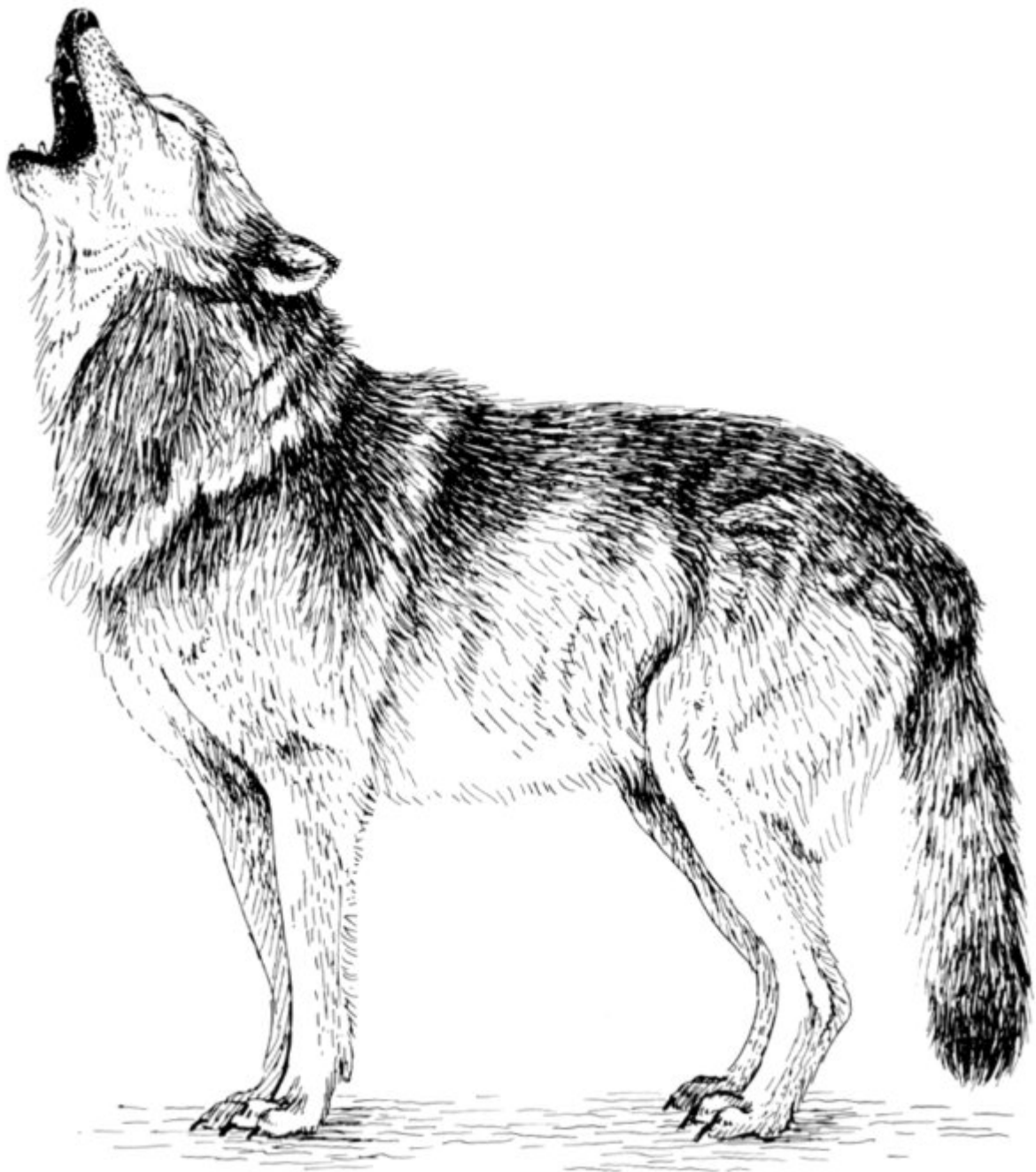


WOLVES



Introduction

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

A companion pack on wolves is also available; Let's Talk Wolf is a wolf communication programme using body language and facial expressions, linked to the SEAL and anti-bullying programmes.

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.



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 wolves 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.



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 Wolves



SUBJECTS:

Art

P.O.S:

Exploring and developing ideas

LEARNING OBJECTIVES:

To record from firsthand observation.

Life Cycle



SUBJECT:

Science

P.O.S:

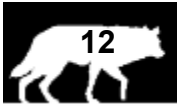
Sc2 - Living things in their environment

LEARNING OBJECTIVES:

To understand that adults have young and that these grow into adults which in turn produce young.



Activity



SUBJECT:

Literacy

P.O.S:

En2 - Reading strategies

LEARNING OBJECTIVES:

To recognise words and show understanding of their meanings.

Activity



SUBJECTS:

Art & English

P.O.S:

Investigating and making art, craft and design

LEARNING OBJECTIVES:

En2 - Nonfiction and nonliterary texts.

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

LEARNING OBJECTIVES:

En3 - Spelling

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 can be found in the glossary.



Life as a Hunter

Wolves are large predators which live and hunt together in family groups called packs. Wolves are intelligent animals that have lots of features which help them find and catch their prey.

