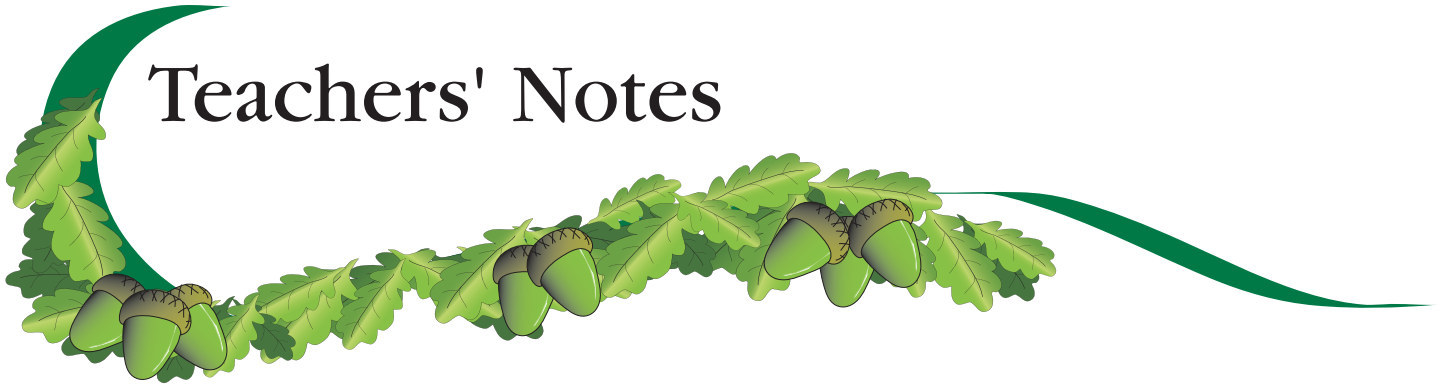
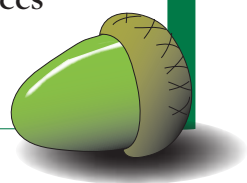


Teachers' Notes

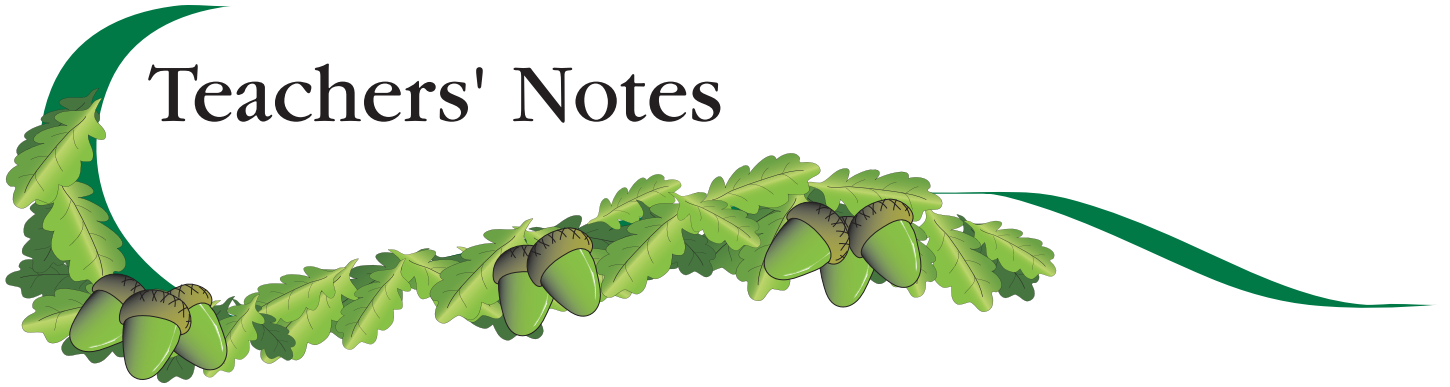


1.0 Introduction

- 1.1 This pack has been prepared using a number of online and published resources and is the first fully bilingual "Red Squirrel Education Pack" to have been prepared in Wales.
- 1.2 It has been designed in such a way that pages can be added at a later date with plenty of space in the folder to collate further resource material.
- 1.3 The Friends' website will be updated with new activities and information and will have both downloadable material to add to the pack and activities that can be undertaken online www.redsquirrels.info
- 1.4 The pack has been designed to be as versatile as possible with the option to create a "Red squirrel workbook" or simply to use single work sheets when they are relevant to a particular subject or theme. The workbook can be photocopied and collated in one language or contain a mixture of English and Welsh depending on your requirements (a cover for the workbook has been included for your convenience).
- 1.5 The information sheets provided in section 2 are as follows:
 1. The Red Squirrel
 2. Habitat
 3. The Red Squirrel's Drey
 4. Food
 5. Dangers
 6. What can I do to help?They are intended to give background information for use as reference material to create lesson plans or, if appropriate they can be given to the children to read.
- 1.6 A series of activity sheets have been created for Key Stages 1 and 2 which relate directly to the information sheets, thus after discussing habitat for example, it will be possible to undertake a corresponding activity.
- 1.7 Where possible, the activities have been tied in with aspects of the National Curriculum for Wales. Details can be found in section 3.
- 1.8 A list of further resources both published and on-line can be found in the resources section of this education pack.



Teachers' Notes



2.0 Information Sheets

2.1 Red Squirrel

This sheet provides information about the morphology of the red squirrel which can be used to discuss various topics such as adaptations to the environment, similarities and differences amongst species, comparing red and grey squirrels.

Key Stage 1

Activity 1 - Label the Squirrel
Activity 2 - Red Squirrel Model
Activity 3 - Red Squirrel Mask

Key Stage 2

Activity 1 - Adaptations to the Environment
Activity 2 - How much does a Squirrel Weigh?
Activity 3 - Red squirrel 3D Card
Activity 4 - Red Squirrel Desk Tidy

2.2 Habitat

Red squirrels live in woodlands therefore by using the red squirrel as a starting point, it is possible to introduce a number of different concepts including food webs, food chains, using keys to identify trees and other plants, and processes such as photosynthesis, germination, recycling (decaying leaf litter and dead wood) etc. When discussing this subject it would be possible to arrange a site visit with the Red Squirrel Education Officer (see front of pack for details).

Key Stage 1

Activity 4 - Red Squirrel Habitat
Activity 5 - Trees and Leaves
Activity 6 - Leaf Mobile

Key Stage 2

Activity 5 - Red Squirrel Habitat
Activity 6 - Identify the trees
Activity 7 - Food Chain
Activity 8 - Label the Map
Activity 9 - Anglesey Woodlands

2.3 Drey

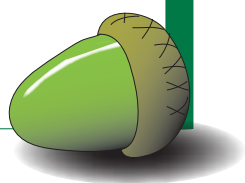
Red squirrels make nests called dreys. This sheet simply provides some information about the drey and can be used as a basis for discussing homes e.g. comparing the houses that people live in with the homes of other creatures and the materials that are used to build them.

Key Stage 1

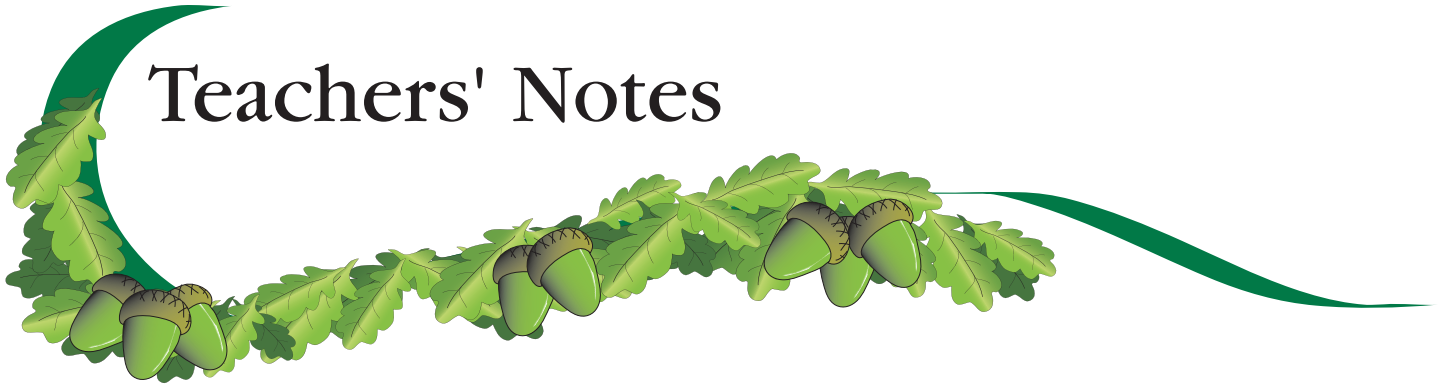
Activity 7 - The Red Squirrel's Drey
Activity 8 - Where's the Drey?

Key Stage 2

Activity 10 - Find the Drey!
Activity 11 - Rusty's Adventures



Teachers' Notes



2.0 Information Sheets

2.4 Food

Here, the red squirrel's diet is analysed and this is a good opportunity to look at the different tree species and to look at plant lifecycles.

Key Stage 1

Activity 9 - The Red Squirrel's Food
Activity 10 - Red Squirrel Food Plate
Activity 11 - How many Acorns?
Activity 12 - Find the Food!

Key Stage 2

Activity 12 - Red Squirrel Diet

2.5 Dangers

Red Squirrels have been under threat for some time with many populations in England and Wales becoming extinct. The main problem has been the introduction of the grey squirrel which carries a virus that is fatal to the red squirrel along with loss of habitat. Grey squirrels are also thought to out compete red squirrels thus exacerbating the problems faced by the reds. It would be possible here to look at diseases that effect other species and/or humans creating temporary or perhaps permanent population crashes e.g. the black plague.

Key Stage 1

Activity 13 - Dangers Facing the Red Squirrel

Key Stage 2

Activity 13 - Dangers Facing the Red Squirrel

2.5 What can I do?

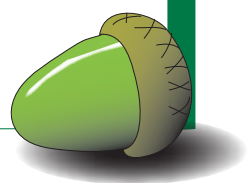
This sheet explains what the children can do to help the red squirrels and can be used to illustrate the concept of "Think Global Act Local"

Key Stage 1

Activity 14 - Plant a Tree

Key Stage 2

Activity 14 - Build a Nest Box



Teachers' Notes

3.0 National Curriculum in Wales

Most of the activities in this pack tie into aspects of the National Curriculum in Wales. In order to make the pack more accessible, the areas to which each activity relates has been outlined below. Most of the activities relate to the science section but there are also aspects of English, Welsh, mathematics, geography, art and design and technology. Each activity has an associated National Curriculum sheet that outlines the task, objectives and possible extension work to be carried out on a similar theme.

Key Stage 1

Key Stage 2



Art

Activity 2 - Red Squirrel Model
Activity 3 - Red Squirrel Mask
Activity 6 - Leaf Mobile
Activity 10 - Red Squirrel Food Plate

Activity 3 - Red Squirrel 3D Card
Activity 4 - Red Squirrel Desk Tidy



English

Activity 7 - The Red Squirrel's Drey
Activity 9 - Red Squirrel's Food
Activity 13 - Dangers facing the Red Squirrel

Activity 6 - Identify the Trees
Activity 11 - Rusty's Adventures
Activity 12 - Red Squirrel Diet



Geography

Activity 12 - Find the Food!

Activity 8 - Label the Map
Activity 9 - Anglesey Woodlands
Activity 10 - Find the Drey!



Mathematics

Activity 11 - How many Acorns?

Activity 2 - How much does a squirrel weigh?



Science

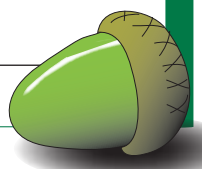
Activity 1 - Label the Squirrel
Activity 4 - Red Squirrel Habitat
Activity 5 - Trees and Leaves
Activity 6 - Leaf Mobile
Activity 7 - The Red Squirrel's Drey
Activity 8 - Where's the Drey?
Activity 9 - Red Squirrel's Food
Activity 10 - Red Squirrel Food Plate
Activity 13 - Dangers Facing the Red Squirrel
Activity 14 - Plant a Tree

Activity 1 - Adaptations to the Environment
Activity 5 - Red Squirrel Habitat
Activity 6 - Identify the Trees
Activity 7 - Food Chain
Activity 12 - Red Squirrel Diet
Activity 13 - Dangers Facing the Red Squirrel



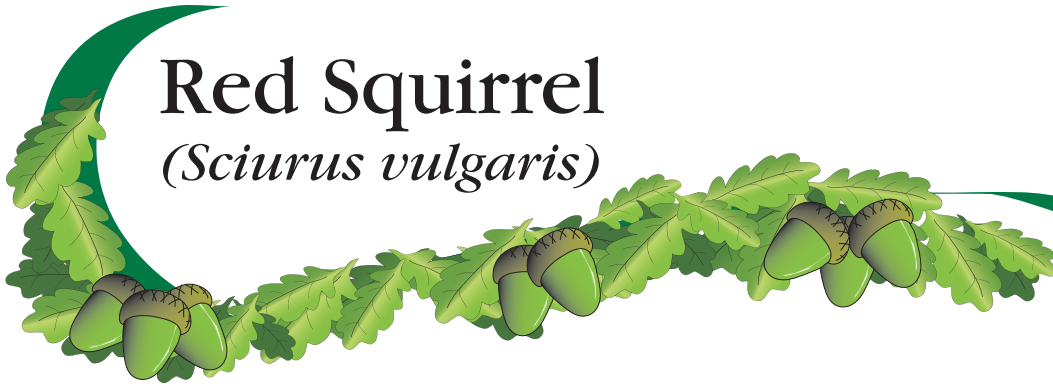
Design and Technology

Activity 14 - Build a Nest Box



Red Squirrel

(*Sciurus vulgaris*)



The red squirrel is a very beautiful mammal.

SIZE It is not a large animal - its body is about 22cm long, which means that it's shorter than an ordinary 30cm ruler. You do, however, need to add the length of its tail to this size and the tail can be nearly as long again.

COAT The red squirrel has a rich, reddish brown coloured coat with a lighter coloured abdomen. The fur is shed twice a year, and in the winter the coat is a thick, warm one, which is usually deep red. In summer, the red squirrel has a lighter coat, which is also lighter in colour and may appear to be grey.

TAIL The red squirrel has a magnificent, reddish brown, bushy tail. It's very useful because it helps the squirrel to keep its balance as it climbs, runs and jumps amongst the branches. It is also used to signal to other squirrels, as a flag it is used to tell others that danger approaches. It also has the advantage that it may be wrapped snugly, like a duvet, around the red squirrel as it sleeps in its drey. Welsh red squirrels often have blonde tails.

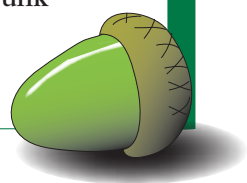
EYES Red squirrels have watchful, wise, black eyes. There is a ring of lighter fur around the eyes which are on either side of the head. The squirrel has good eyesight and a wide field of vision, which is important for spotting danger and predators.

EARS The red squirrel has very deep red ear tufts that are 3 cm long in mid winter but are smaller in summer. Their ear tufts often turn blonde later in the year. They possess sensitive hearing which is vital to them so that they can tell when predators are near.

WHISKERS The squirrel's whiskers are very sensitive and are found around its nose and just above its mouth. They are used to judge distance and the size of objects.

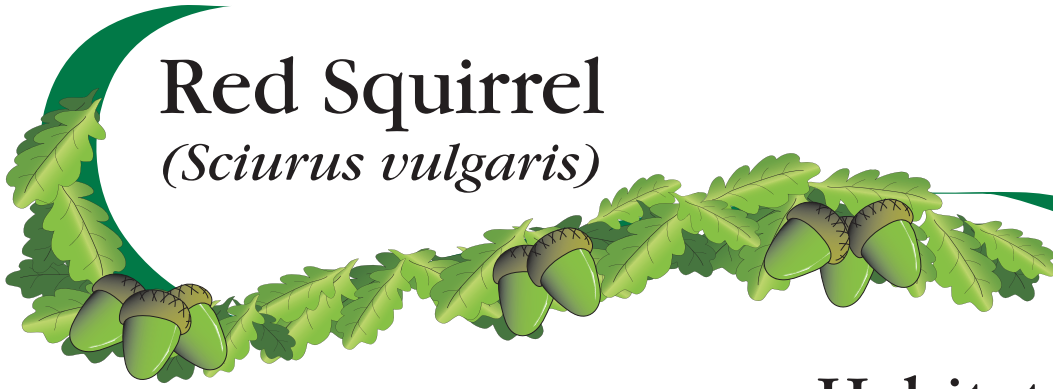
FRONT LEGS There are five fingers on the front legs, which are similar to hands - they have four long fingers and one short thumb. The squirrel uses the fingers very deftly to hold nuts and cones, raising them to the mouth to extract the small seeds.

HIND LEGS The squirrel's hind legs are longer than its front legs, and these have five toes. The toes have claws which are long and strong for climbing. The squirrel will run down a tree trunk headfirst, using the claws on her fingers and toes to grip the tree.



Red Squirrel

(*Sciurus vulgaris*)



Habitat

- Red squirrels like to live in woods. There are red squirrels at Mynydd Llwydiarth, near Pentraeth on Anglesey, where there are plenty of conifers. They like living amongst the highest branches of the trees because they feel safe there.
- When the red squirrels feel sufficiently confident, they will move around nimbly on the forest floor.
- Their natural habitat is deciduous forests - that is, forests of trees which shed their leaves in winter, such as the oak, hazel, ash and beech.
- They also live in coniferous forests provided there is enough food for them.
- Scots pine - the red squirrel uses this tree for its pine cones, and also to make its nest (drey) of twigs in its branches. The dreys are built at least 3m from the ground.
- The red squirrel may also be found on trees such as the Norway spruce, larch and lodgepole pine.
- The red squirrels spend most of their time in the highest branches of the trees, and move around during the day.
- In summer they usually feed and move early in the morning and in the late afternoon. After lunch, they enjoy a siesta and sleep either in their dreys or in a convenient hole in the branches high up off the ground so that they are safe from predators.
- In winter they move around later in the morning and use the middle part of the day to forage for food.
- The Anglesey red squirrels have survived on Mynydd Llwydiarth, and have also started to move out of the coniferous forest into deciduous woodland around Wern yr Wylan.

