on the roads. Every year frogs have to cross busy roads on their way back to ponds to lay their eggs and many of them get killed.

How can we help frogs?

One way in which we can help frogs is by having a pond in the garden or in the school grounds.

Have a look at the list below and put a tick next to the things that a frog would like to have in a pond and a cross next to the things a frog would not like.



	4
1. Steep edges so the pond is difficult to get out of.	
2. Few or no plants at the edge of the pond.	
3. A shallow edge to the pond to get in and out easily.	
4. A sunny spot because tadpoles like warm water.	
5. Plenty of algae (the tiny plants that tadpole eat) to grow on and hide under.	
6. A deep part to hibernate in during the winter.	



Frog Myths and Legends

Raining Frogs!

There are lots of stories of 'raining frogs', more so in tropical places than in Britain. This could be because during a normal rainstorm masses of frogs and froglets become active because they like the damp conditions. It has also been suggested that freak whirlwinds could pick up large numbers of frogs and drop them somewhere else!

The Native Americans have names for every moon of the year. The Cree tribe have a legend which tells of how it was decided that winter would last five moons.

Wis-a-ked-jak, the Trickster met with all the animals to decide how many moons would be winter. The moose said that there should be as many moons of winter as there were hairs on his body. The beaver said there should be as many winter moons as the scales on his tail. But O-ma-ki-ki, the little frog, said there should only be as many moons as the toes on his foot. Wis-a-ked-jak decided this was right. So winter only lasts five moons and when it ends, the frogs song their victory song.

Superstitions

- It was believed that if you cut out the tongue of a live frog and placed it on a woman's heart she would only be able to tell the truth.
- X A potion made from oil, salt and frogs is a cure for poisons.
- 策 Frogs were often a popular ingredient in witches' brews.
- To cure toothache, spit into a frog's mouth, then ask it to take the ache away and let the frog go.

The word 'Frog' is very old, dating back at least to Anglo-saxon times, and comes from

the old English 'Frogga'.

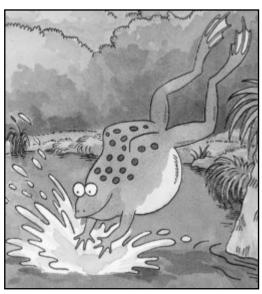






Frog Quiz

1. What are frog eggs called?
2. What is their favourite food?
3. What do we call animals that only eat meat?
4. What are baby frogs called when they are just leaving the pond?
5. Where do frogs like to <u>hibernate</u> ?







Wildwood's Frogs

Frogs at Wildwood

We have three different kinds of frogs kept at Wildwood. There are also Common Frogs living wild near ponds in the woods.

Marsh Frogs

- Marsh frogs weren't in Britain at all until 1935 when 12 adults from Hungary were released on Romney Marsh, which is how they got their name.
- They are superb jumpers and love sunbathing look out for them sitting on logs or by the edges of pools.
- Listen out for them calling to one another they sound more like birds than frogs!

North American Bullfrogs

 Bullfrogs are the largest frog in America and can grow to the size of a dinner plate. They were introduced here in the late 1900s and weren't expected to be able to breed in our climate - but they did!



 Look out for the large round eardrums behind their eyes and listen for their call, which sounds like a bull's roar.

Pool Frogs

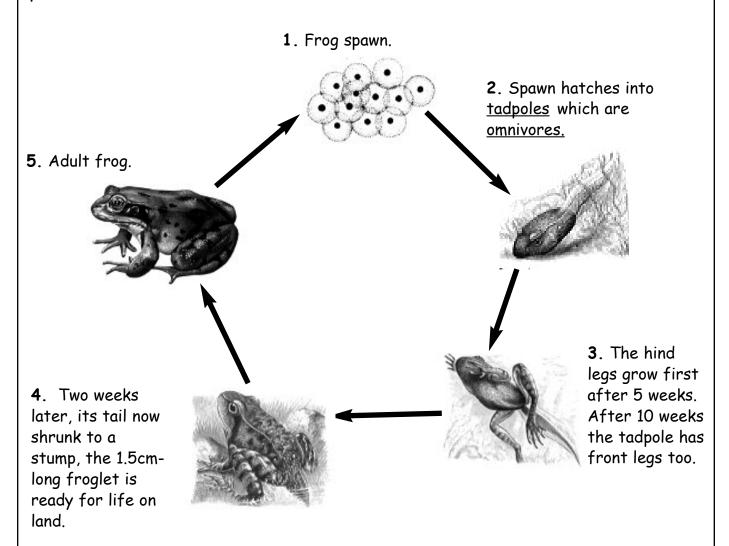
- The pool frog is a small, pointy-nosed olive frog with a bubbling call.
- The last wild one in this country died in 1999 and scientists are now <u>reintroducing</u> them.



now <u>ronning mem.</u>	
	Have you seen any of our frogs
	Jumping? Swimming? Eating? Crawling?
	Choose your favourite Wildwood frog and use the space below to draw a picture of it.