Large ears: Wolves can hear 10 times better than we can. This helps them find their prey.

Thick coat: woolly underfur and waterproof guard hairs on the outside keep the wolf dry and warm.

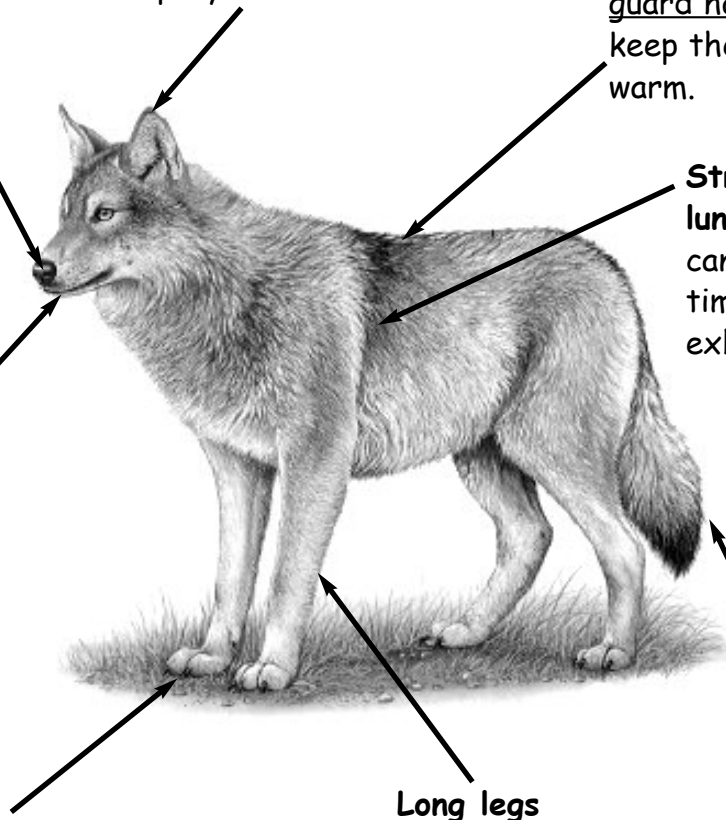
Sensitive nose: a wolf's sense of smell is 100 times better than ours. so even if they can't see or hear their prey, they can smell it.

Strong heart and lungs so that the wolf can run for a long time, running down and exhausting its prey.

Powerful jaws and sharp teeth for grabbing and killing their prey.

Large padded paws for grip and moving quietly.

Tail lets the wolf show other wolves how it's feeling.



Long legs

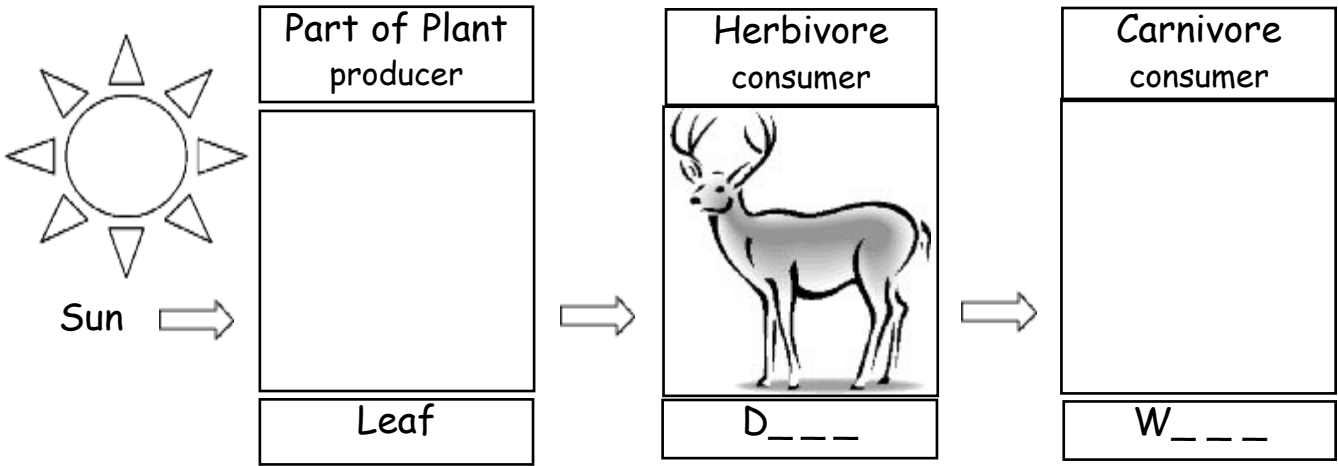
Question: Why do you think a wolf has eyes on the front of its head like us but prey animals like deer have eyes on the sides of their heads?

Question: Why do you think long legs might be important to a predator?