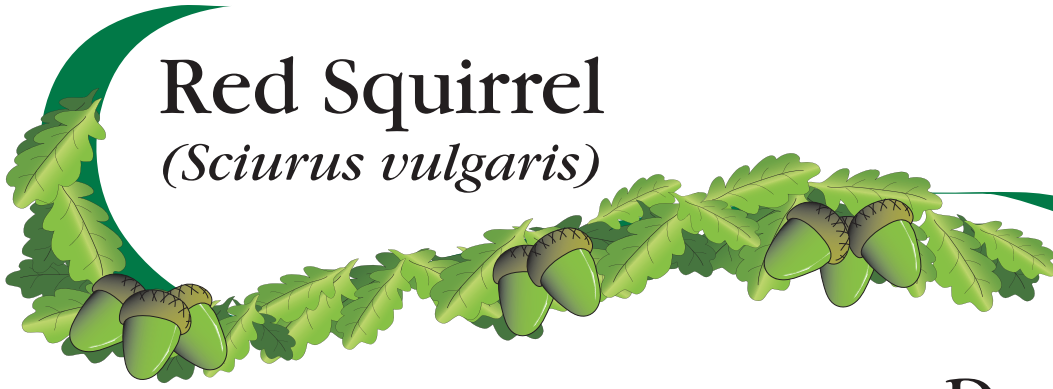


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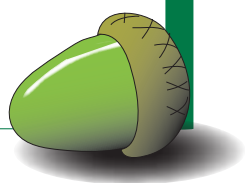
Red Squirrel

(*Sciurus vulgaris*)



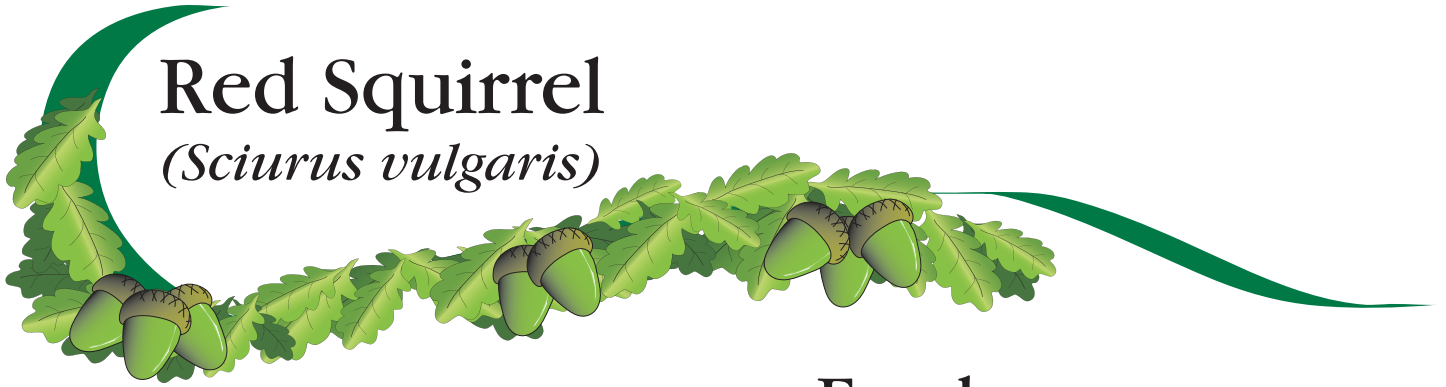
Drey

- The red squirrel builds its nest, called a drey, high in the branches of trees to feel safe and the drey is usually at least 9m above the forest floor. It's usually quite an untidy nest, but large. It is usually sited near to the tree trunk in order to obtain as much protection as possible from the wind.
- The drey is made from twigs, and lined comfortably with moss, leaves and fur.
- In fact the red squirrel has two kinds of nests - a more temporary summer drey which will be used simply for a nap after lunch or for a night's sleep.
- In winter, a far stronger drey is built which will withstand the weather.
- When the female - the mother squirrel - starts to build a nest to raise her family, she makes sure that it is sufficiently strong and large for the young ones, and that it is particularly cosy with a soft, warm layer of leaves, moss and fur.
- Once the male and female have mated, the female will ensure that she has a nest ready for the birth of the little ones. A red squirrel will usually raise one litter a year and most of the young are usually born around March or June.
- There is an average of three young per litter and they are very small when born. They are hairless, they are blind, deaf and are unable to take care of themselves and clean themselves.
- They weigh only around 10 - 15 gm when born.
- The mother takes great care of them and is very protective of them for the first two months. They suckle the mother and do not eat solid food for about seven weeks.
- Their fur starts to grow after about a fortnight. After a month their eyes and ears open.
- By the time they are seven weeks old they are able to climb quite well and start to explore the drey.
- When they are two months old they start to explore beyond the drey but if the mother feels that they are moving too far she will grab them by the scruff of their neck and bring them back to the drey.
- As the young squirrels grow, they venture further and further afield until one day they finally leave the drey.



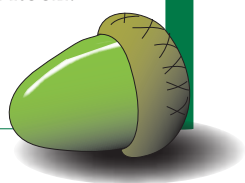
Red Squirrel

(*Sciurus vulgaris*)



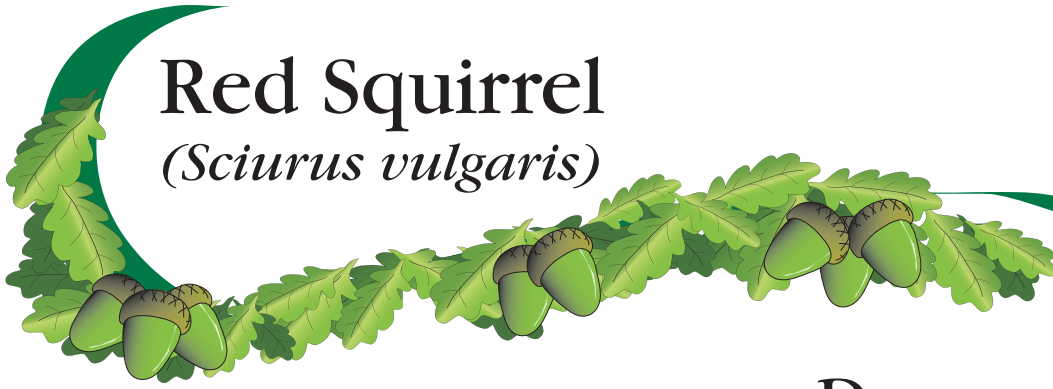
Food

- Seeds are the basis of a red squirrel's diet, and especially seeds from pine cones. The squirrels hold the cones between their hands and raise them to their mouths. The front teeth are used to extract the small seeds from the cones, and once the seeds have been eaten, the bracts are discarded.
- Red squirrels often have a favourite spot in the forest such as tree stumps, where they like to eat. Here you may be able to see the discarded cones on the forest floor once the seeds have been eaten.
- The Scots pine is one of the red squirrels' favourite conifer trees.
- Red squirrels will also eat Norway spruce seeds. The seeds of this tree are larger and the seeds remain in the cones until spring.
- Lodgepole pine and the European larch also provide cones that are suitable for the red squirrels. The seeds of both the lodgepole pine and the European larch are smaller than those of the Scots pine.
- Hazelnuts are eaten by red squirrels. They can split a hazelnut cleanly in half to get at the protein rich nut inside the shell.
- Red squirrels will also eat acorns after removing them from the acorn cups.
- The squirrel will raise a nut to its mouth using its two hands. On each hand there are four fingers and a thumb and the squirrel use these very deftly.
- Most red squirrels are right handed.
- The squirrel will squat on its hind legs to eat cones, nuts and acorns and will use its two hands to raise the food to its mouth.
- In the spring it feeds on young shoots and flowers.
- It will also eat fruits, berries, tree bark and fungi.
- Occasionally red squirrels will eat insects and birds' eggs.
- Red squirrels collect hazelnuts and cones and bury them for later use. Occasionally, they forget where they have been buried and new plants will grow from the buried seeds. This means that the squirrel is of great assistance in seed dispersal and this results in new growth of young trees, at times at some distance from the tree where the seeds were collected.
- The red squirrel is a shy mammal and it's easier to find its traces rather than see the animal itself. The most obvious signs are the scales left on the forest floor marking the site where the red squirrel has been feeding.



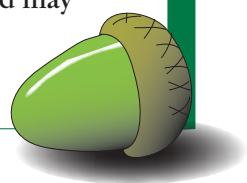
Red Squirrel

(*Sciurus vulgaris*)



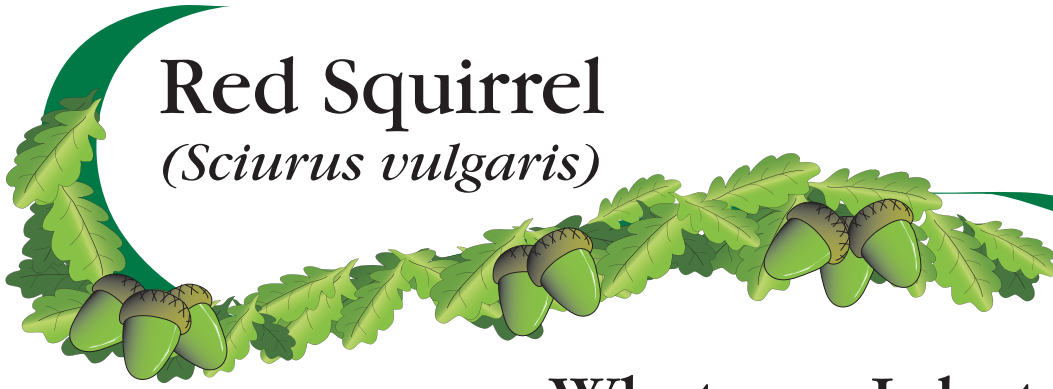
Dangers

- The red squirrel has been in Wales and the rest of Britain since the end of the last Ice Age, around 10,000 years ago. The animal is a native of these islands but its numbers have, unfortunately, been greatly reduced during the last century.
- The red squirrel has a few enemies in the wild, such as the fox, stoat, pine marten and goshawk. Another predator is the domestic cat, especially in built up areas.
- Red squirrels are also vulnerable to being run over on busy roads.
- The main reason why the red squirrel has become increasingly scarce is the appearance of the grey squirrel.
- At the end of the nineteenth century, around 1876, a few grey squirrels were brought over from North America to Britain, and unfortunately for the red squirrel, its grey cousin succeeded in adapting itself to its new environment and is now flourishing.
- The grey squirrel has flourished and has succeeded in driving the red squirrel from its natural habitat. It lives in the same kind of habitat as the red squirrel - habitats such as deciduous woods and coniferous forests.
- The grey squirrel is also a carrier of a virus called Parapox; although this virus does not harm the grey squirrel, it kills the red squirrels.
- We are very lucky on Anglesey that we have a remaining population of red squirrels. Scientists have been examining the population and have found that they have been here for centuries, but that they are now in danger of extinction.
- Dr Craig Shuttleworth has been appointed to study the red squirrels of Mynydd Llwydiarth. He has been studying these red squirrels carefully over the last few years. He has also been trapping the grey squirrels and disposing of them so that the red squirrels will survive.
- If red squirrels are to survive on Anglesey, the grey squirrels must be removed to allow the red squirrels to re-occupy the habitats from which they have been excluded so that the island may once more be a safe haven for the red squirrel.



Red Squirrel

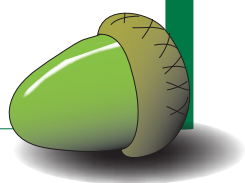
(*Sciurus vulgaris*)



What can I do to Help?

A few years ago, a group of people who were interested in conservation came together and decided that they would do their utmost to save the red squirrels of Anglesey - they are the **Friends of the Anglesey Red Squirrels**.

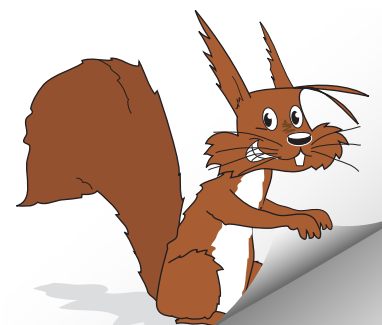
- They raise funds in order to aid the red squirrels. e.g. food in winter and shelter in nest boxes
- You can help by joining the Friends of the Anglesey Red Squirrels.
- By learning about the red squirrels and helping to safeguard them, you too can be a part of the scheme to save the red squirrels on Anglesey.
- Tell your friends and parents about the red squirrels of Anglesey.
- Join a Red Squirrel Conservation Programme.
- There are also other worthwhile activities - for example you could help to build a nesting box for the squirrels.
- Take a walk in the woods and learn about the habitat of the red squirrel.
- Learn about other red squirrels in Wales.



Key Stage 1

Contents

1. List of Activities describing activity type and curriculum subject
2. Front Page for Key Stage 1 Activity Booklet
3. **Activity 1 - Label the Squirrel**
 - a. Label the Squirrel Activity Sheet
 - b. Label the Squirrel Answer Sheet
 - c. Label the Squirrel National Curriculum Sheet
4. **Activity 2 - Red Squirrel Model**
 - a. Red Squirrel Model Activity Sheet
 - b. Red Squirrel Model National Curriculum Sheet
5. **Activity 3 - Red Squirrel Mask**
 - a. Red Squirrel Mask Activity Sheet
 - b. Red Squirrel Mask National Curriculum Sheet
6. **Activity 4 - Red Squirrel Habitat**
 - a. Red Squirrel Habitat Activity Sheet
 - b. Red Squirrel Habitat Answer Sheet
 - c. Red Squirrel Habitat National Curriculum Sheet
7. **Activity 5 - Trees and Leaves**
 - a. Trees and Leaves
 - b. Trees and Leaves Answer Sheet
 - c. Tree and Leaves National Curriculum Sheet
8. **Activity 6 - Leaf Mobile**
 - a. Leaf Mobile Activity Sheet
 - b. Leaf Mobile National Curriculum Sheet
9. **Activity 7 - The Red Squirrel's Drey**
 - a. The Red Squirrel's Drey Activity Sheet
 - b. The Red Squirrel's Drey National Curriculum Sheet
10. **Activity 8 - Where's the Drey?**
 - a. Where's the drey? Maze Activity Sheet
 - b. Where's the Drey? Maze Answer Sheet
 - c. Where's the Drey? National Curriculum Sheet
11. **Activity 9 - The Red Squirrel's Food**
 - a. The Red Squirrel's Food Activity Sheet
 - b. The Red Squirrel's Food Answer Sheet
 - c. The Red Squirrel's Food National Curriculum Sheet
12. **Activity 10 - Red Squirrel Food Plate**
 - a. Red Squirrel Food Plate Activity Sheet
 - b. Red Squirrel Food Plate Answer Sheet
 - c. Red Squirrel Food Plate National Curriculum Sheet
13. **Activity 11 - How many Acorns?**
 - a. How many Acorns? Activity Sheet
 - b. How many Acorns? Answer Sheet
 - c. How many Acorns? National Curriculum Sheet
14. **Activity 12 - Find the Food!**
 - a. Find the Food! Activity Sheet
 - b. Find the Food! Answer Sheet
 - c. Find the Food! National Curriculum Sheet
15. **Activity 13 - Dangers Facing the Red Squirrel**
 - a. Dangers Facing the Red Squirrel Activity Sheet
 - b. Dangers Facing the Red Squirrel Answer Sheet
 - c. Dangers Facing the Red Squirrel National Curriculum Sheet
16. **Activity 14 - Plant a Tree**
 - a. Plant a Tree Activity Sheets, Q1, Q2
 - b. Plant a Tree Answer Sheets, A1, A2
 - c. Plant a Tree National Curriculum Sheet



Key Stage 1



Activity List

Activity Number	Activity Title	Activity Type	Subject
1	Label the Squirrel	Join the dots, colour in the squirrel and label the body	Science
2	Red Squirrel Model	Colour in, cut and fold	Art
3	Red Squirrel Mask	Colour in and cut out	Art
4	Red Squirrel Habitat	Colour in, identify and label the animals in the picture	Science
5	Trees and Leaves	Match the tree name to the leaf	Science
6	Leaf Mobile	Colour in and cut out leaf shapes and attach to lengths of string to hang from the ceiling	Art/Science
7	The Red Squirrel's Drey	Copy the sentences	English/Science
8	Where's the Drey ?	Maze	Science
9	Red Squirrel's Food	Word search	English/Science
10	Red Squirrel Food Plate	Colour in and cut out the items and stick them onto the plate according to season	Art/Science
11	How Many Acorns ?	Count the acorns, add and subtract	Mathematics
12	Find the Food !	Grid references	Geography
13	Dangers facing the red squirrel	Fill the blanks	English/Science
14	Plant a Tree	Grow a tree in the classroom, label a tree diagram, fill in the blanks and identify the seeds	Science

Rusty's

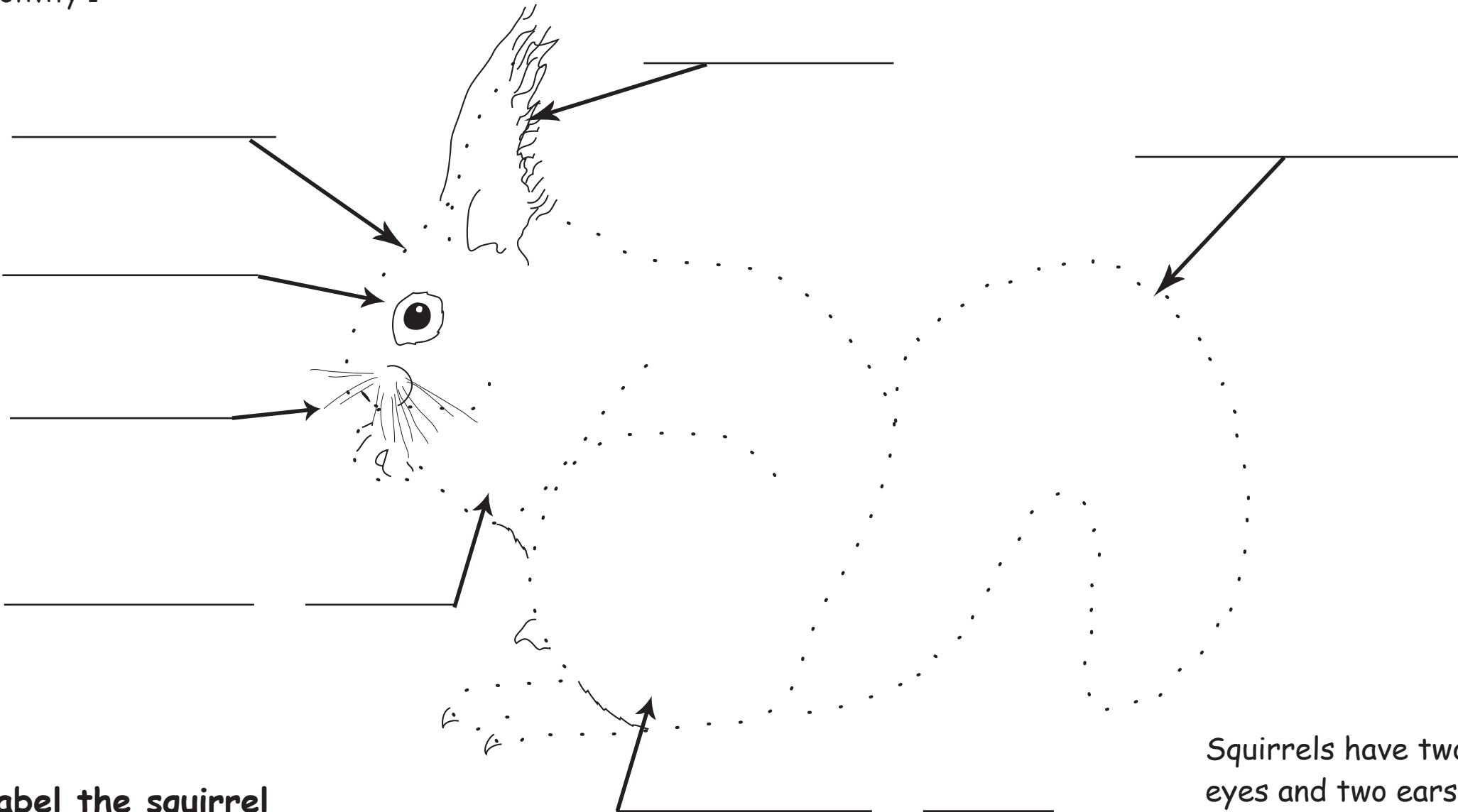


Activity Book

Name: _____

Year: _____

Activity 1



Label the squirrel

Join the dots and label the parts of the squirrel with the words below.

tail

back leg

head

eye

ear

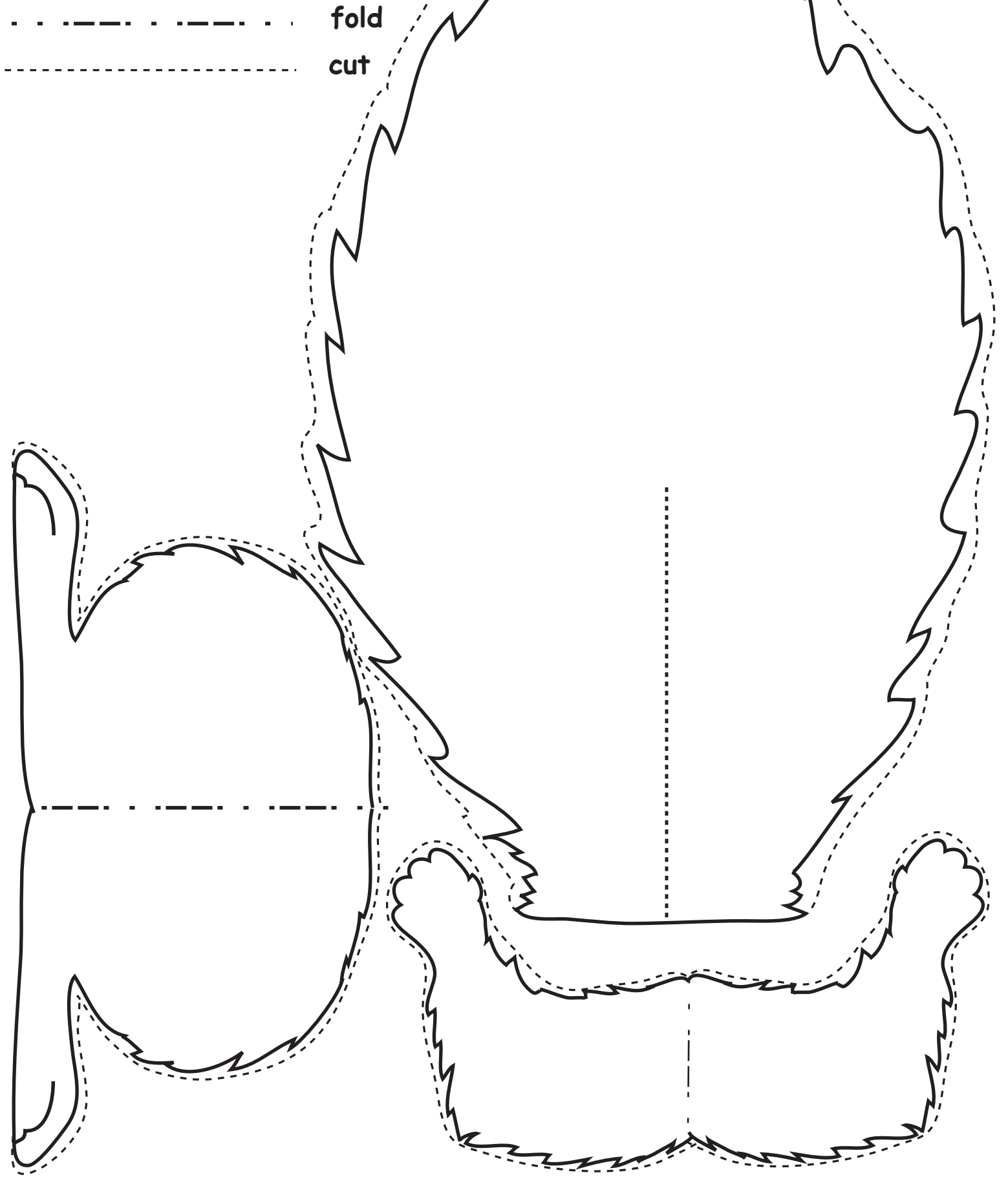
whiskers

front leg

Squirrels have two eyes and two ears just like us.