Frog Life Cycle

Frogs are at their most active during the spring so this is a really good time to look out for them, if you have a pond at home or at school. You may find spawn, tadpoles and later on in early summer, see tiny froglets leaving the pond to start a new life on land.



Question: Why does frog spawn have a jelly layer surrounding it?





Frog Word Search

Can you find all the words to do with frogs in the grid below? There are 20, running forwards, backwards, up, down, across and diagonally. Some of the letters are used in more than one word.

To help you, here are some clues for the words you ar	re looking for: F a
young frog, T a baby frog that lives in wo	ater ALL the time, S
frog eggs, P a tadpole's home, H	when animals sleep for the
winter, J how frogs move on land, W	- their back feet are this,
S_{-} - how frogs move in water, C_{-} - the nois	se a frog makes,
C_{-} - an animal that only eats meat, A_{-}	$____$ animals that live
on land as adults but in the water as babies, A $_$ $_$ $_$	a tadpole's favourite food,
T_{-} - a frog has a long sticky one that it uses t	o catch its food, S,
S and I a frogs favourite foods, M_	, C, , P, and
$B____$ are all kinds of frogs that you can see	at Wildwood!

Q	E	R	0	V		N	R	Α	C
G	0	R	F	L	L	U	В	L	0
W	Ш	В	В	Ш	D	E	E	G	M
F	R	C	S	S	T	E	U	A	M
S	R	R	L	N	P	L	G	E	0
P	Y	0	U	A	M	0	N	D	N
Α	T	A	G		U	P	0	N	D
W	C	K	W	L	J	D	T	L	Н
N	Ш	S	U		E	A	A	T	S
Н	S	P	F	R	0	T	D	0	R
0	N	A		В		Н	P	M	A
Н		В	E	R	N	A	H	Е	M





Make a Frog Puppet!

To make your hand puppet, you will need:

- a needle and green thread
- the pattern (next page)
- goggle eyes
- 20cm x 60cm of green felt
- 20cm x 15cm of pink felt
- 5cm x 20cm of yellow felt
- A scrap of red felt
 - Mark out and cut the pieces of felt as shown on the pattern.
 - Sew the long edge of the throat piece along edges C and D of the mouth piece using the letters as a guide.
 - 5. Sew remaining edges together.

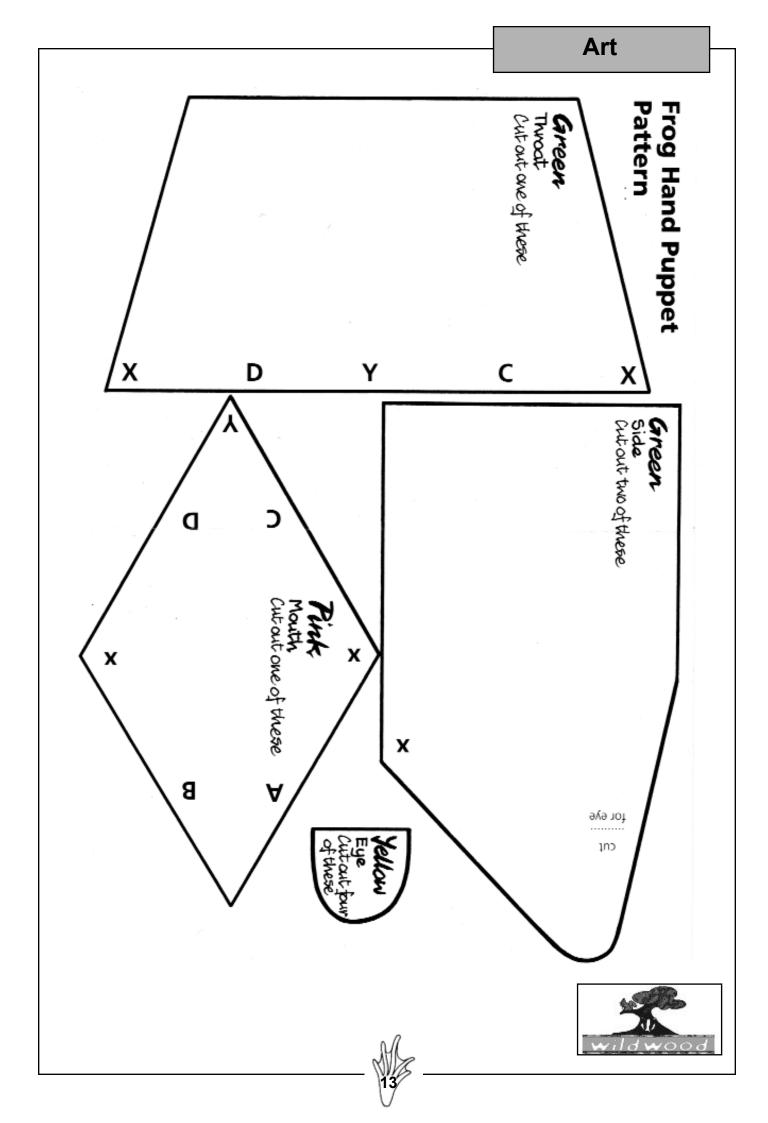
Don't forget to take care with scissors!