Food Chains and Teeth

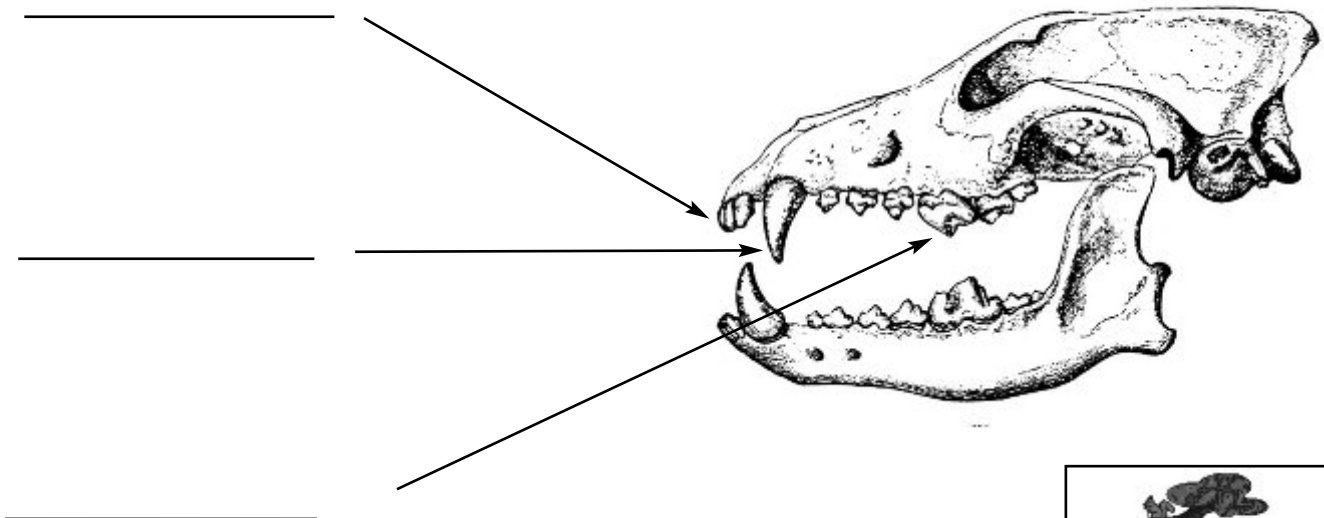
Can you draw and fill in the gaps of this simple food chain?



Wolves have teeth which are used mainly for eating large mammals like deer but they will also catch small mammals and birds. The teeth are different shapes with:

- small incisors for cutting.
- canines for holding and tearing.
- carnassial teeth for slicing flesh.

Can you name the different types of teeth on this wolf skull?



Feeding Time

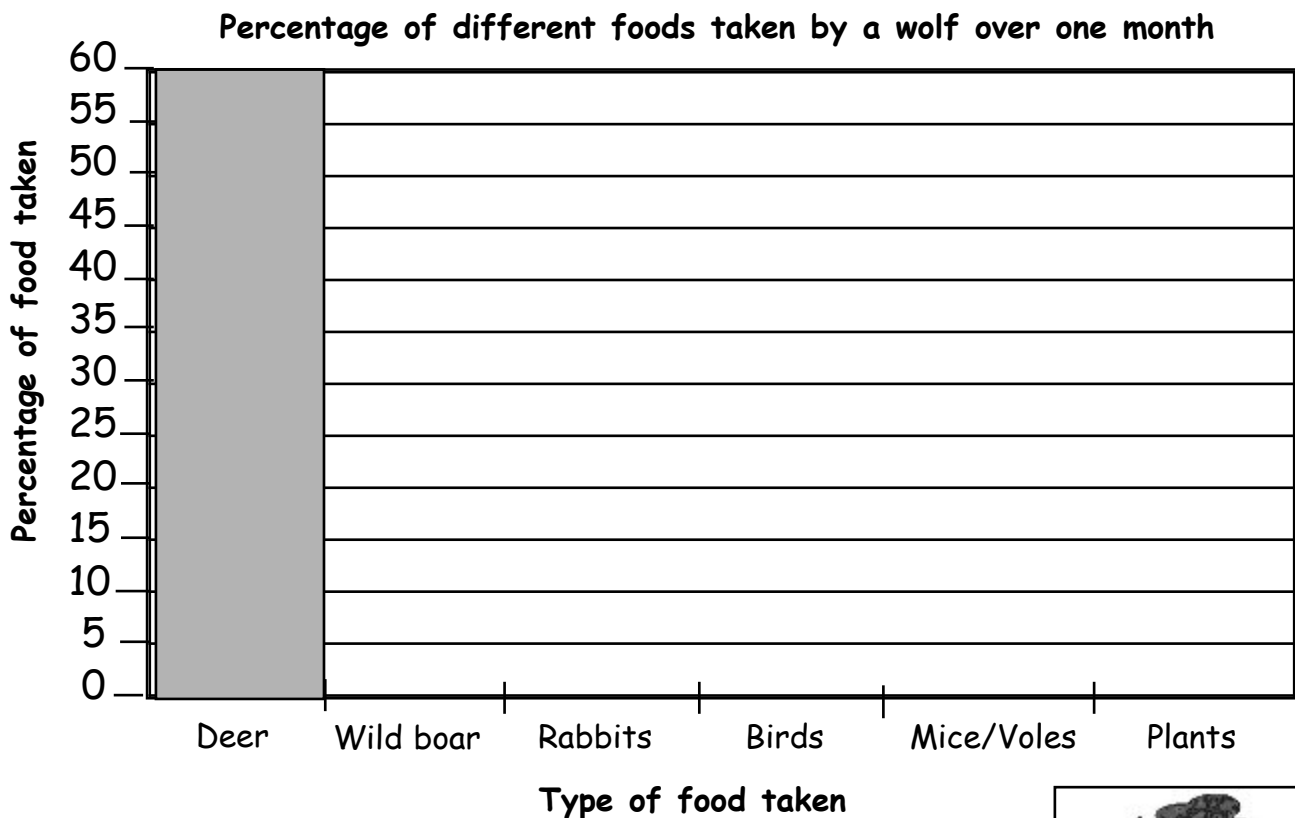
Wolves are hunters or predators. They hunt their prey using scent, sound and sight. Wolves live in family groups called packs, which means that they can work together as a team to hunt for prey animals that are bigger than they are. European wolves mainly eat large animals like deer and wild boar. A single wolf could catch smaller prey such as rabbits, mice, voles and birds on its own.