Are there any parts of the squirrel's body that are not like ours?

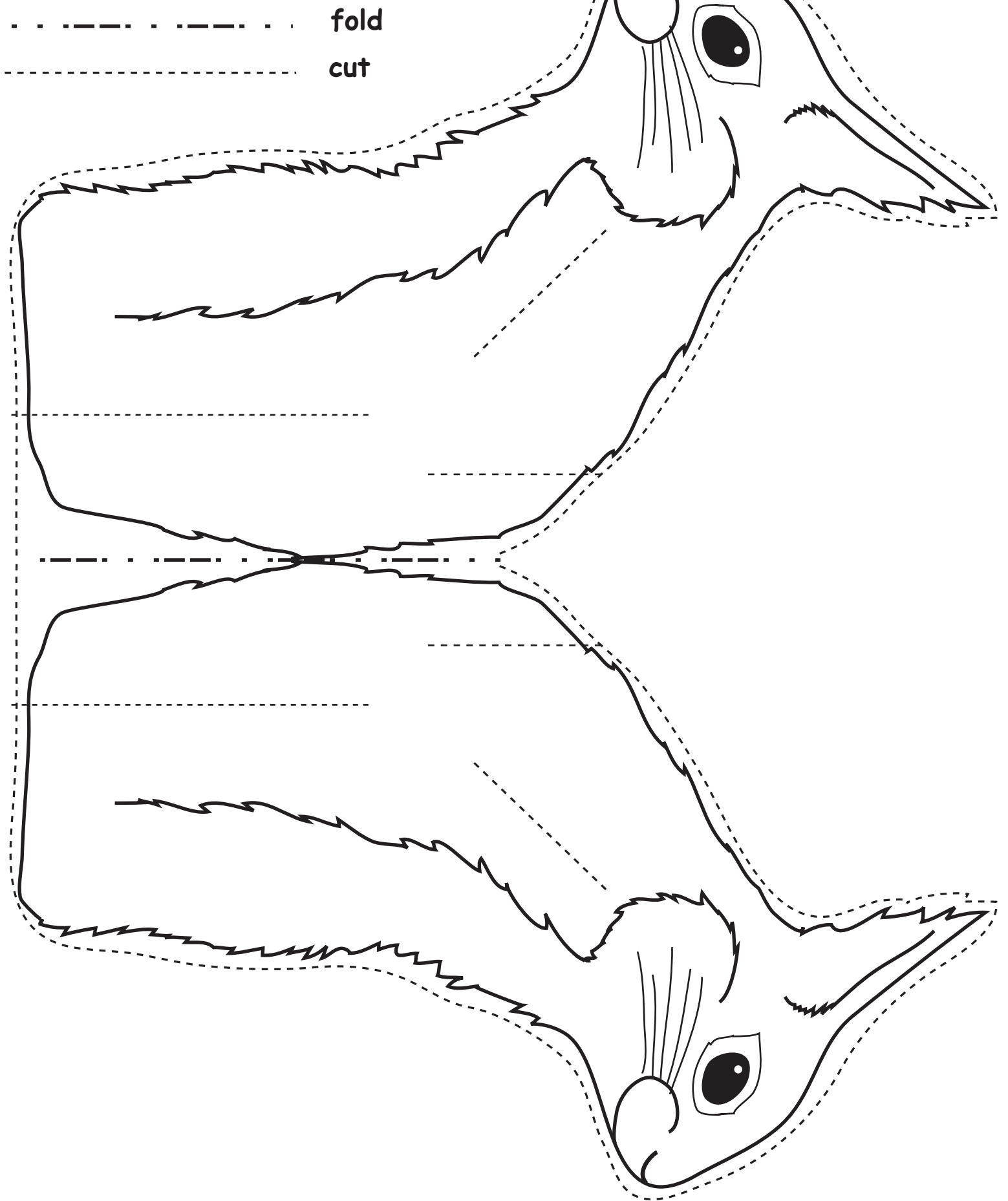
Red squirrel model



fold

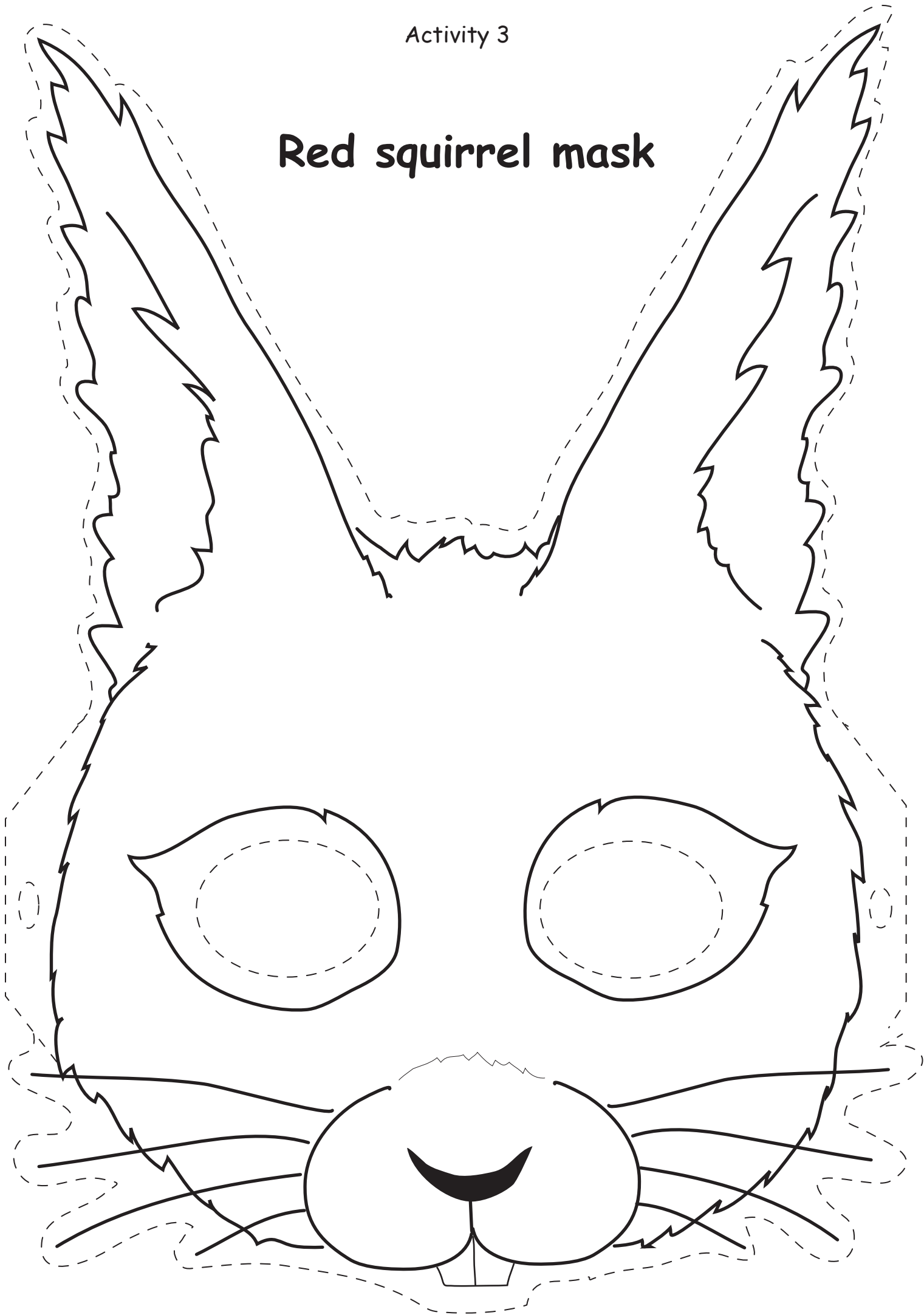
cut

Red squirrel model



Activity 3

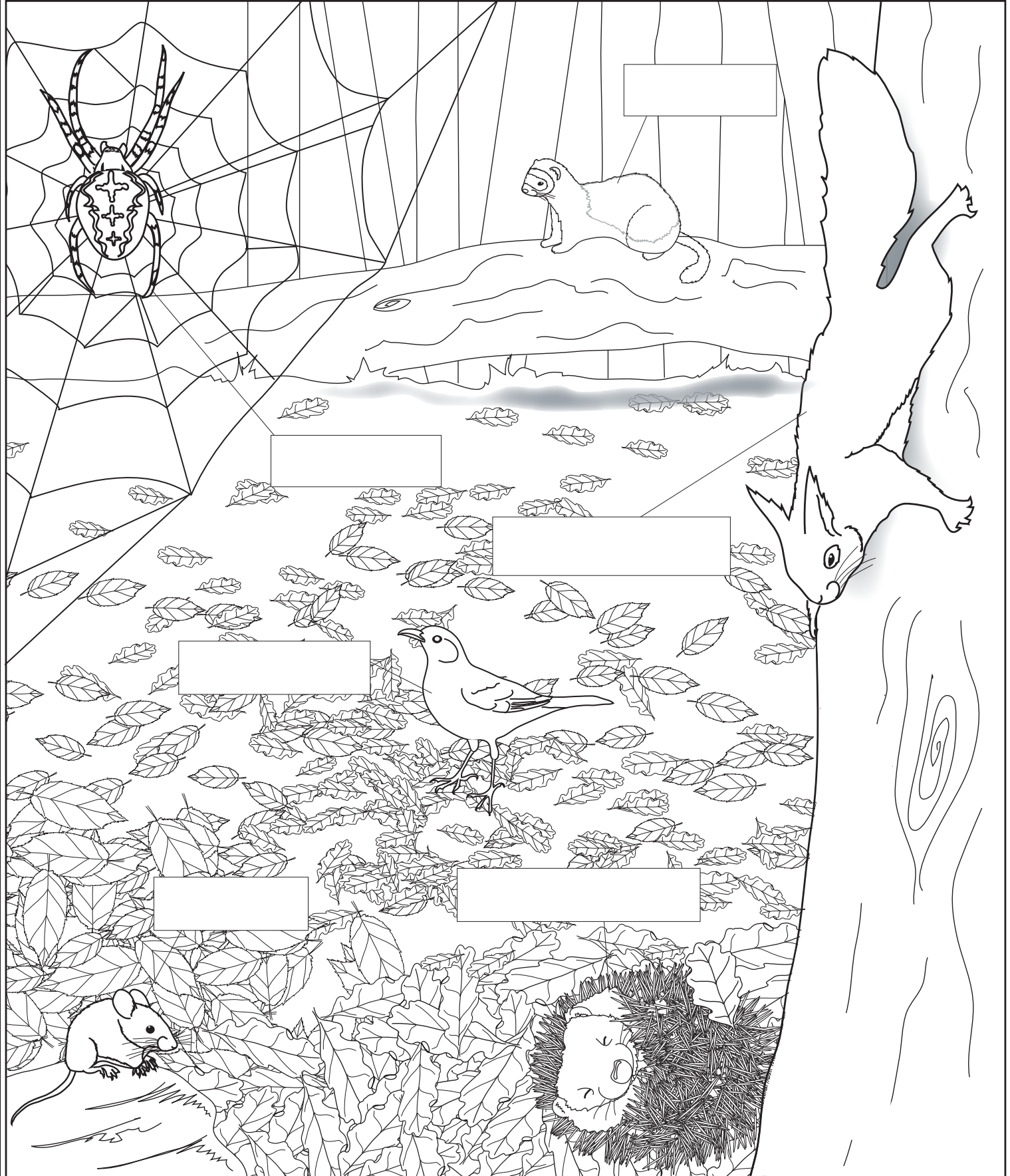
Red squirrel mask



Red squirrels like to live in woods. They like living amongst the highest branches of the trees because they feel safe there. There are red squirrels in the forest at Mynydd Llwydiarth, near Pentraeth on Anglesey.

Trees provide shelter and food for many animals.

Can you name the animals in the picture below?



red squirrel ☐

bird ☐

mouse ☐

spider ☐

polecat ☐

hedgehog ☐

Look at the pictures below.
Join the name of the tree to it's leaf.

hazel

birch

rowan

holly

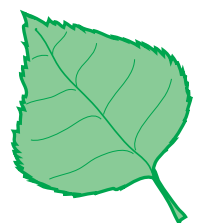
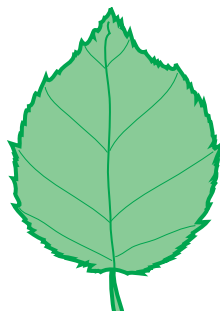
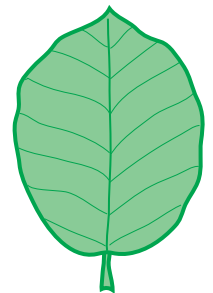
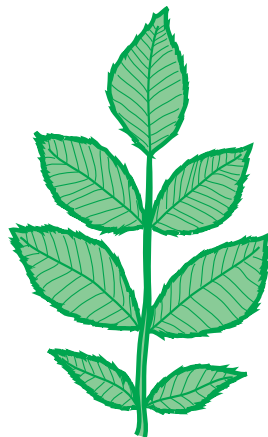
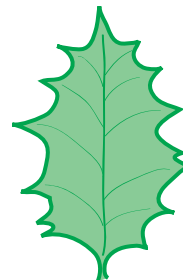
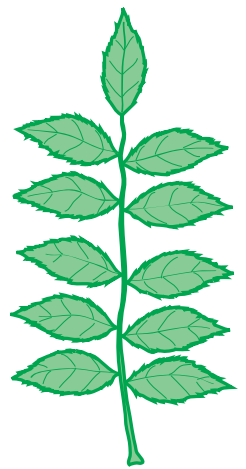
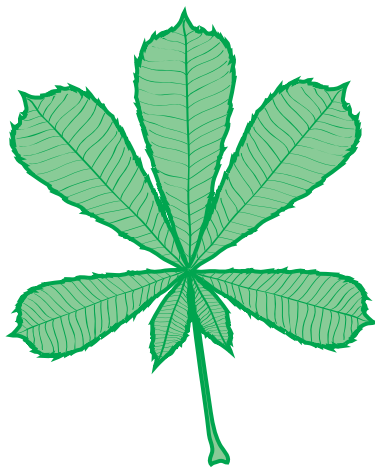
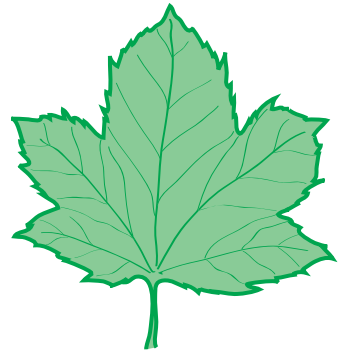
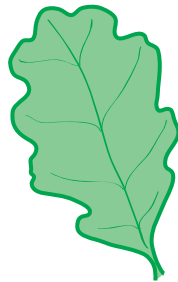
ash

sycamore

oak

horse chestnut

beech

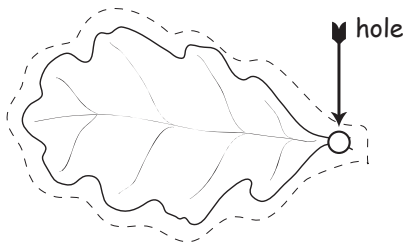
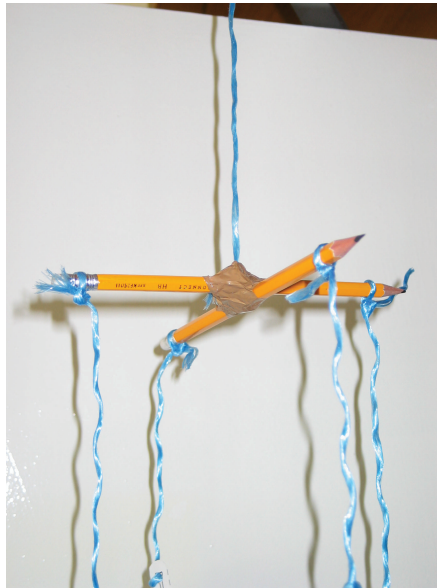


Leaf Mobile Instructions

You Will Need:

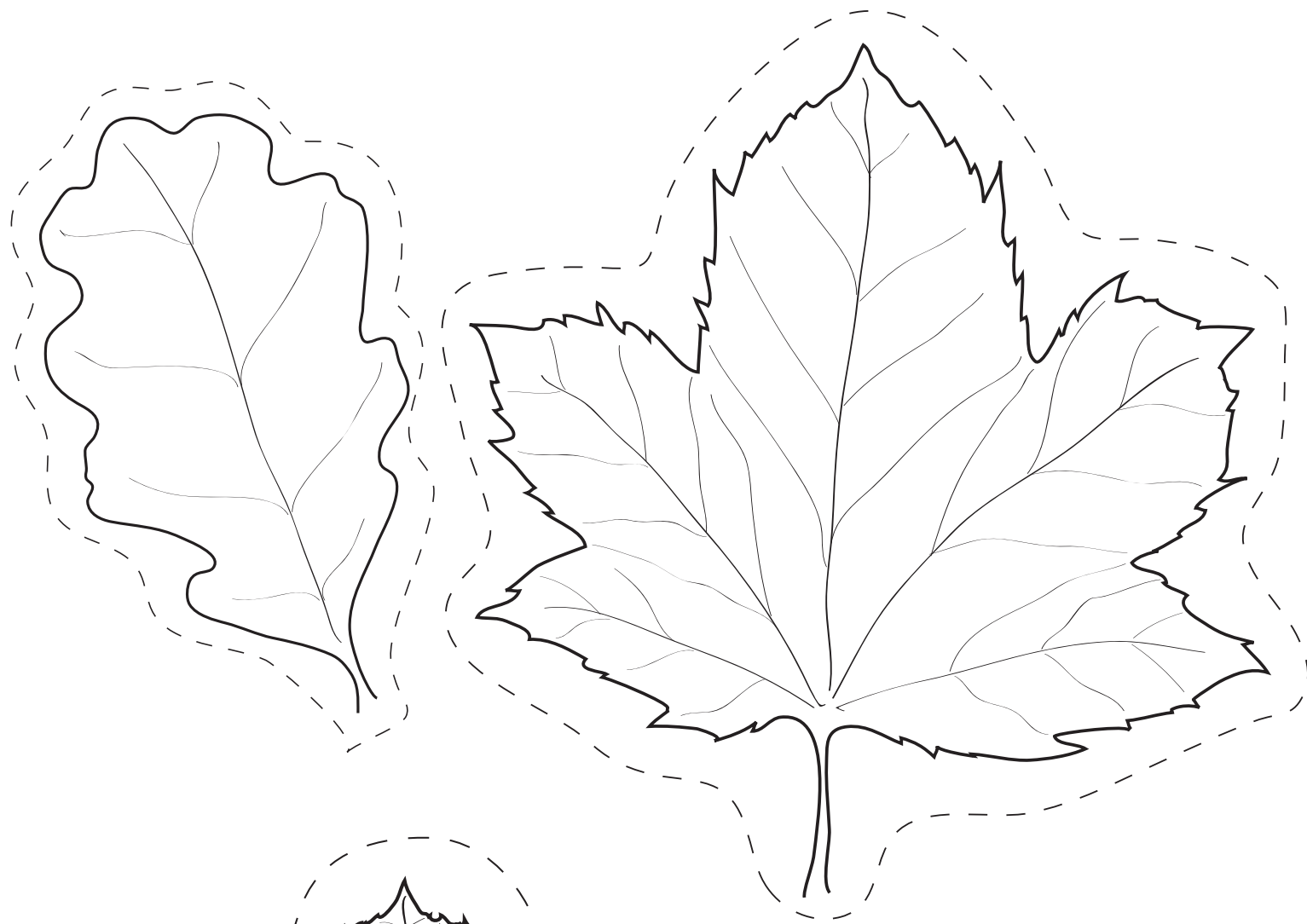
2x pencils (or dowel or straws), string, tape, hole punch, scissors

1. □ Cut two 70cm pieces of string, two 45cm pieces □
□ of string and one 35cm long piece of string
2. □ Tie the pencils together in a cross shape with the □
□ 35cm string
3. □ Tape over where the □
□ string is on the
□ pencils
4. □ Tie the 70cm pieces □
□ to the ends of
□ one pencil
5. □ Tie the 45cm pieces □
□ to the ends of
□ the other pencil
6. □ Cut out the leaf shapes from sheet 1 and punch □
□ holes in the ends



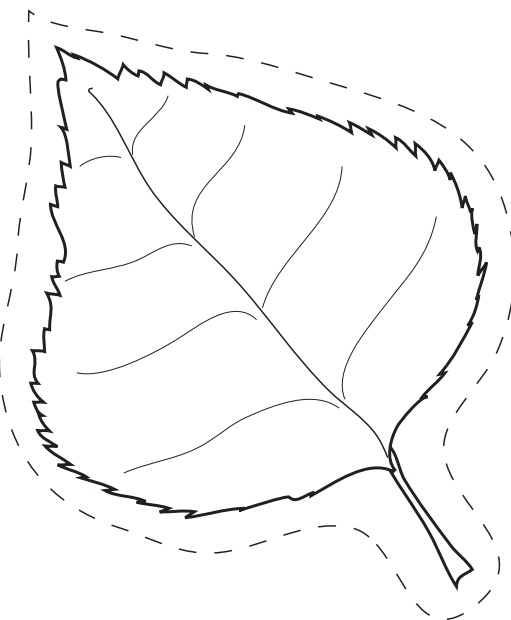
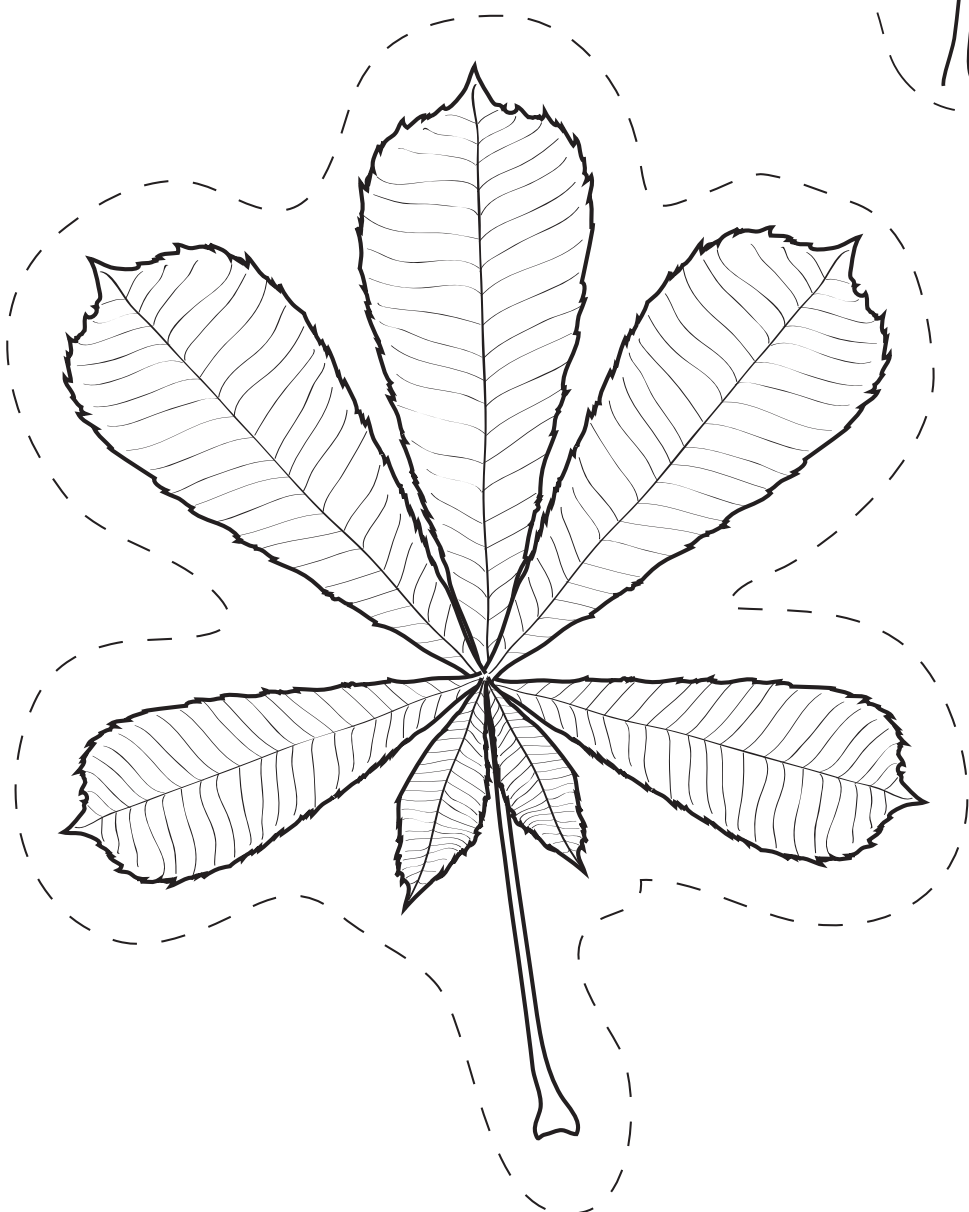
7. □ Put the string through the holes of the big leaves □
□ and tie them half way up the string
8. □ Put the sting through the holes of the small □
□ leaves and tie them to the bottom of the string
9. □ Repeat steps 6 to 8 with sheet 2 and the 45cm □
□ pieces of string
10. □ Hang your mobile using the 35cm piece of string





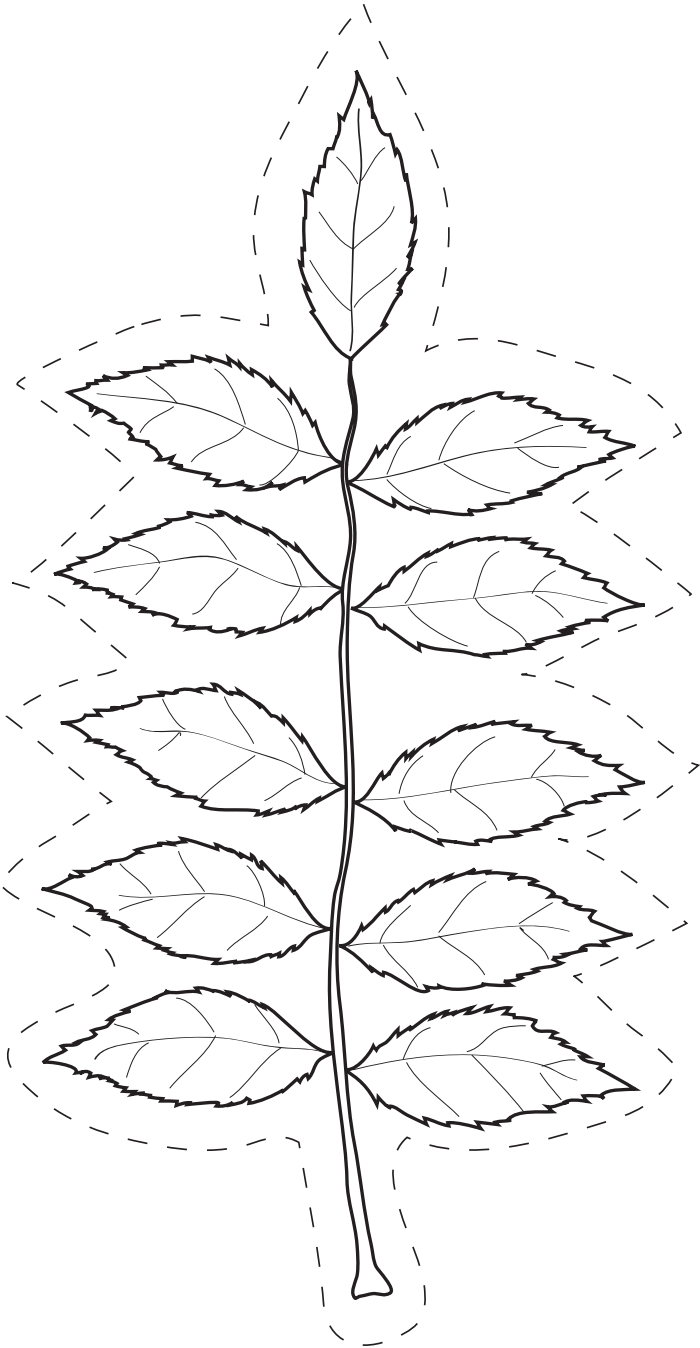
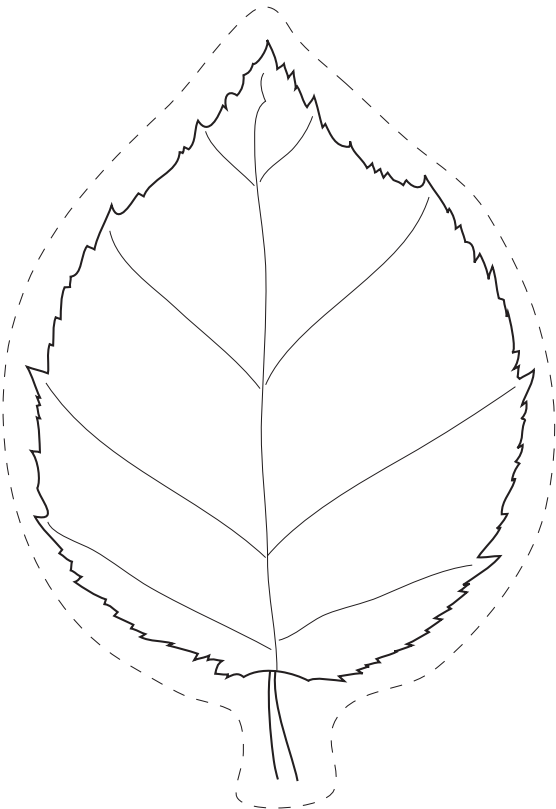
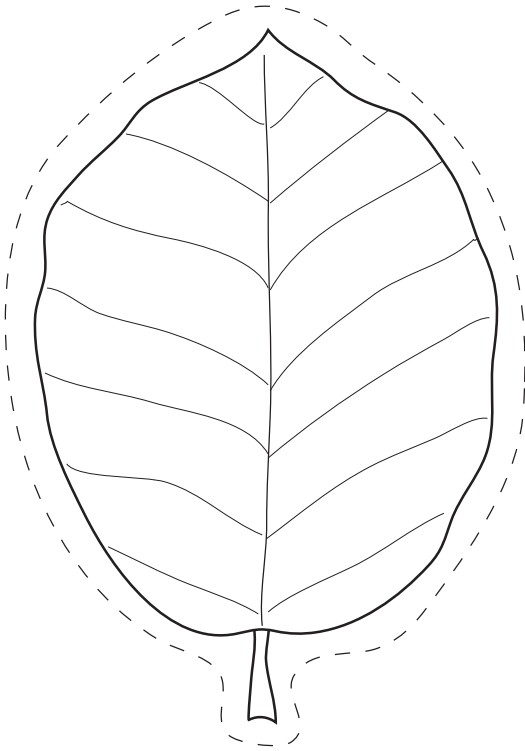
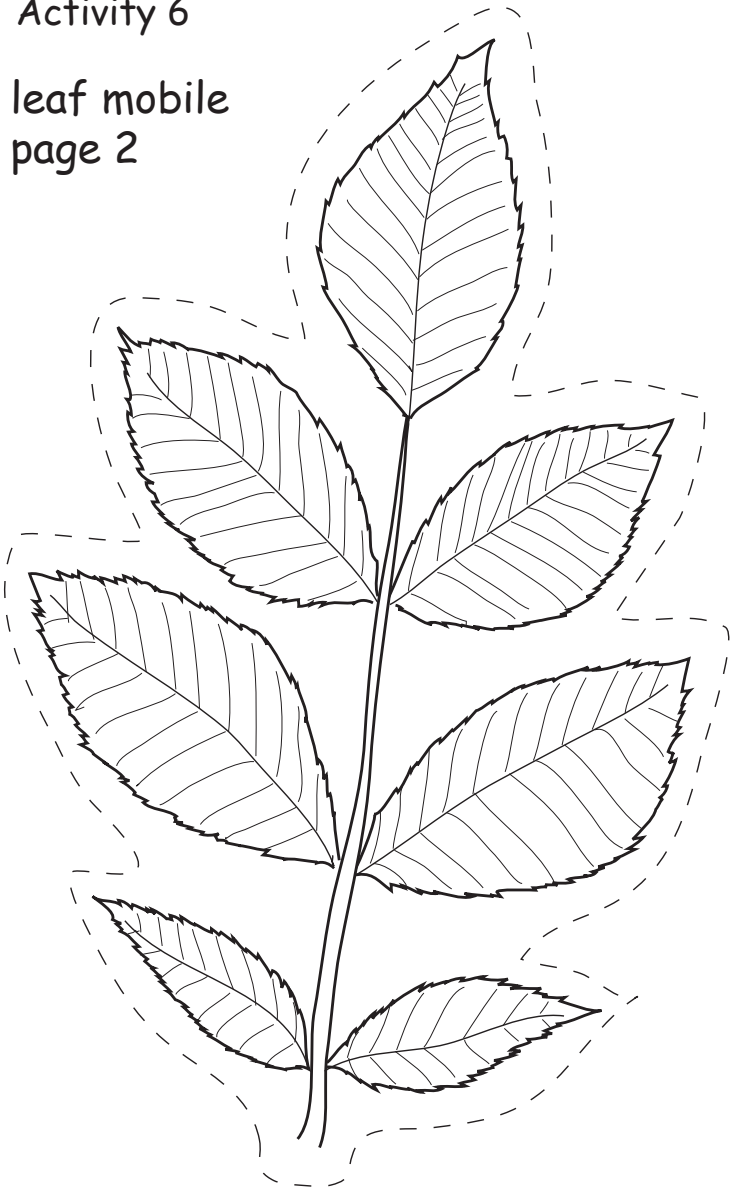
Activity 6

leaf mobile
page 1



Activity 6

leaf mobile
page 2



The Red Squirrel's Drey



Copy the sentences below

The red squirrel's nest is

called a drey and it builds it

high in the branches of trees.

The drey is made of twigs

leaves, moss and fur.

Where's the Drey?

Maze

The red squirrel builds nests called dreys, high in the woodland canopy. The red squirrel will carry dry moss, soft strips of bark, grass and dried leaves and use them to line the drey. This makes a soft, comfortable nest for the young kits when they are born. They produce two litters of three to four kittens a year, usually in March and July.

Unfortunately, this little red squirrel has got lost in the woods.

Can you help it find its way back to its drey?



Where's the Drey?