- 2. Sew two eye pieces
 together leaving the
 straight edge open. Turn
 inside out. Repeat with
 other two eye pieces.
- 4. Sew one side piece to side A, making sure the x marks are in the same place. Repeat for side B on the mouth piece.
- Insert eye pieces into cuts. Make sure they stick out on the correct side of the puppet.
- Turn right side out and stick on goggle eyes.
 Stick a red felt tongue into the mouth.





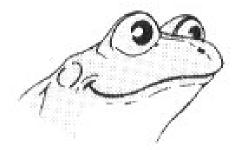


Make a Frog Mask!

To make your mask, you will need:

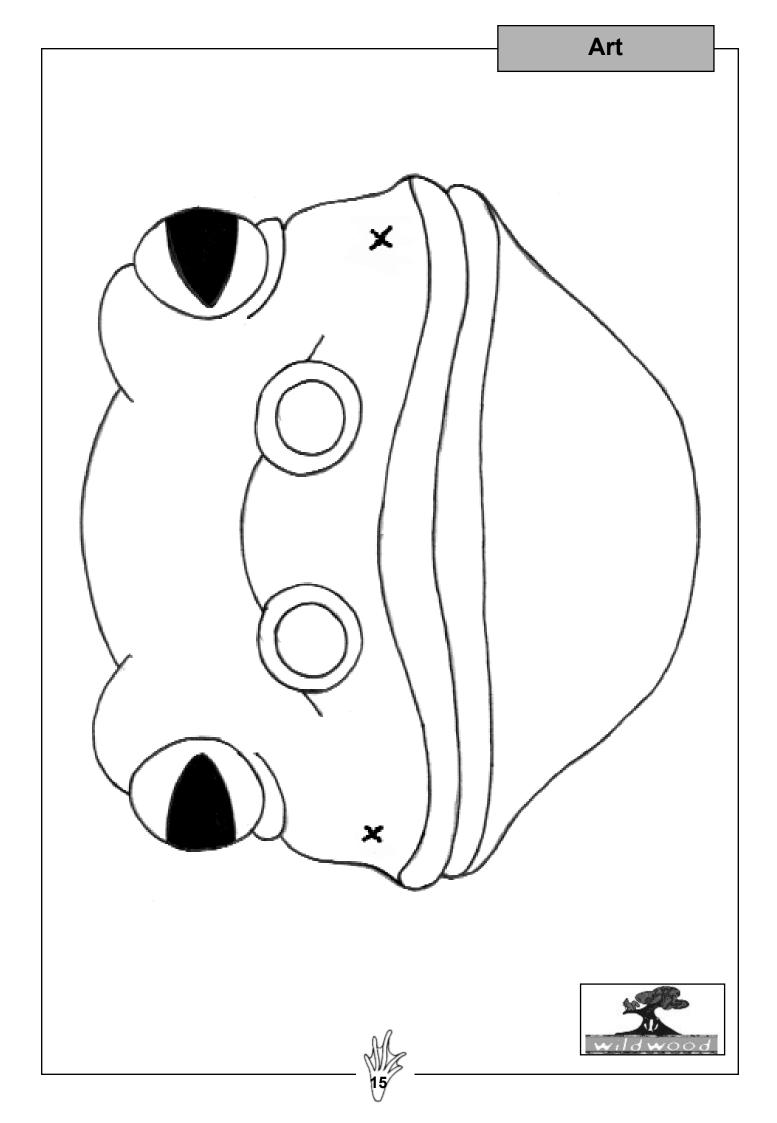
- felt tips, coloured pencils or paint
- a pair of scissors
- a hole punch
- some elastic
 - Trace the frog head on the next page onto thin card.
- 2. Colour it in and cut it out. Ask a grown-up to help you cut out the eye shapes.
- Use a hole punch to make holes where it is marked by a cross.
- 4. Measure the correct length of elastic to fit around your head.

- 5. Thread the elastic through the holes on the side of the mask and tie a knot.
- 6. Your mask is now ready to wear!









Word List

- algae microscopic green plants that live in water.
- amphibian an animal which spends part of its life cycle on land and part in the water.
- carnivore an animal which eats meat.
- cold-blooded body temperature which goes up and down as surroundings heat up or cool down.
- consumer an animal which eats plants or other animals. Consumers are sometimes called herbivores and sometimes carnivores or omnivores.
- froglet a baby frog which is able to come out of the water.
- habitat a place where an animal lives.
- hibernate to sleep through the winter.
- life cycle the process of adults having young which then grow into adults and in turn produce young.
- omnivore an animal which eats both meat and plants.
- predator an animal which hunts and eats other animals.
- prey an animal which gets hunted and eaten by other animals.
- producer a green plant which can take energy from the sun and make food using the process of photosynthesis.
- reintroducing bringing back an animal or plant which used to live here.
- spawn eggs.
- tadpole a baby frog, toad or newt which must live underwater at this stage of its <u>life cycle</u>.
- transparent see-through.