Wolves are carnivores or meat-eaters. They are opportunistic feeders and will eat just about anything they can catch within their territory. Wolves also need to eat small amounts of plants such as grass, fruits, berries or leaves as they get important nutrients from these.

Percentage (fraction out of 100) of different types of food taken by one wolf over one month

	Deer	Wild boar	Rabbits	Birds	Mice/Voles	Plants
Percentage % taken	60	15	15	5	3	2

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





Habitats and Homes

Wolves are very adaptable and can live in lots of different types of habitats, including moorland, mountains and forests.



Wolves live together in packs. Each pack of wolves has its own territory. This is an area where the wolves live and hunt for food. They will defend it against other packs of wolves.

The size of the territory depends on the type of habitat.

Where there is plenty of food to catch, wolf territories can be quite small (perhaps 25 square miles). If there is less food or it is more spread out, the wolves will need a larger territory so that they can still find enough food.

25 square miles is a lot of space! Blean Woods, the largest woodlands in Kent, are only 11 square miles. **Can you look at a map of the place where you live and work out how big 25 square miles is?** (Remember, 25 square miles is a square, 5 miles each side.)



A Place for Pups

This is a wolf's den. The mother wolf digs the den when she is about to have pups. The pups are born in the den and live there until they are about eight weeks old. Adult wolves might use things like caves, bushes and snow scrapes as shelter in bad weather but most of the time they just sleep out in the open. Remember that wolves have thick fur that can keep them warm even in cold, snowy weather.

How do wolves talk to each other?

Scent

Wolves recognise each other by smell. A wolf's sense of smell is 100 times better than a human's so this is a good way of leaving messages for one another! Wolves scent mark trails which they use a lot by marking rocks, stumps or scraped patches of ground with urine. They also have scent glands between the pads on their paws so that they leave smelly footprints wherever they go!

Howling

Wolves make lots of different noises but the most well-known is howling. Wolves often howl to tell other wolf packs that they are there and to warn off neighbouring packs so that they can avoid fights.



Listen for an ambulance going past Wildwood with its siren on. Nadja, one of our hand reared wolves, thinks that a note in the siren sounds like a wolf from another pack and howls back to it. All the other wolves in the park join in and wherever you are at Wildwood you can hear them.



Tracks and Signs

Like most wild animals, wolves are shy of humans which means that they are not easy to find. If you want to find out about wolves and where they live, you need to become a wolf detective and look for the signs that wolves leave behind.

Remember, we don't have wild wolves in this country anymore. See if you can find any of the signs below when you are watching the Wildwood wolves.

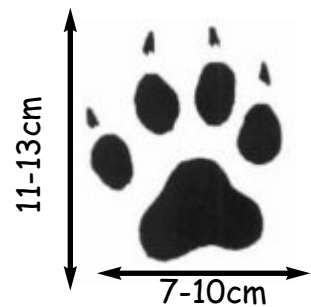
Dens

Wolves dig holes in the ground called dens so that their pups can be born somewhere safe. The entrance is quite big, generally about half a metre across. This is bigger than the entrance to a fox's home. Sometimes there is a mound of earth at the entrance and bones or scraps of meat which were brought for the pups.



Tracks

Wolf tracks can be difficult to tell from dog tracks but they are found much further away from towns and villages. Their tracks are large and their paws spread to support the wolf on snow and help it move quietly.



Wolf poo

Wolves often use this to mark wolf paths or the edges of their territory.



Bones

Bones are left over from the wolves' dinner. If a wolf ate a small animal such as a mouse, it would just crunch up the bones and eat them but if wolves are eating a big animal such as a deer, they wouldn't eat the bones. However, they might gnaw them or crunch them in two to lick out the marrow.



Can you see any signs of wolves in our wolf enclosure? Write down or draw a picture of any signs you see.



Wolves and People

Hundreds of years ago wolves lived in Britain but humans made the wolf extinct here. This means that there are no wild wolves left in this country anymore. Of course, there are still wolves living in the wild in other countries, so they are not extinct everywhere and even in Britain you can still see wolves in zoos.