Activity 8



The Red Squirrel's Food

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

The red squirrel has cached its food in these squares.
Can you help the squirrel find its food?
(The words may go up, down or diagonally)

This is the food that the red squirrel has cached:

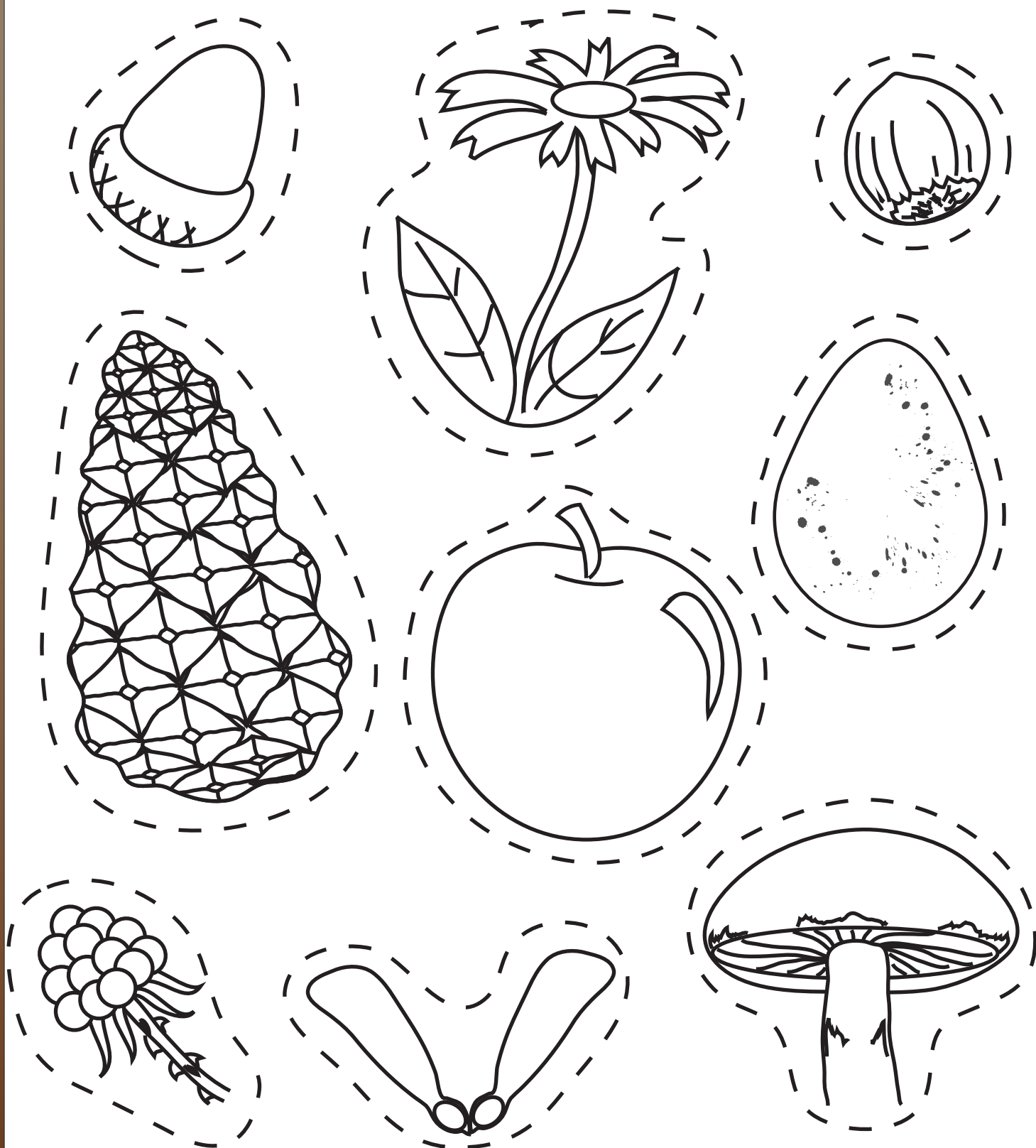
1. hazelnuts
2. seeds
3. acorns
4. pine cones
5. young shoots
6. fungi

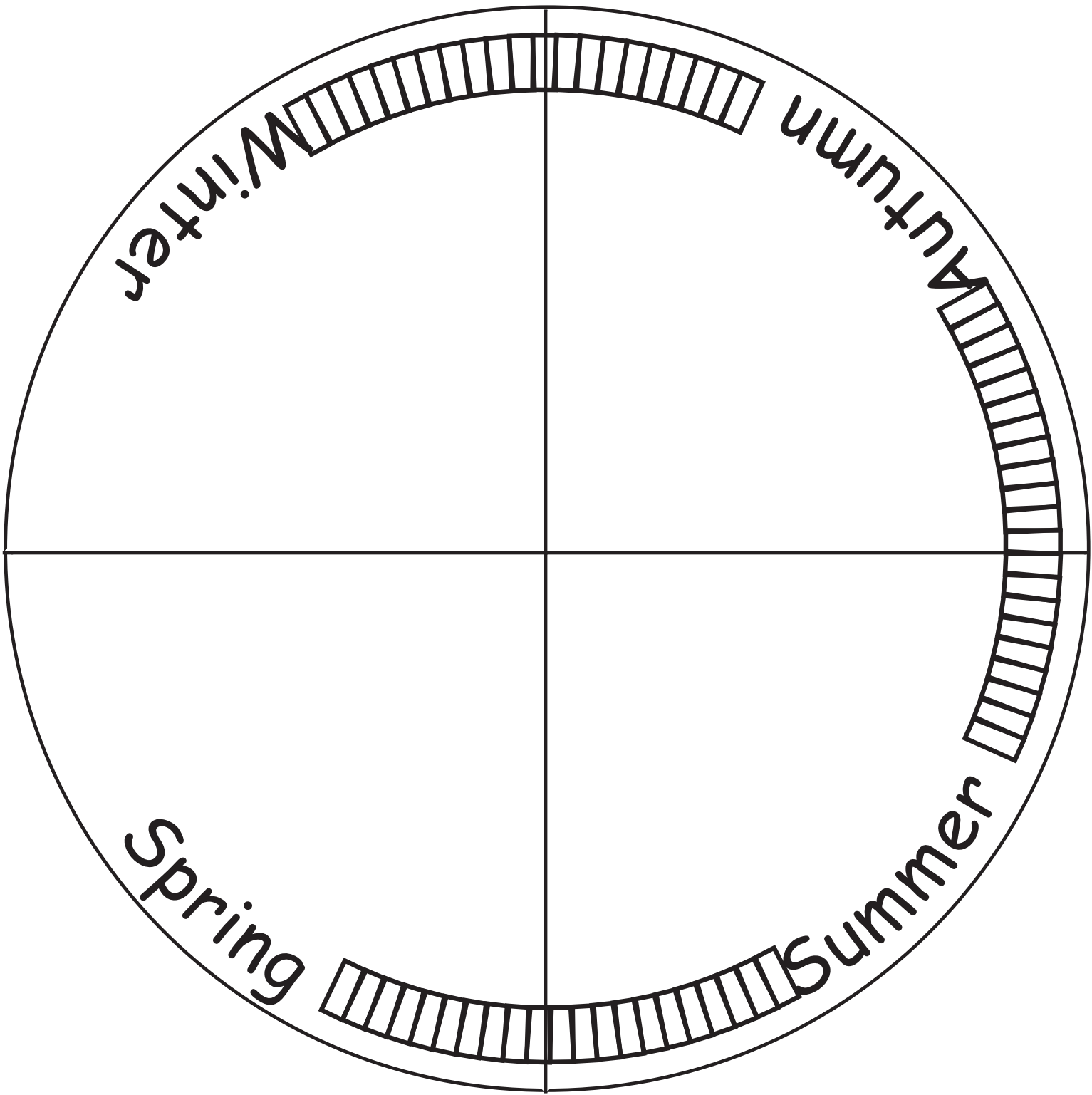


Red Squirrel Food Plate

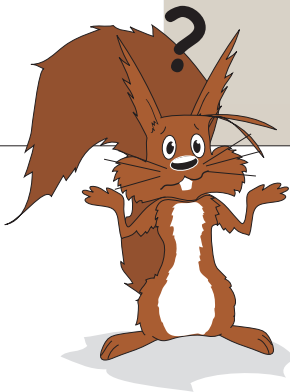
Here are some pictures of what a red squirrel might eat. Colour in and cut out the shapes below then cut out the shape of a plate, section it into quarters and label each quarter spring, summer, autumn, winter. Think about when the food might be available for the squirrel to eat e.g. pine cones have seeds in them during the summer, birds lay their eggs in the spring. Glue the cut out shapes into the appropriate section of your "plate."

Acorns, Pine cones, Bird eggs, Hazel nuts, Fungi, Seeds, Berries, Flowers, Apples.





How many Acorns?

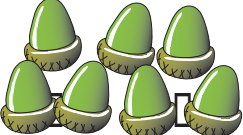



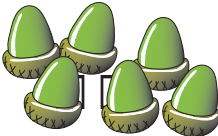

Rusty has been collecting acorns in the forest.
Can you help him count them?

 +  = acorns

 +  = acorns

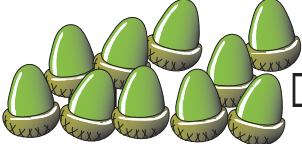

-  = 3 acorns



 +  = acorns

 -  = acorn

+  = 9 acorns

 -  = acorns

 -  = acorns

 +  = acorns

 - = 5 acorns

1 <input type="text"/>	2 <input type="text"/>	3 <input type="text"/>	4 <input type="text"/>	5 <input type="text"/>	6 <input type="text"/>	7 <input type="text"/>	8 <input type="text"/>	9 <input type="text"/>	10
------------------------	------------------------	------------------------	------------------------	------------------------	------------------------	------------------------	------------------------	------------------------	----

Find the Food!

Rusty the red squirrel has hidden his food somewhere in the grid below.

In order to find it again he needs to know in which square his food is located.

Can you help Rusty?

To give the location of the square, look along the top row and choose which column the food is in then look down the side to decide which row it's in. For example the pine cone is hidden in square C6.

Locate the following:

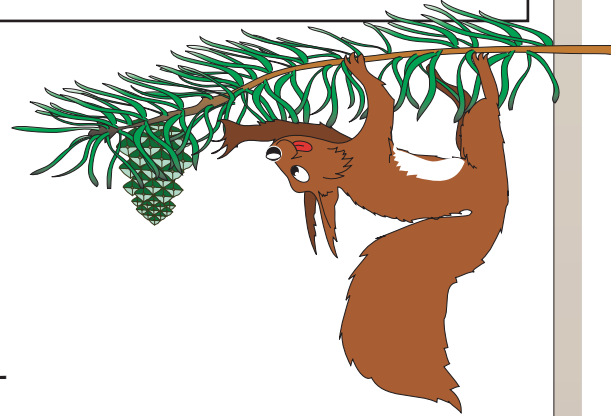
Acorn _____

Berries _____

Flower _____

Hazel nut _____

Seeds _____



a □ b □ c □ d □ e □ f □ g □ h

1								
2								
3								
4								
5								
6								
7								

Dangers Facing the Red Squirrel

Fill in the blanks using the words below

red

fox

woodlands

trees

rare

America

grey

disease

grey

The _____ squirrel is native to Britain.

There is another squirrel found in Britain the _____ squirrel.

The _____ squirrel was introduced into parks and quickly spread into the surrounding countryside.

The grey squirrel comes from _____.

Grey squirrels carry a _____ which kills the red squirrels. Red squirrels are now very _____ in Wales.

Red squirrels have several enemies including the _____, stoat and pine marten.

Red squirrels live in _____.

Many trees are cut down every year so there are less places for the squirrels to live.

By planting _____, it is possible to help the red squirrels and other animals that live in woodlands.

Red squirrels love to eat the nuts and seeds from a number of trees including hazel nuts, acorns and the seeds from pine cones. Squirrels also build their dreys in the treetops therefore trees are very important for them. You can help the red squirrels by planting trees! The instructions below show you how to plant an oak tree.

You will need:

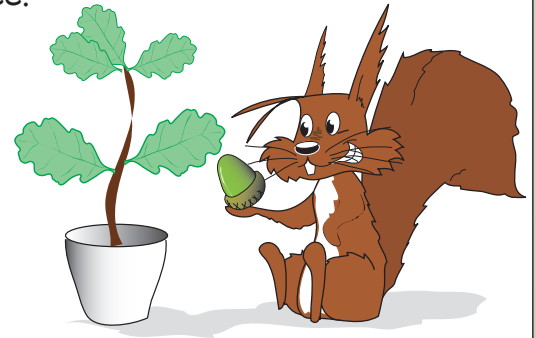
A pot (an empty yoghurt pot will do)

Compost

Acorns

A bucket of water

Wire mesh

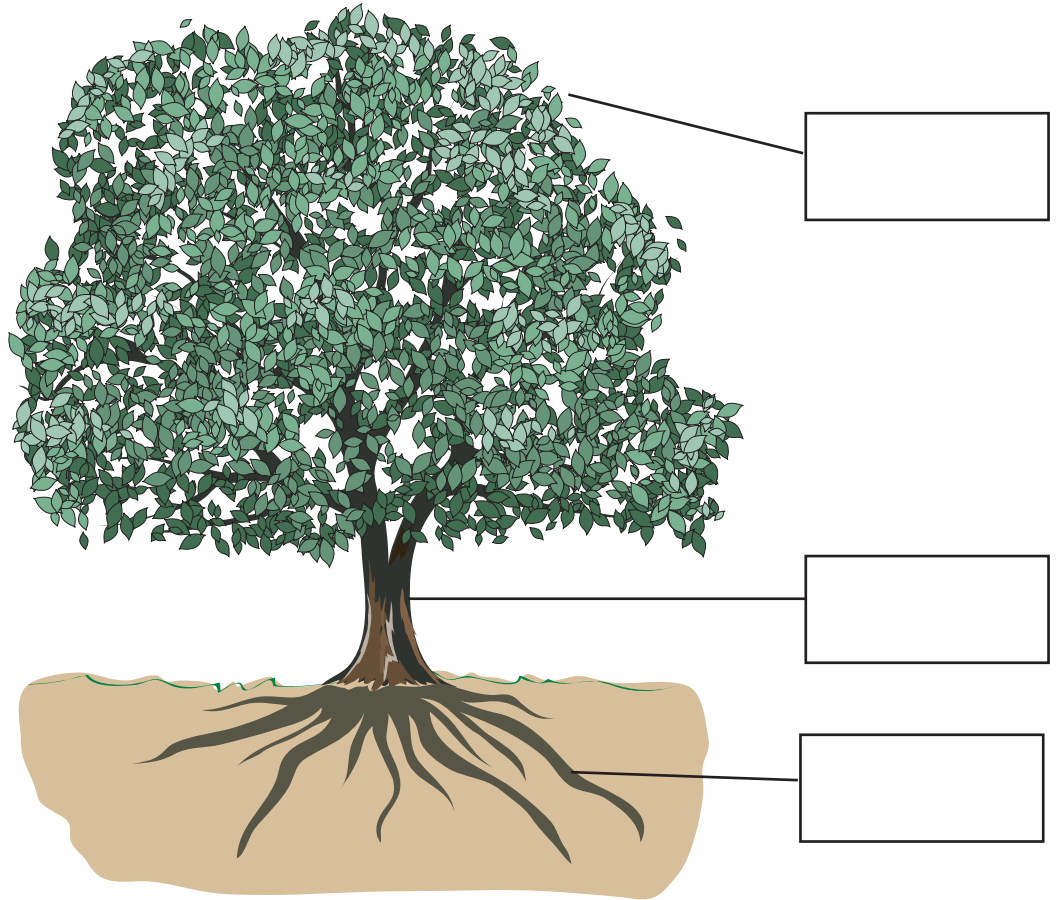


1. Collect your acorns in the autumn. They can be found on the ground under oak trees especially after strong winds.
2. Test the acorns to see whether or not they will grow. To do this fill a bucket or container with water and place the acorns inside. If the acorns float they will not grow very well therefore put them back where you found them so that the birds and mice can eat them. If the acorns sink, keep them so that they can be planted.
3. Your pot needs to have holes in the bottom so that the water can drain out of the soil. If your pot doesn't have holes already, carefully cut small holes in the bottom (ask your teacher to help you).
4. Next, fill your pot with compost.
5. Make a hole in the compost about 2cm deep and place 2 acorns inside the hole.
6. Cover the acorns with soil then water from the top.
7. Stand your pot in a sheltered position outside but make sure to protect it from mice and birds, wire mesh may be useful for this.
8. Remember, don't let the soil dry out! Once the seedling has appeared start watering from the base of the pot to encourage the roots to grow.
9. Once your tree has grown to a height of 20cm it will be ready to be planted in its permanent home. Choose an area large enough to accommodate your tree, remember that oak trees can grow very tall and the root system can spread a large distance underground so be careful not to plant it too close to any buildings or structures.
10. Dig a hole large enough for the roots and clear away any vegetation growing around the hole so that the tree does not have to compete with the other plants.
11. Place your young oak tree in the hole and firm the soil around it. You want to make sure that your tree is planted at the same depth as it was growing in the pot.
12. Water the newly planted tree and then enjoy watching it grow!

Plant a Tree

Label the diagram below

Trunk
Roots
Canopy



Fill in the blanks using the following words

□	water	□□	□	□	nutrients	□	□	□	anchor
□	leaves	□□	□	□	water	□□	□	□	light

The canopy is made up of thousands of _____.

The trunk carries _____ and _____ from the soil into the leaves.

The roots of a tree collect water and nutrients and _____ the tree so that it is able to withstand strong winds.

In order to grow trees and plants need _____ and _____.

Plant a Tree

Look at the pictures below can you identify which nut or seed grows on which tree

Hazel tree

Oak tree

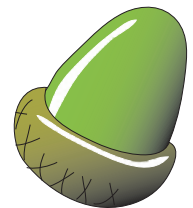
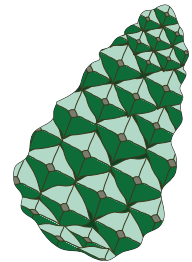
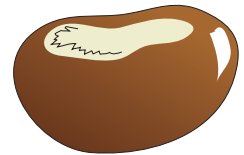
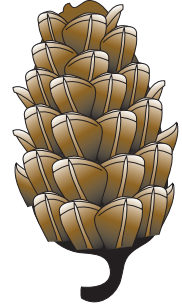
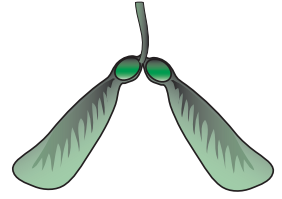
Scot's pine

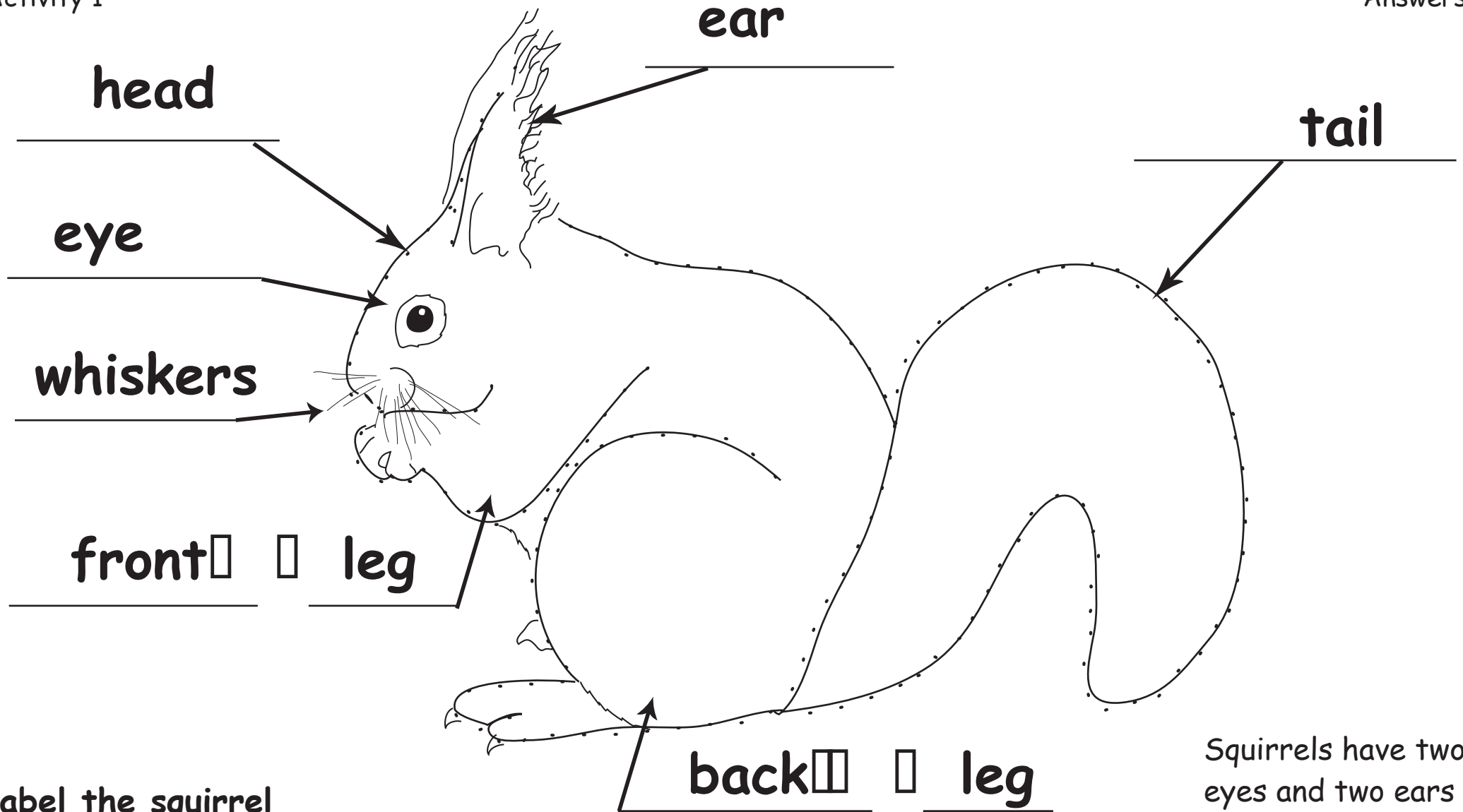
Larch

Ash

Sycamore

Horse chestnut

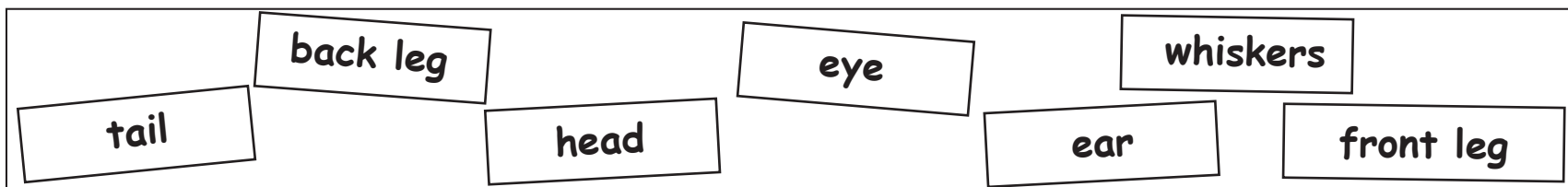




Label the squirrel

Squirrels have two eyes and two ears just like us.