As people farmed more and more land and built towns, cities and roads, forests were cleared and large areas of wolf habitat were lost. The last British wolf was killed in Scotland in 1749. Humans were also afraid of wolves and worried that they would kill their cows and sheep so they shot and poisoned the wolves until they became extinct in Britain.

The black solid areas on the map below are where wolves can be found now. The speckled areas show where they used to be found, in addition to the black areas.



Can you find Great Britain on the map above and colour it in?

Making a comeback

Wolves are gradually spreading back into some of the areas they used to live in in parts of North America and Europe. Some countries, such as Germany, have not had wolves living in them for hundreds of years but now people are starting to see wolves there again.



Reintroduction

There have also been some successful reintroductions by humans. Yellowstone Park in America is an example of wolves being successfully reintroduced back into their former habitat.

Question: Would you like it if wolves still lived in England? Why?



What do you think?

Some people believe that wolves should be **reintroduced** to parts of Scotland and others disagree. Read the arguments below and see if you can work out which are arguments **for (want it to happen)** and which are **against (don't want it to happen)** the reintroduction of wolves in this country.



1 How can we expect other countries to save their lions and tigers if we won't put back our own large carnivores?

4 People pay to go on wildlife watching holidays. Wolves would attract tourists to Scotland which would bring in money and jobs.

2 Wolves may kill farmers' livestock e.g. sheep.

3 There are too many deer in Scotland, which are damaging crops and forests because they are eating so much. There is currently no top predator to eat the deer so people have to control their

5 Wolves used to be here - as people are the reason they aren't here any more (because they were hunted and lost large areas of habitat), people have a duty to put them back again.



numbers by shooting them. Wolves would hunt deer and help keep their numbers down.

6 Wolves are often the 'baddies' in stories e.g. Little Red Riding Hood, The Three Little Pigs, so some people think they are evil and may attack humans.

See if you can sort the arguments into **for** and **against** by writing the numbers of the arguments in the boxes below.

FOR

AGAINST

Activity

What do you think? Have a class discussion. Some of the children could role play the following characters and put their point of view to the rest of the class.

Sheep farmer
Land owner
Forester

Local resident
Manager of an Ecotourism company
Conservation worker

Do you still have the same opinion you started with?



Wolf Myths and Legends

There are many tales about wolves from all over the world. Some of these portray them as evil and others show them as brave and good.

Stories

✦ The Seneca tribe of North America tell a story of a warrior who was cared for by wolves. He was a long way from home and his feet were injured. The wolves licked his feet to make them better. They curled up beside him every night to keep him warm and brought him food that they had hunted every day until he was well enough to return home to his tribe.



✦ The Vikings had a story of a large, fierce wolf called Fenris, whose destiny was to end the rule of the gods and bring about the age of humans. The gods kidnapped Fenris and tried to chain him but he shook all his chains off until he was bound by a magical silken ribbon made out of the roots of a rock, the sound of a cat's footfall, the breath of a fish and a bird's spittle. He escaped at Ragnarok (the gods' day of doom) and swallowed Odin, the chief of the gods, whole. This meant the end of the rule of the gods.



Many cultures have stories about wolves looking after orphaned children. The Romans told a legend of how Romulus, the founder of the city of Rome, and his twin brother Remus were looked after by a she-wolf when they were babies.



Superstitions and Beliefs

- ✦ People believed that wolves eyes can glow in the dark.
- ✦ People used to think that sorcerers could change into a wolf at will by putting on a wolf skin.
- ✦ Some Scottish and Irish families were believed to have descended from wolves and could shape shift or turn back when it suited them.
- ✦ In England people used to believe that if a wolf saw a man before he saw the wolf, the man would be struck dumb.
- ✦ Wolf teeth were rubbed against the gums to stop toothache.
- ✦ In France wolf teeth were worn around the necks of young children to protect them from harm.

Stories with Big Bad Wolves - Little Red Riding Hood, Three Little Pigs.

Stories with Caring Wolves - Romulus and Remus, The Jungle Book, The Three Little Wolves and the Big Bad Pig.

Now can you make up your own story with wolves in?



Wolf Quiz

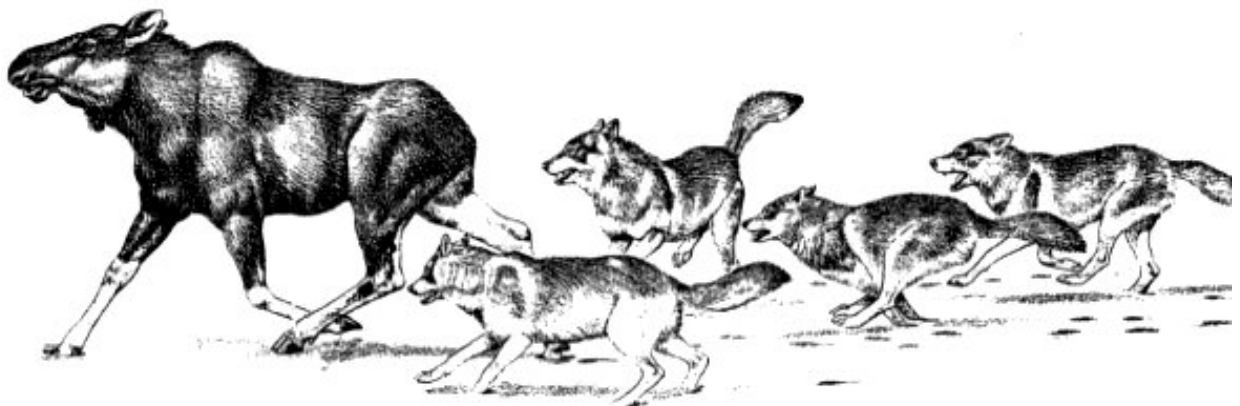
1. Name one adaptation that helps a wolf to be a hunter.

2. What is a family group of wolves called?

3. How might a wolf mark its territory?

4. Where could you go to see wolves nowadays?

5. Why do wolves work as a team when they go hunting?



The Wildwood Wolves

Wolf Pack

There are four wolves in the Wildwood pack; three males and one female. They have a big enclosure with lots of trees in it, so if the wolves are lying down and keeping still, you may have to look carefully to spot them.

Our alpha male, the leader of our pack, is called **Apollo**. He is the oldest wolf and although he isn't the biggest wolf in the pack, he is the wisest and most experienced. Our two other males are called **Akela** and **Io**. **Akela** is a big dark wolf with white patches on the side of his nose. **Io** is the biggest wolf in the pack, even though he is the youngest of the males. He has a darker face than **Akela**. He is very curious and may come close to the fence to see what is going on.

Female wolves are usually smaller than the males. **Amber** is our female wolf. She has very beautiful orange eyes, so she is named for the colour of her eyes. She also has lots of scars on her nose from old fights. She is a confident wolf and if **Io** is close to the fence she will often come and join him.

Hand-reared Wolves

We also have two hand-reared wolves at Wildwood. This means that they have been looked after by people since they were just young pups. They are both females and their names are **Nadja** and **Michka**.

Nadja is slightly bigger and her fur is a little paler than **Michka's**. She has a nick in the top of one ear. She is the bossy one and likes telling her sister what to do!

Michka is smaller and darker than **Nadja**. You can often see **Nadja** and **Michka** sitting on top of their wooden platform, keeping an eye on things.



Have you seen any of our wolves

Howling?

Sleeping?

Eating?

Running?

Choose your favourite Wildwood wolf and use the box to draw a picture of it.



Wolf Life Cycle

Wolves are usually born in the spring. The mother wolf digs a den underground, where the pups are born. When they are born, the wolf pups' eyes and ears are closed and they have no teeth. Over the next few weeks the pups will stay inside the den as their eyes and ears open and they get their first set of teeth. Once they leave the den, the pups spend lots of time playing and then begin learning to hunt.

1. Wolf pups are born in a den.



2. At 10 days old the wolves' eyes open. Their eyes are blue at first



and go darker as the wolves get older. By three weeks old, the pups can hear and they have grown their milk teeth. They still stay inside the den.

3. At four weeks old, the pups start leaving the den regularly.



They start to eat meat and they begin to howl. By the time they are 8 weeks old they have stopped drinking milk.

5. Adult wolf. By the time they are a year old, the pups are fully trained hunters. They may stay with the pack or go off on their own to start a new pack.



4. At 12 weeks old, the pups start going with the adults on hunting trips.



By six months old they will look the same size as the adults and they will have lost their baby teeth. By 8 months they weigh the same as an adult wolf.

Question: Why do you think wolf pups are born in a den?



Wolf Word Search

Can you find all the words to do with wolves 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 are looking for: P___ - a group of wolves, T_____ - the area where wolves hunt, M___ - what wolves eat, D___, M___ and a R_____ are all things wolves would eat, C_____ - an animal that only eats meat, M_____ - the type of animal a wolf is, P_____ - a hunting animal, F___ - this keeps a wolf warm, P___ - a baby wolf, T___ - a happy wolf would wag this, S_____ - what a wolf does with its nose, H___ - the sound wolves make, S_____ - when a wolf bares its teeth, M___ - what baby wolves drink, R___ - what a wolf does when it chases something, T_____ - you find these in a wolf's mouth, C_____ - this helps an animal to hide, D___ - a wolf's home.

C	T	E	R	R	I	T	O	R	Y
A	P	T	I	B	B	A	R	M	M
R	A	A	D	M	S	T	M	I	A
N	C	I	E	D	N	E	C	L	M
I	K	L	E	U	A	E	A	K	M
V	F	U	R	T	R	T	D	I	A
O	S	M	E	L	L	H	O	W	L
R	O	T	A	D	E	R	P	U	P
E	G	A	L	F	U	O	M	A	C



Make a Poseable Wolf!