Join the dots and label the parts of the squirrel with the words below.

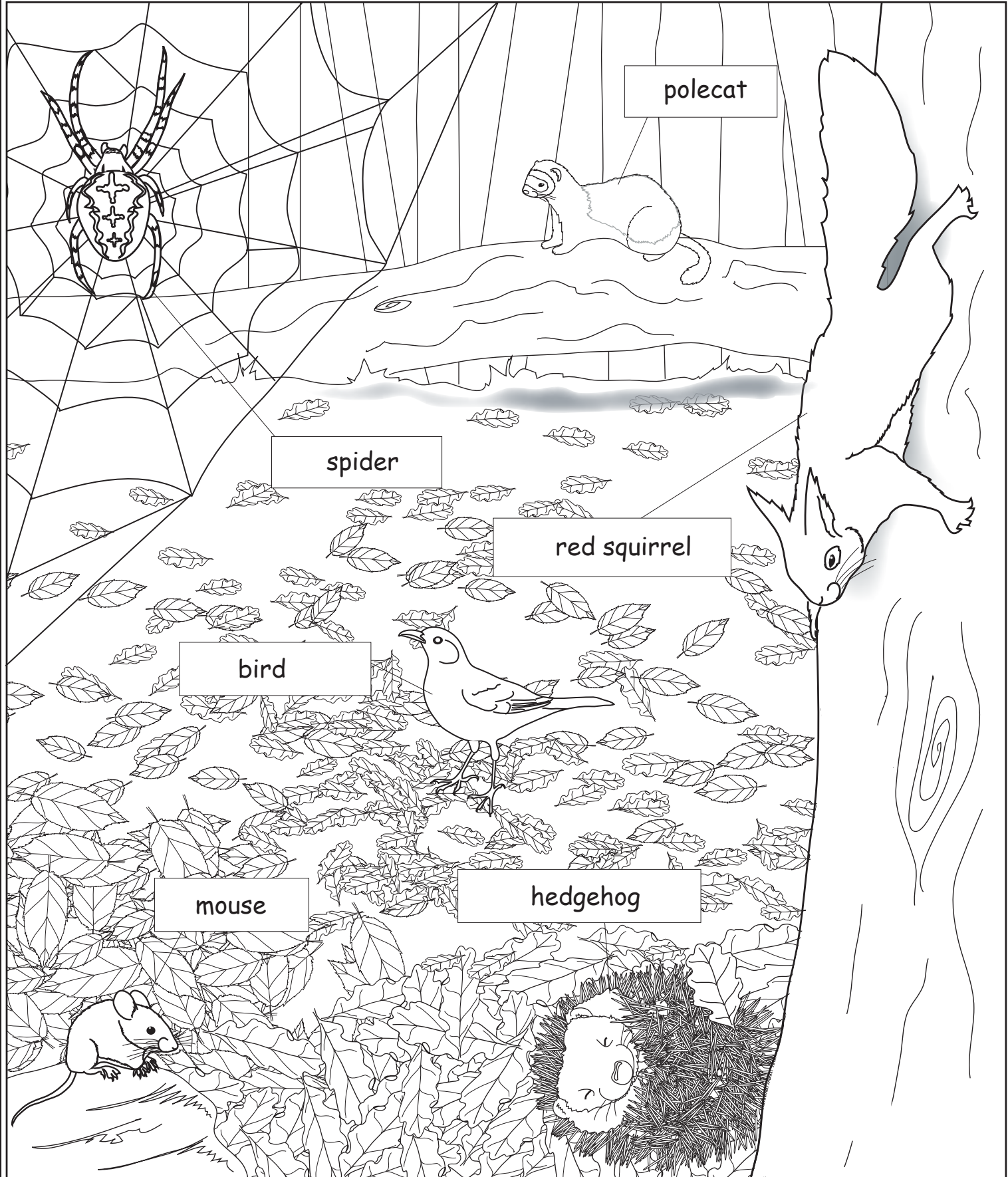


Are there any parts of the squirrel's body that are not like ours?

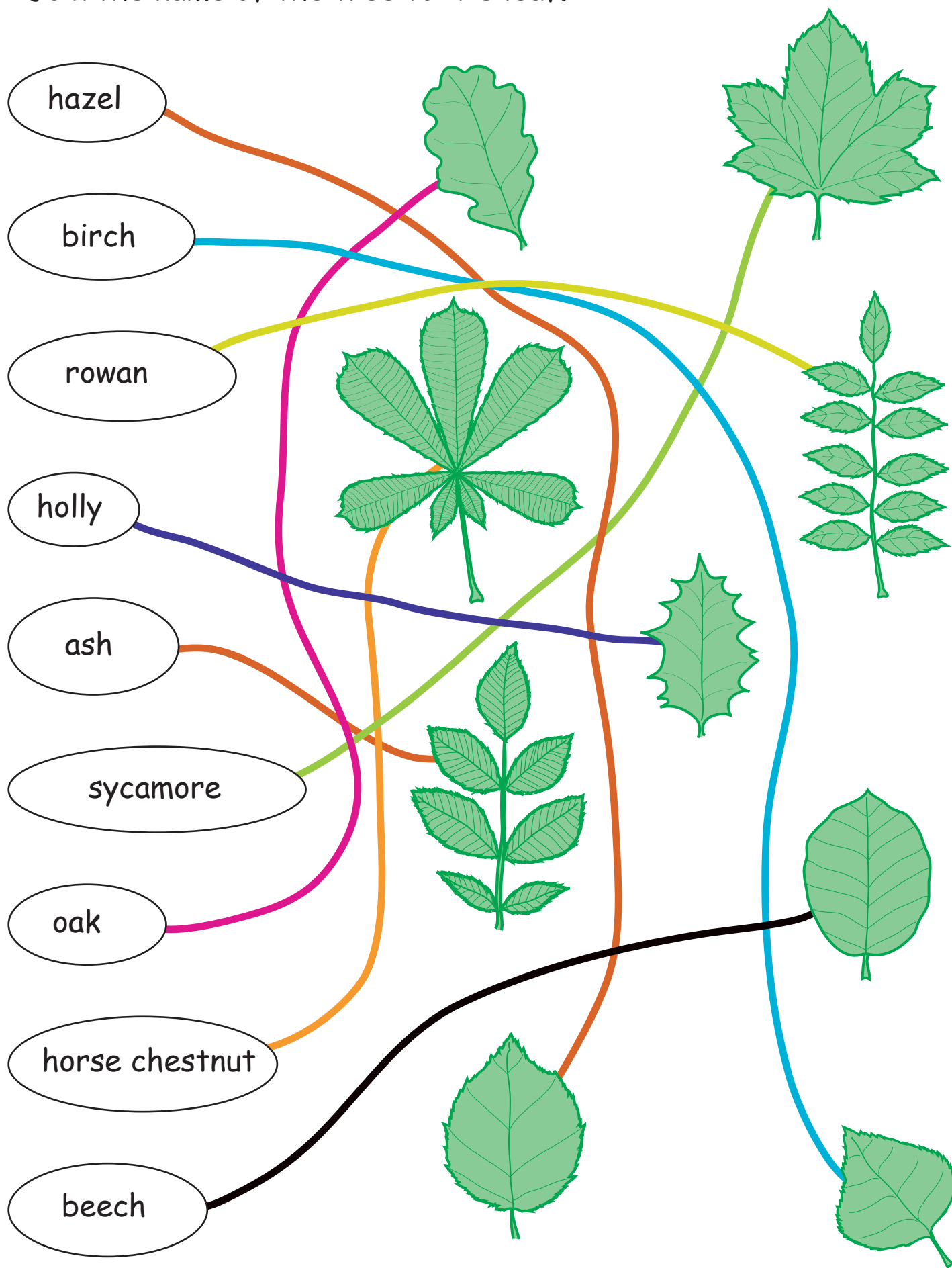
Red squirrels like to live in woods. They like living amongst the highest branches of the trees because they feel safe there. There are red squirrels in the forest at Mynydd Llwydiarth, near Pentraeth on Anglesey.

Trees provide shelter and food for many animals.

Can you name the animals in the picture below?

red squirrel ☐bird ☐mouse ☐spider ☐polecat ☐hedgehog ☐

Look at the pictures below.
Join the name of the tree to its leaf.



Where's the Drey?

Activity 8
Answers

A complex maze is overlaid on a photograph of a forest. The maze is composed of white lines forming a series of loops and dead ends. A single path is highlighted in red, starting from a small brown squirrel at the bottom right and winding its way through the maze to a nest of sticks and leaves at the top left. The background is a lush green forest with tall trees and dense foliage.

Where's the Drey?

Activity 8
Answers

A complex maze is overlaid on a background image of a forest. The maze is composed of white paths and red walls. A red path starts at a squirrel at the bottom right and leads to a nest at the top left. The nest is a dark, cup-shaped structure made of sticks and leaves, situated in a tree. The squirrel is a brown squirrel with a bushy tail, standing on its hind legs. The forest background shows tall, thin trees and green foliage.



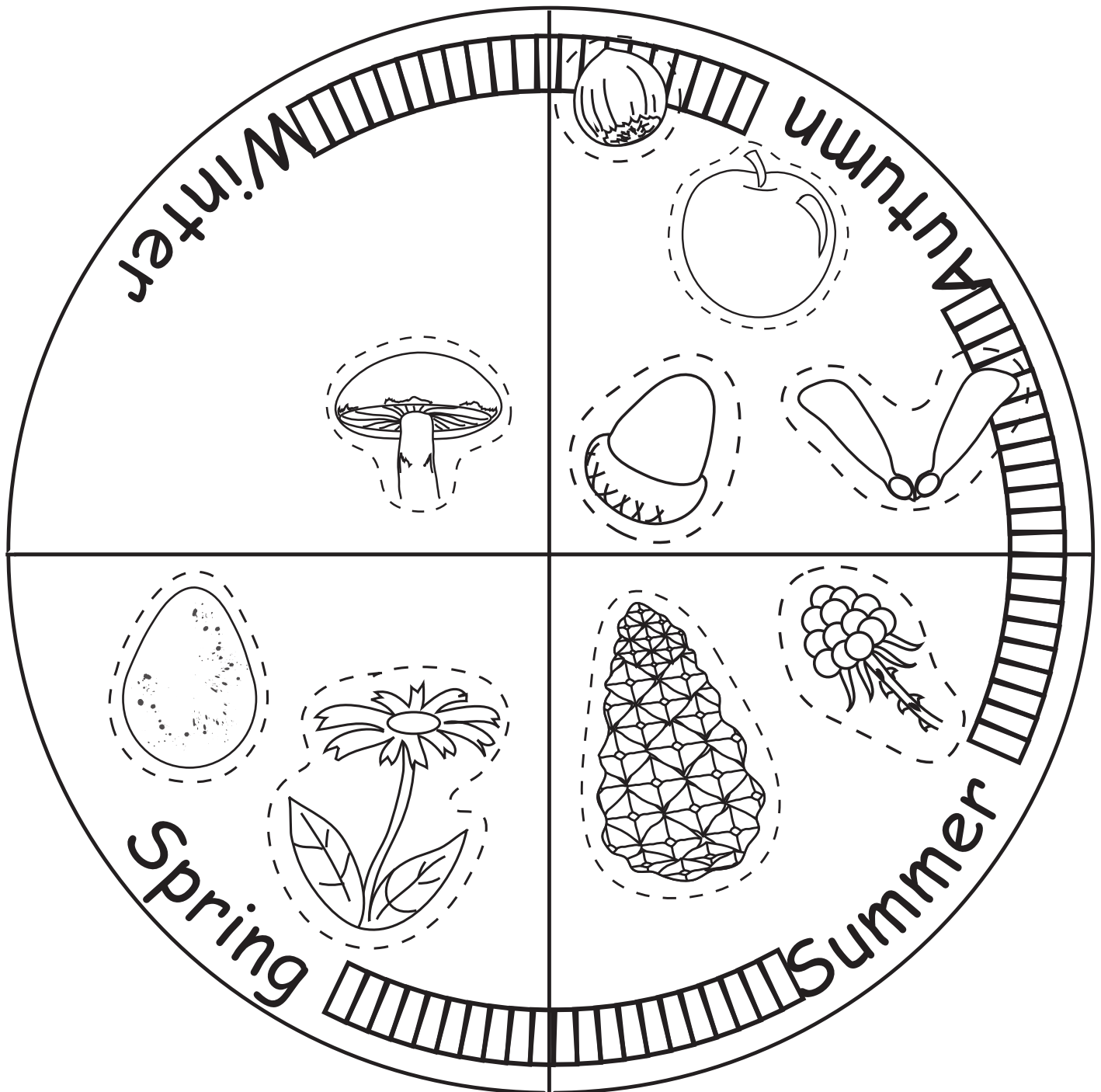
a	f	f	b	z	x	c	t	d	s	s
y	o	u	n	g	s	h	o	o	t	s
f	p	n	n	h	t	i	m	u	k	e
y	c	g	a	s	v	c	n	b	p	e
l	i	i	t	z	k	l	q	s	l	d
p	r	p	i	n	e	c	o	n	e	s
k	y	m	j	z	i	e	h	o	g	n
t	s	d	a	c	o	r	n	s	x	f
w	d	h	l	d	k	c	m	b	j	a

The red squirrel has cached its food in these squares.
Can you help the squirrel find its food?
(The words may go up, down or diagonally)

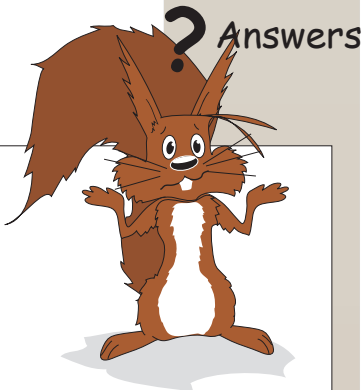
This is the food that the red squirrel has cached:

1. hazelnuts
2. seeds
3. acorns
4. pine cones
5. young shoots
6. fungi





How many Acorns?



Rusty has been collecting acorns in the forest.
Can you help him count them?

   = 4 acorns

   = 7 acorns

4

  = 3 acorns

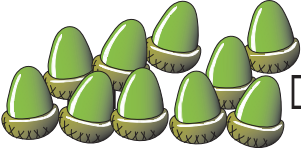

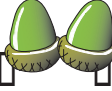
   = 10 acorns




   = 1 acorn

2

  = 9 acorns

   = 2 acorns










   = 8 acorns

   = 6 acorns

3

 = 5 acorns

1 	2 	3 	4 	5 	6 	7 	8 	9 	10
---	---	---	---	---	---	--	---	---	----

Rusty the red squirrel has hidden his food somewhere in the grid below.

In order to find it again he needs to know in which square his food is located.

Can you help Rusty?

To give the location of the square, look along the top row and choose which column the food is in then look down the side to decide which row it's in. For example the pine cone is hidden in square C6.

Locate the following:



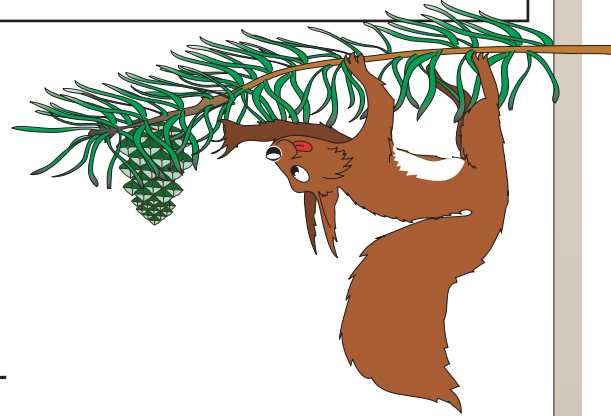
Acorn b2

Berries f7

Flower e4

Hazel nut h5

Seeds g1



a □ b □ c □ d □ e □ f □ g □ h

1								
2								
3								
4								
5								
6								
7								

Dangers Facing the Red Squirrel

Fill in the blanks using the words below

red

fox

woodlands

trees

rare

America

grey

disease

grey

The red squirrel is native to Britain.

There is another squirrel found in Britain the grey squirrel.

The grey squirrel was introduced into parks and quickly spread into the surrounding countryside.

The grey squirrel comes from America.

Grey squirrels carry a disease which kills the red squirrels. Red squirrels are now very rare in Wales.

Red squirrels have several enemies including the fox, stoat and pine marten.

Red squirrels live in woodlands.

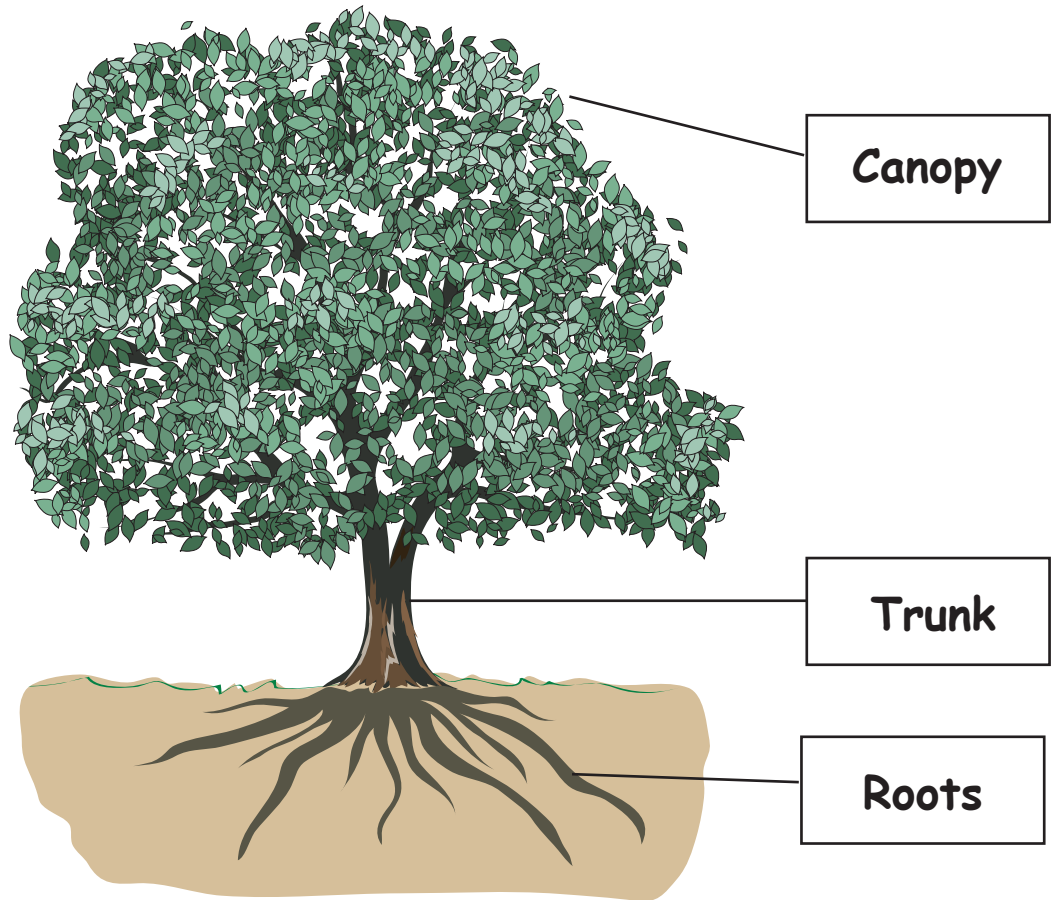
Many trees are cut down every year so there are less places for the squirrels to live.