To make your wolf, you will need:

- ♦ crayons or coloured pencils
- ♦ a pair of scissors
- ♦ 3 push pins

1. Colour in the parts of your wolf.

2. Cut out all the pieces of your wolf.

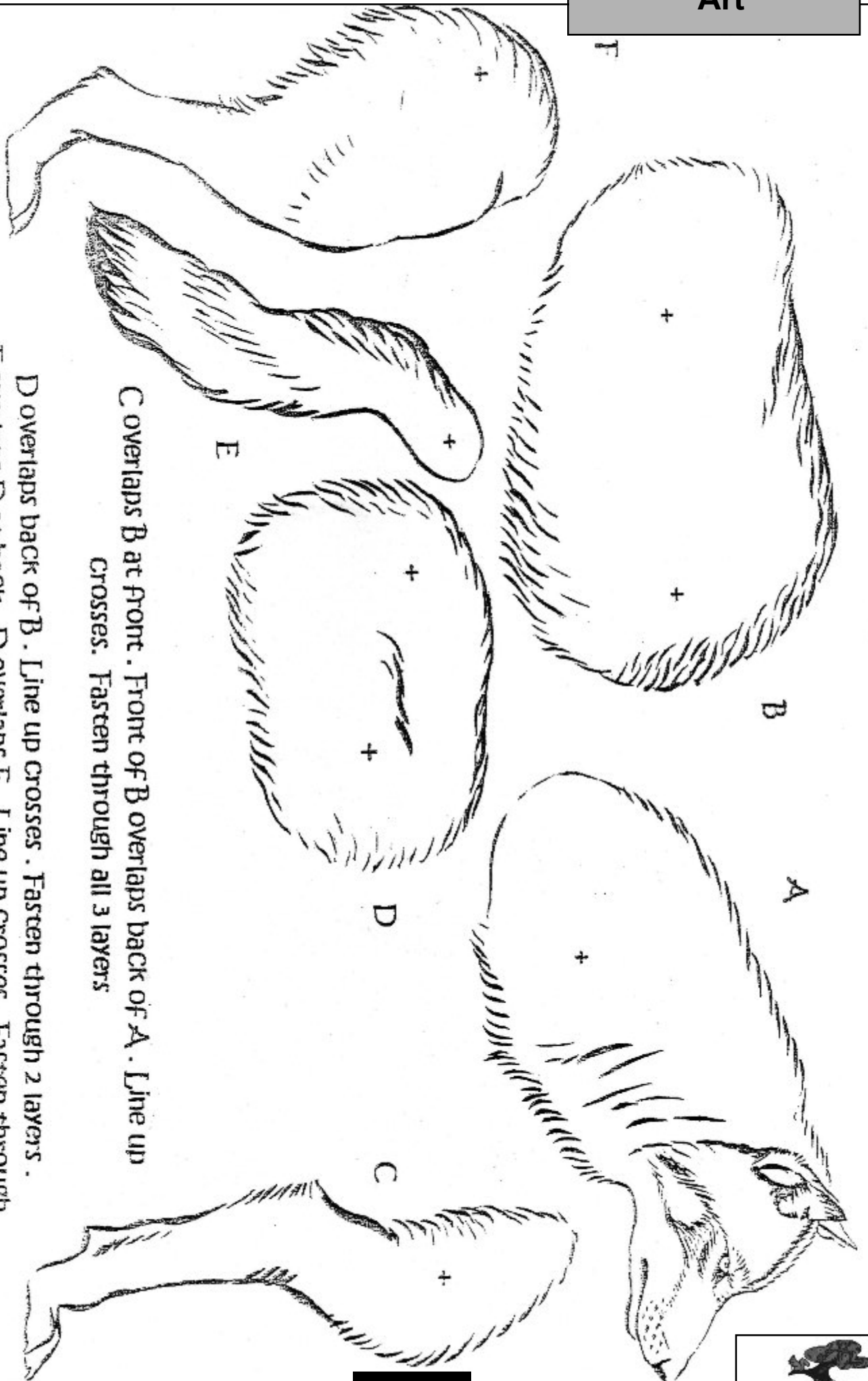
3. C (front leg) overlaps the front of B (front half of body). The front of B overlaps A (head and chest). Line up the crosses and fasten through all 3 layers.

4. D (back half of body) overlaps the back of B (front half of body). Line up the crosses and fasten through both layers.

5. F (back leg) overlaps the back of D (back half of body). D overlaps E (tail). Line up the crosses and fasten through all 3 layers.

6. Can you make your wolf run? How can you make it look angry or frightened?





C overlaps B at front . Front of B overlaps back of A . Line up crosses . Fasten through all 3 layers

D overlaps back of B . Line up crosses . Fasten through 2 layers .

F overlaps D at back . D overlaps E . Line up crosses . Fasten through all 3 layers

Make a Wolf Mask!