By planting trees, it is possible to help the red squirrels and other animals that live in woodlands.

Plant a Tree

Label the diagram below

Trunk
Roots
Canopy



Fill in the blanks using the following words

<input type="checkbox"/>	water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	nutrients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	anchor
<input type="checkbox"/>	leaves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	light

The canopy is made up of thousands of leaves.

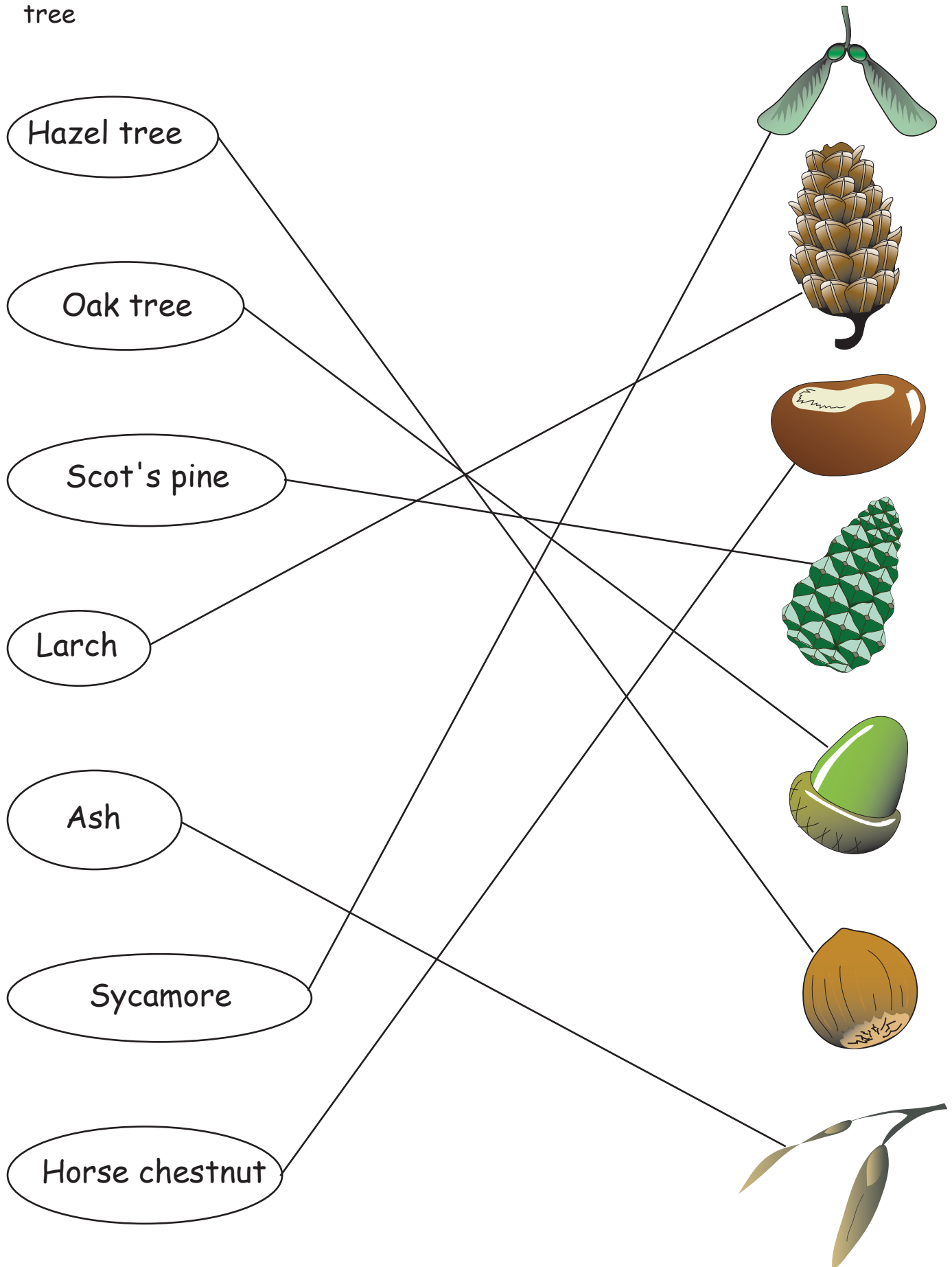
The trunk carries water and nutrients from the soil into the leaves.

The roots of a tree collect water and nutrients and anchor the tree so that it is able to withstand strong winds.

In order to grow trees and plants need water and light.

Plant a Tree

Look at the pictures below can you identify which nut or seed grows on which tree



National Curriculum in Wales

Key Stage 1

Activity 1

Subject

Science

Life Processes and Living Things

2. Humans and other animals



Task

Worksheet: Use given words to correctly label the illustrated animal

Objectives

To understand that:

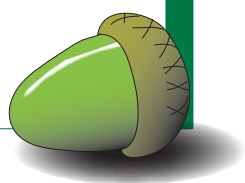
- animals have similar body parts to humans
- animals have different body parts to humans

Resources

Worksheet: Label the Squirrel

Extension Activities

- Look at other ways a squirrel differs from a human e.g. fur, size, weight.
- Look at other animals and search for similarities and differences.



National Curriculum in Wales

Key Stage 1

Activity 2

Subject

Art

2. Making



Task

Worksheet: Simple 3D model to be coloured in and cut out

Objectives

To understand:

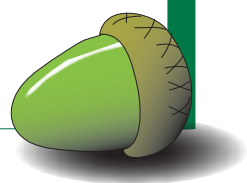
- use of colour and basic craft skills to create a simple 3D model

Resources

Worksheet: Red Squirrel Model

Extension Activities

- Experiment with multi media to create different textures
e.g. use fake fur, tissue paper, paint, crayon
- Make another model of your favourite mammal using card or other materials such as clay



National Curriculum in Wales

Key Stage 1

Activity 3

Subject

Art

2. Making



Task

Worksheet: A mask to be coloured in and cut out

Objectives

To use:

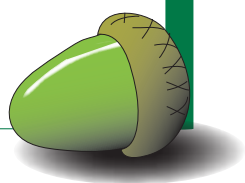
- colour and basic craft skills to create a simple mask

Resources

Worksheet: Squirrel Mask

Extension Activities

- Experiment with multi media to create different textures e.g. use fake fur, tissue paper, paint, crayon, pipe cleaners for whiskers etc
- Make another model of your favourite mammal using card or other materials



National Curriculum in Wales

Key Stage 1

Activity 4

Subject

Science

Life Processes and Living Things

4. Living things in their environment



Task

Worksheet: Label the picture using the words given

Objectives

To understand that:

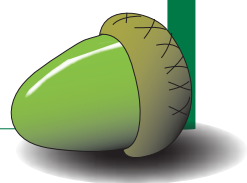
- squirrels live in trees
- trees provide food and shelter for many creatures
- there are a variety of animals in the local environment

Resources

Worksheet: Red Squirrel Habitat

Extension Activities

- Look in more detail at creatures that use trees for food and shelter
- Plant a tree in the school grounds
- Learn to identify different trees



National Curriculum in Wales

Key Stage 1

Activity 5

Subject

Science

Life Processes and Living Things

4. Living things in their environment



Task

Worksheet: To identify which leaf belongs to which tree. A line should be drawn from the leaf to the name of the tree

Objectives

To understand that:

- leaves come in different sizes, shapes and colours
- leaves can be used to identify tree species

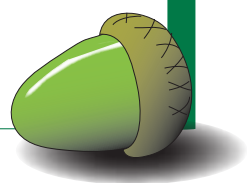
Resources

Worksheet: Trees and Leaves

Worksheet: Leaf mobile

Extension Activities

- Collect examples of different leaves, cover the bottom part of the leaf with paint and make a print of each one. The prints can be used to show the veins running through the leaves and illustrate the different shapes and textures. The prints can be collated to form a scrap book
- Look at other ways of identifying trees such as the bark texture and colour, the shape and colour of the buds, the shape and size of the tree etc
- Press the leaves, then make a collage



National Curriculum in Wales

Key Stage 1

Activity 6

Subject

Art

2. Making

Science

Life Processes and Living Things

4. Living things in their environment



Task

Worksheet: Leaf shapes to be coloured in and cut out then strung together to create a mobile

Objectives

To understand:

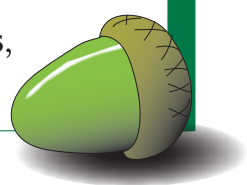
- use of colour and basic craft skills to create a mobile
- that trees can be identified from the shape of their leaves
- that leaves come in different shapes and sizes
- that leaves change colour through the seasons

Resources

Worksheet: Leaf Mobile

Extension Activities

- Colour the leaves in different colours to illustrate the changes in season
- Use different mediums to colour the leaves such as tissue paper, paint etc
- Create other mobiles such as nuts and seeds, woodland animals, birds etc



National Curriculum in Wales

Key Stage 1

Activity 7

Subject

English

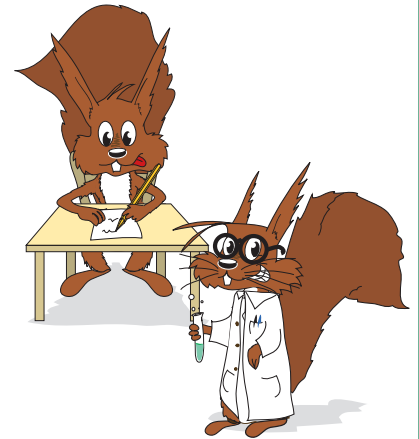
Writing

2. Skills

Science

Life Processes and Living Things

4. Living things in their environment



Task

Worksheet: Copy the sentences

Objectives

To learn that:

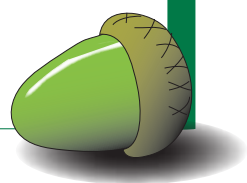
- squirrels make nests called dreys
- squirrels use different materials to make their dreys

Resources

Worksheet: The Red Squirrel's Drey

Extension Activities

- Field visit: to look for a drey
- Learn about and make a red squirrel nest box



National Curriculum in Wales

Key Stage 1

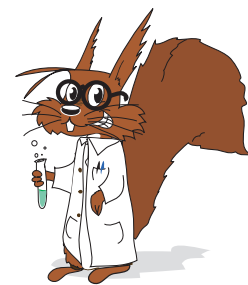
Activity 8

Subject

Science

Life Processes and Living Things

4. Living things in their environment



Task

Worksheet: Find the correct path to the drey

Objectives

To understand that:

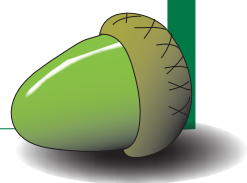
- squirrels must find their dreys in the forest
- to encourage problem solving and analytical thinking

Resources

Worksheet: Where's the Drey? - Maze

Extension Activities

- Field visit: encourage the children to find an object hidden in woodland
- Develop the idea of using different senses to find things e.g. smell
- Explain how animals search for food and shelter



National Curriculum in Wales

Key Stage 1

Activity 9

Subject

English

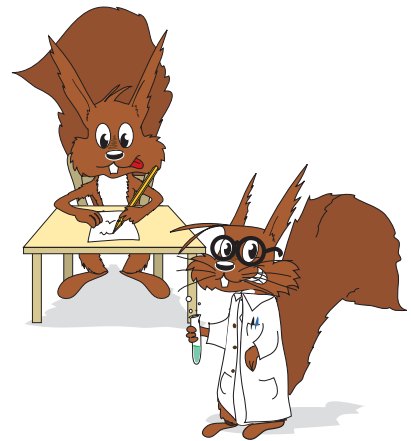
Writing

2. Skills

Science

Life Processes and Living Things

1. Life Processes



Task

Worksheet: Word search

Objectives

To learn about:

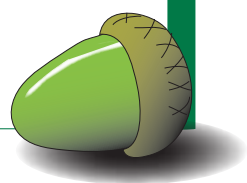
- the variety of food resources utilised by squirrels

Resources

Worksheet: The Red Squirrel's Food

Extension Activities

- Collect some of the nuts and seeds mentioned and create a collage
- Visit a woodland to search for chewed cones or cracked hazel nuts to indicate that squirrels have been feeding there
- Learn about the plants that provide the food for the squirrels
e.g. hazel, fungi, pine



National Curriculum in Wales

Key Stage 1

Activity 10

Subject

Art

2. Making

Science

Life Processes and Living Things

4. Living things in their environment



Task

Worksheet: Create a squirrel food plate. Discover what type of food is available to the squirrel at different times of the year, then cut out the shapes and glue them into the appropriate seasons on the plate

Objectives

To understand that:

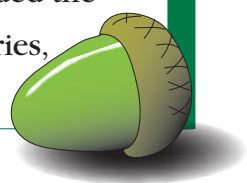
- squirrels feed on a variety of food materials
- various food groups are available at different times of the year
- during some seasons, food may be plentiful, during others it may be very scarce

Resources

Worksheet: Red Squirrel Food Plate

Extension Activities

- Discuss behavioural adaptations that the squirrel has to survive the leaner seasons e.g. less activity, hoarding food
- Look at animals that have adapted in other ways such as hibernation, bird migration
- Look at the food resources available to humans and how they have extended the periods by building greenhouses, importing food from the warmer countries, adding chemicals to food to make it last longer, tinning and freezing etc



National Curriculum in Wales

Key Stage 1

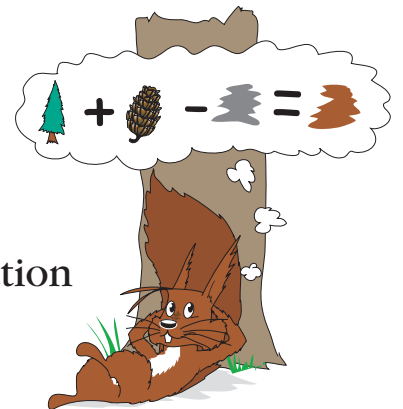
Activity 11

Subject

Mathematics

Number

2. Understanding number relationships and methods of calculation
3. Solving numerical problems



Task

Worksheet: A mathematical activity

Objectives

To understand that:

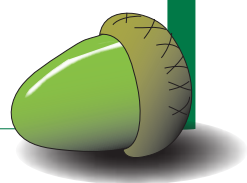
- squirrels collect and eat acorns
- mathematics applies to everyday situations

Resources

Worksheet: How Many Acorns?

Extension Activities

- Create further worksheets with different methods of calculation



National Curriculum in Wales

Key Stage 1

Activity 12

Subject

Geography

Geographical Enquiry and Skills

Task

Worksheet: Simple grid referencing to identify the
location of various food resources

Objectives

To understand that:

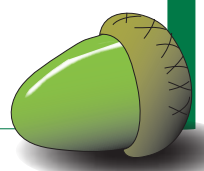
- squirrels must search and find food in their environment in order to survive
- grid referencing can be used as an useful tool to find things using a map

Resources

Worksheet: Find the Food!

Extension Activities

- Use a map to discover where the main areas of woodland are on Anglesey using the key symbols depicted on the map
- The key red squirrel populations in Wales are on Anglesey - Pentraeth and Newborough, Clocaenog Forest, Tywi and Crychan Forests, try to find them on a map of Wales and give the mid point grid reference



National Curriculum in Wales

Key Stage 1

Activity 13

Subject

English

Reading

2. Skills

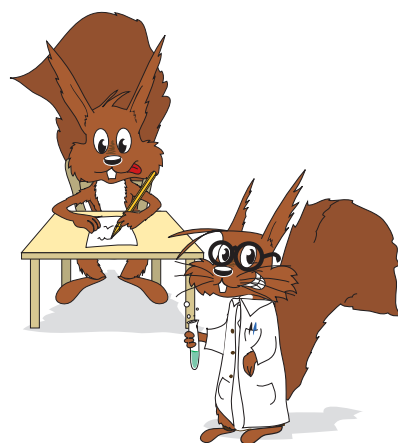
Writing

2. Skills

Science

Life Processes and Living Things

4. Living things in their environment



Task

Worksheet: Read the text and fill in the blanks using the words provided

Objectives

To understand that:

- there are several dangers facing the red squirrel
- it is possible to help by taking positive action

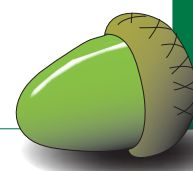
Resources

Worksheet: Dangers Facing the Red Squirrel

Worksheet: Plant a Tree

Extension Activities

- There are many mammals all over the world which, like the red squirrel are under threat due to loss of habitat, bad management practices and persecution. Look at examples from different countries e.g. tigers, bears, elephants
 - There are also many mammals in Britain that are suffering e.g. the water vole, some bat species and several species of bird
- Look at the factors that are causing their decline



National Curriculum in Wales

Key Stage 1

Activity 14

Subject

Science

Life Processes and Living Things

3. Green Plants as Organisms

Task

Worksheet: Plant an oak tree in the classroom and then answer the questions



Objectives

To understand that:

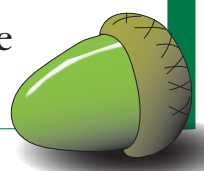
- trees support a number of species and that by planting a tree you are helping those species by providing food and shelter
- different trees produce different seeds and nuts and therefore can benefit different species
- trees and other flowering plants need water and light to grow
- roots are used to draw up water and nutrients from the soil and to support the tree
- the trunk is used to transport water and nutrients from the roots to the leaves

Resources

Worksheet: Plant a Tree, Q1, Q2

Extension Activities

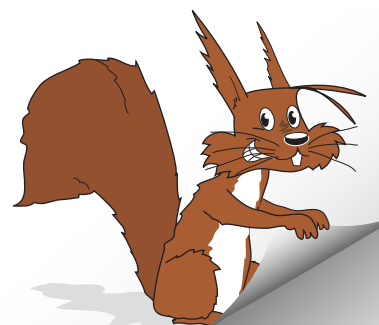
- Create a wildlife garden in the school grounds and plant a small copse of trees
- Plant other species such as flowering plants and vegetables and compare the rates at which they grow, the size and shape of the seed and their life cycles



Key Stage 2

Contents

1. List of activities describing activity type and curriculum subject
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 - b. Adaptations to the Environment Answer Sheet
 - c. Adaptations to the Environment National Curriculum Sheet
4. **Activity 2 - How much does a Squirrel Weigh?**
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 - b. How much does a Squirrel Weigh? National Curriculum Sheet
5. **Activity 3 - Red Squirrel 3D Card**
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6. **Activity 4 - Red Squirrel Desk Tidy**
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12. **Activity 10 - Find the Drey!**
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 - b. Find the Drey! Answer Sheet
 - c. Find the Drey! National Curriculum Sheet
13. **Activity 11 - Rusty's Adventures**
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 - b. Rusty's Adventures National Curriculum Sheet
14. **Activity 12 - Red Squirrel Diet**
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 - c. Dangers Facing the Red Squirrel National Curriculum Sheet
16. **Activity 14 - Build a Nest Box**
 - a. Build a Nest Box Activity Sheets
 - b. Build a Nest Box National Curriculum Sheet