To make your mask, you will need:

- ♦ crayons or coloured pencils
- ♦ a pair of scissors
- ♦ sellotape or glue
- ♦ some thin elastic

1. Cut out the wolf face and wolf nose. Make sure you don't cut off the tabs!

2. Colour in the face and the nose. Ask a grown-up to help you cut out the eye holes.

3. Cut the 3 slits in the face and push the tabs through them. Fasten with sellotape or glue.

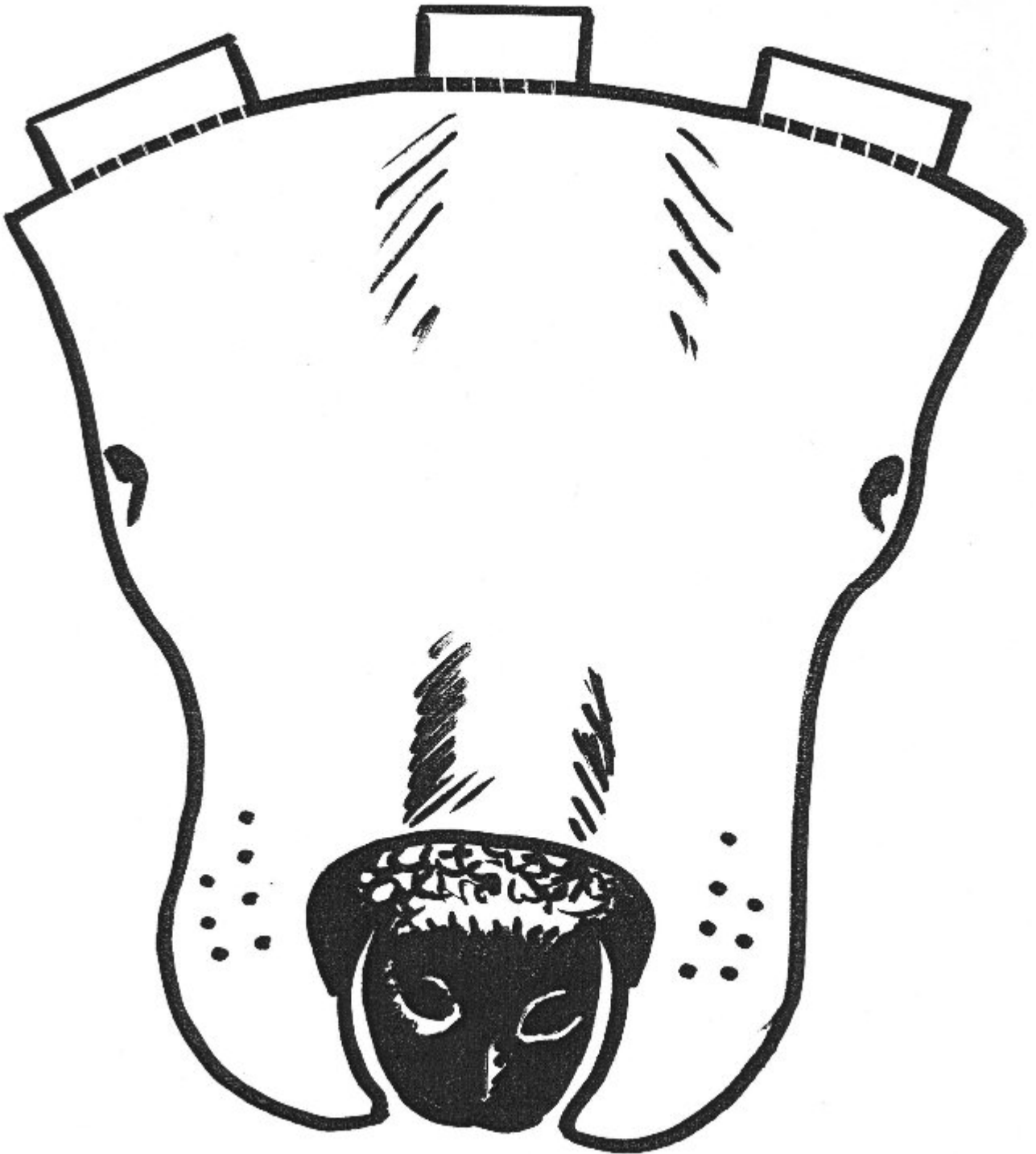
4. Measure the correct length of elastic to fit around your head.

5. Make two small holes in either side of the mask. Thread the elastic through and tie a knot.

6. Your mask is now ready to wear!







Word List

- **adaptable** - able to respond quickly to change.
- **alpha female** - the female leader of a wolf pack.
- **alpha male** - the male leader of a wolf pack.
- **canine** - fang-like teeth at the side of the mouth often used for stabbing and holding prey.
- **carnassial** - sharp, triangular, scissor-like teeth used for slicing up food.
- **carnivore** - an animal which eats meat.
- **consumer** - an animal which eats plants or other animals. Consumers are sometimes called carnivores or omnivores.
- **extinct** - no longer exists.
- **guard hairs** - the tough wiry hairs that form the outer layer of an animal's fur.
- **habitat** - a place where an animal lives.
- **herbivore** - an animal which eats plants.
- **incisor** - rectangular-shaped teeth at the front of the mouth usually used for cutting.
- **nocturnal** - animals which are active at night and sleep during the day.
- **nutrients** - parts of foods which animals need to survive and grow.
- **opportunistic** - will take something by chance.
- **pack** - a family group of animals.
- **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.
- **reintroduce** - to bring back an animal which used to be here.
- **scent gland** - a part of the body which produces a smelly oil.
- **territory** - a place where an animal lives, which it defends from other animals.
- **underfur** - a layer of fur underneath the guard hairs, often soft and fluffy so that it keeps the animal warm.