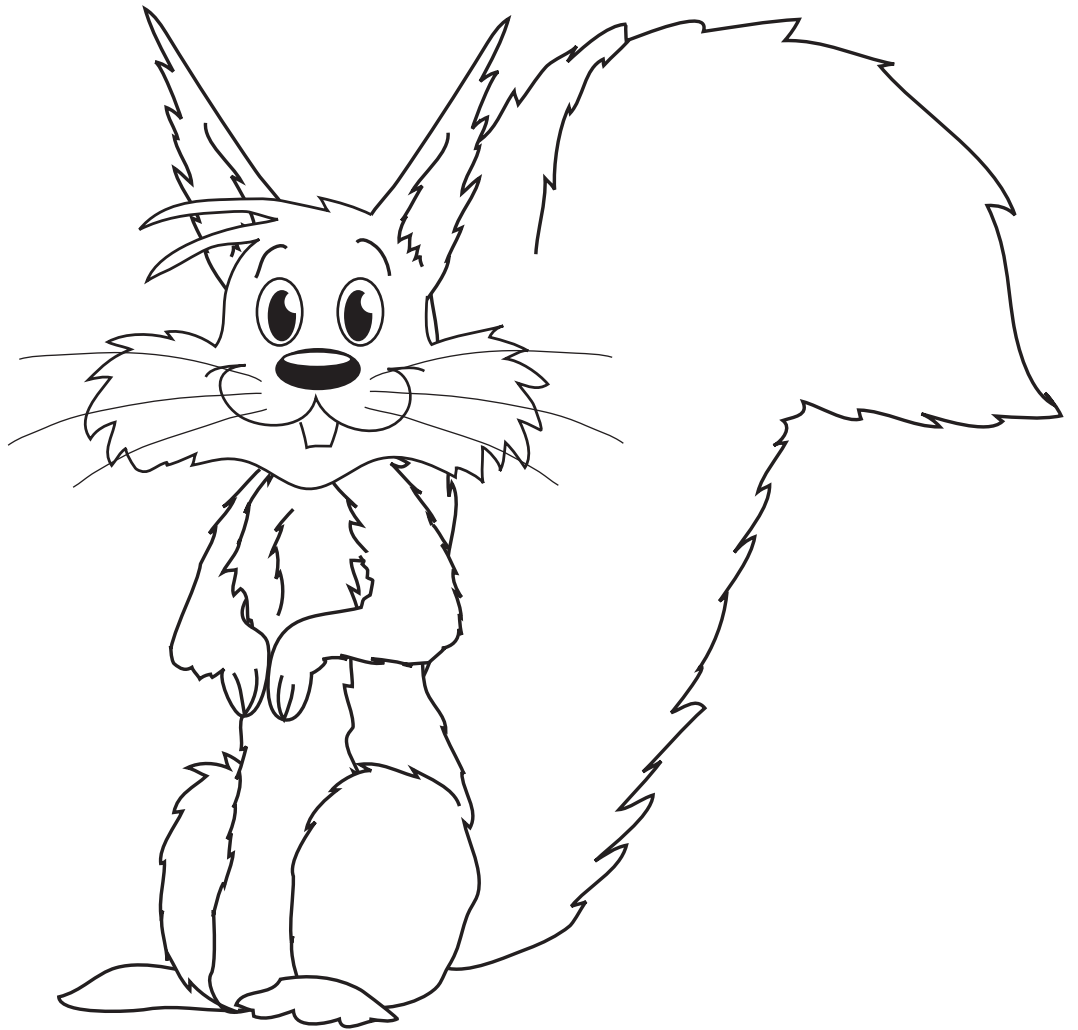


Key Stage 2

Activity List

Activity Number	Activity Title	Activity Type	Subject
1	Adaptations to the Environment	Read the text then note the adaptations of each body part	Science
2	How much does a Squirrel Weigh?	Calculations based on the weight of a squirrel	Mathematics
3	Red Squirrel 3D Card	Create a 3D card	Art
4	Red Squirrel Desk Tidy	Create a desk tidy	Art
5	Red Squirrel Habitat	Read the text and answer the questions	Science
6	Identify the Trees	Identify the trees from their leaves and create a key	English/Science
7	Food Chain	Create a food chain	Science
8	Label the Map	Use grid references to locate areas	Geography
9	Anglesey Woodlands	Compass directions and grid references	Geography
10	Find the Drey!	Answer the questions by giving and following directions	Geography
11	Rusty's Adventures	Complete the story	English
12	Red Squirrel Diet	Fill in the gaps	English/Science
13	Dangers Facing the Red Squirrel	True or false	Science
14	Build a Nest Box	Create a red squirrel nest box	Design and Technology

Rusty's



Activity Book

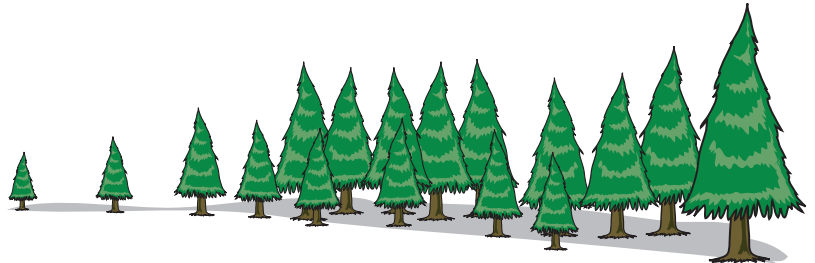
Name: _____

Year: _____

Adaptations to the Environment

Red Squirrel

Read the following text then label the squirrel below noting one adaptation of each body part that helps the squirrel survive in its habitat. One has been done for you as an example.



The red squirrel isn't a very large animal and being light, it is able to hop around the highest branches of the trees and leap effortlessly from one tree to another.

Its coat is a rich reddish brown colour with a white abdomen. The squirrel sheds its fur twice a year. In the winter the coat is much thicker and of a darker colour than it is in the summer. The squirrel needs a thick coat in the winter to keep warm.

The squirrel's tail is large and furry and helps the squirrel balance as it runs, climbs and jumps. It is also used like a flag to warn other squirrels of nearby danger, and when sleeping, the squirrel wraps the tail around itself like a duvet to keep warm.

Red squirrels have watchful, wise black eyes, which are located on either side of the head, which allows the squirrel to have a wide field of vision and because they have very good eyesight, they can spot danger and predators from a distance. You may have noticed that red squirrels have deep red ear tufts which are 3cm long in winter but smaller in the summer. They possess sensitive hearing which is vital to sense when predators are near. The squirrel's whiskers are very sensitive and are used to judge distance and the size of objects.

There are five fingers on the front legs, which are similar to hands - they have four long fingers and one short thumb. The squirrel uses the fingers very deftly to hold nuts and cones, raising them to the mouth to extract the small seeds. The squirrel's hind legs are longer than the front legs and these have five toes. The toes have claws which are long and strong for climbing. The squirrel will run down a tree trunk headfirst, using the claws on its fingers and toes to grip the tree.

Adaptations to the Environment

Red Squirrel

Nose

The red squirrel has a good sense of smell to find food and detect other animals.

Ears

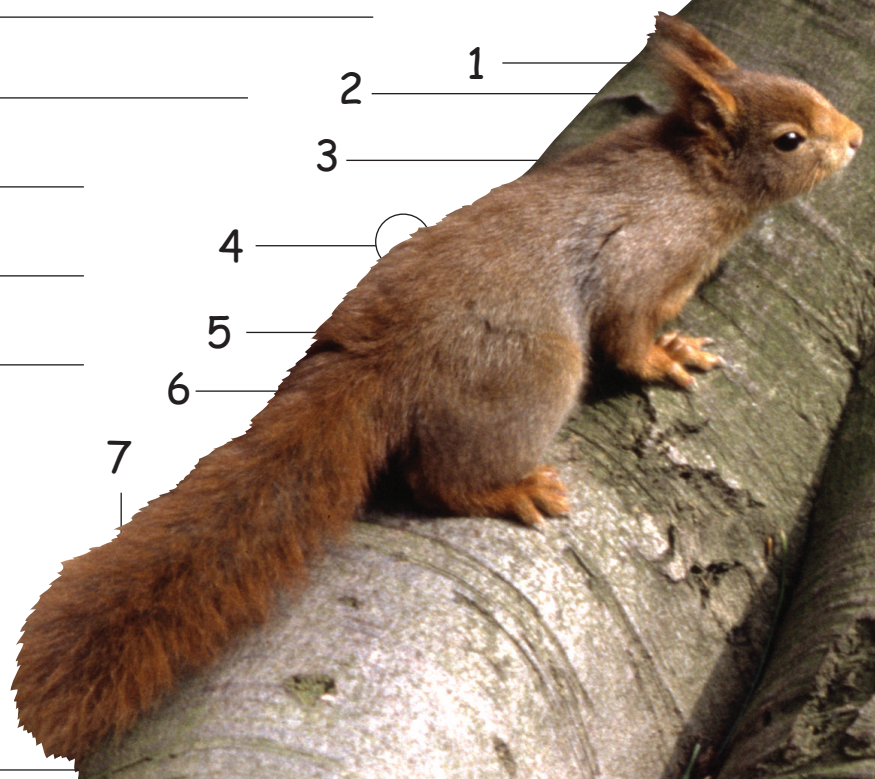
Eyes

Coat

Front legs

Back Legs

Tail






How Much does a Squirrel Weigh?

A red squirrel weighs 300g. Look at the items below and work out what the equivalent weight would be in everyday items

Remember you can add, multiply, subtract and divide - try to use different calculations!

e.g.  +  +  = Red Squirrel 300g

 \times   = Red Squirrel 300g

Combination 1

Combination 2

Combination 3

Combination 4

A grey squirrel is heavier than a red squirrel and weighs around 540g.

Look at the items again and work out what the equivalent weight would be in everyday items.

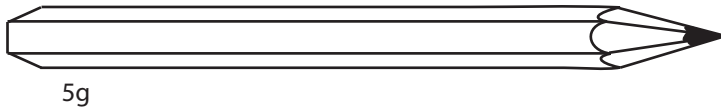
Combination 1

Combination 2

Combination 3

Combination 4

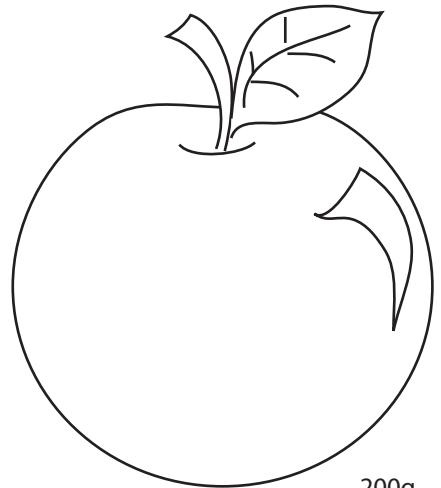
How Much does a Squirrel Weigh?



5g



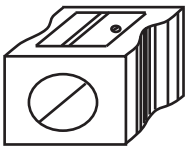
18g



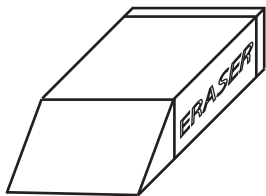
200g



3g



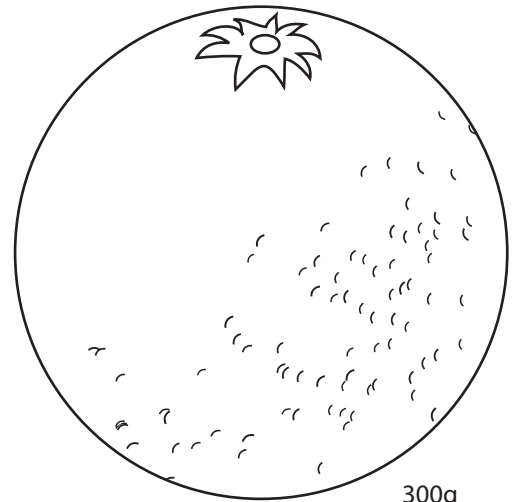
2g



20g



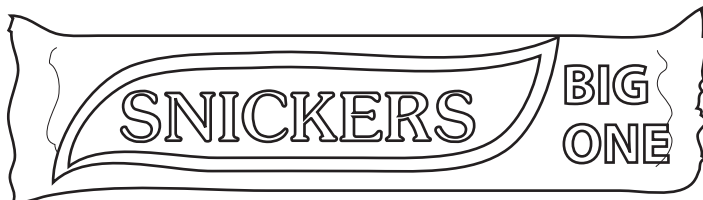
25g



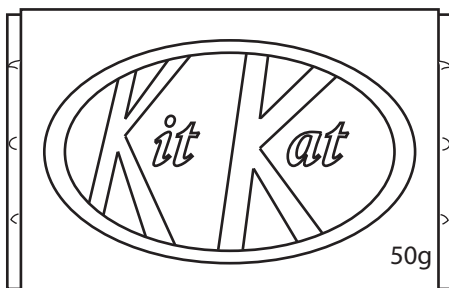
300g



60g



100g



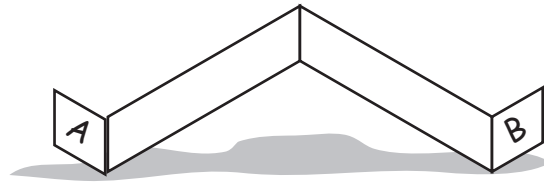
50g



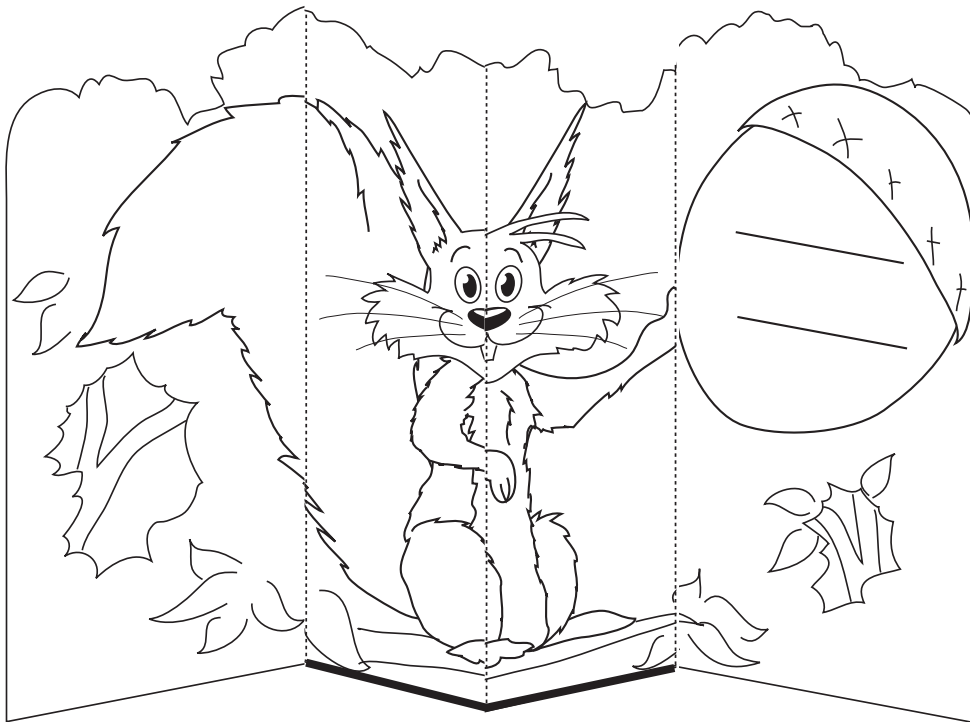
1 kg

Red Squirrel 3D Card

1. Cut out all of the templates
2. Fold the strips in half and then fold the tabs at the end the other way, making the shape shown below.



3. Next fold the main card in half so that A joins with B and C with D.
4. Fold the both ends of the picture but only up to the edge of the thick black line at the base.
5. Next fold the middle part of the picture the other way to create the shape shown below.



6. Glue tab A to box A on the card and so on for all of the other letters.
7. Next close the card firmly, the strips should be bending in the opposite direction to the card.
8. Put glue on the strips.
9. Glue both sides of the picture to the card, the middle of the picture should stick to the strips.
10. Next close the card firmly again.

A

B

C

D

C			D
---	--	--	---

A			B
---	--	--	---



Red Squirrel Desk Tidy

You will need:

1 Red squirrel card board template

Scissors

1 plastic cup

Sellotape

Colouring pens/pencils/crayons/paints/materials

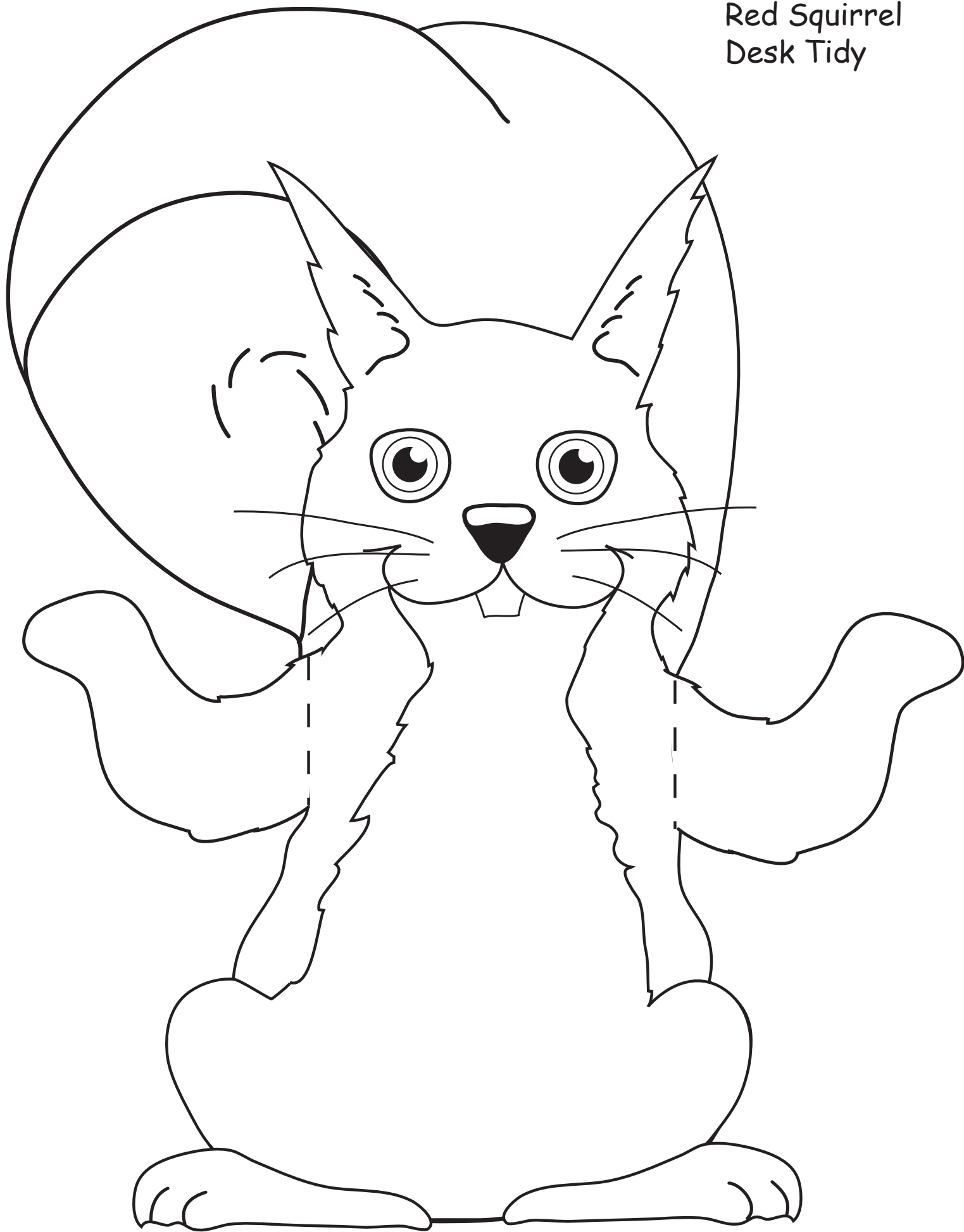
Decorating materials

This item can be used for several purposes including keeping all your writing materials together on your desk, storing your mobile phone, storing your personal belongings at home e.g. jewellery, beads, shells, or even perhaps be used to hold the television remote control!

Instructions:

1. Carefully cut out the red squirrel template
2. Colour in your squirrel template. You can use any medium you like to colour in your squirrel e.g. crayons, paint, felt tip pens etc.
Or you can use material such as felt or fake fur or even tissue paper or crêpe paper.
You may want to colour both sides so that it looks attractive from all angles.
3. Next, take your plastic cup and think about how to decorate it. You may want to glue split hazel nuts to cover the cup or perhaps, sticky paper with a nice pattern.
4. After decorating your cup you are ready to attach the squirrel template to it.
This is done simply by using sellotape to wrap around the base of the squirrel and the cup.

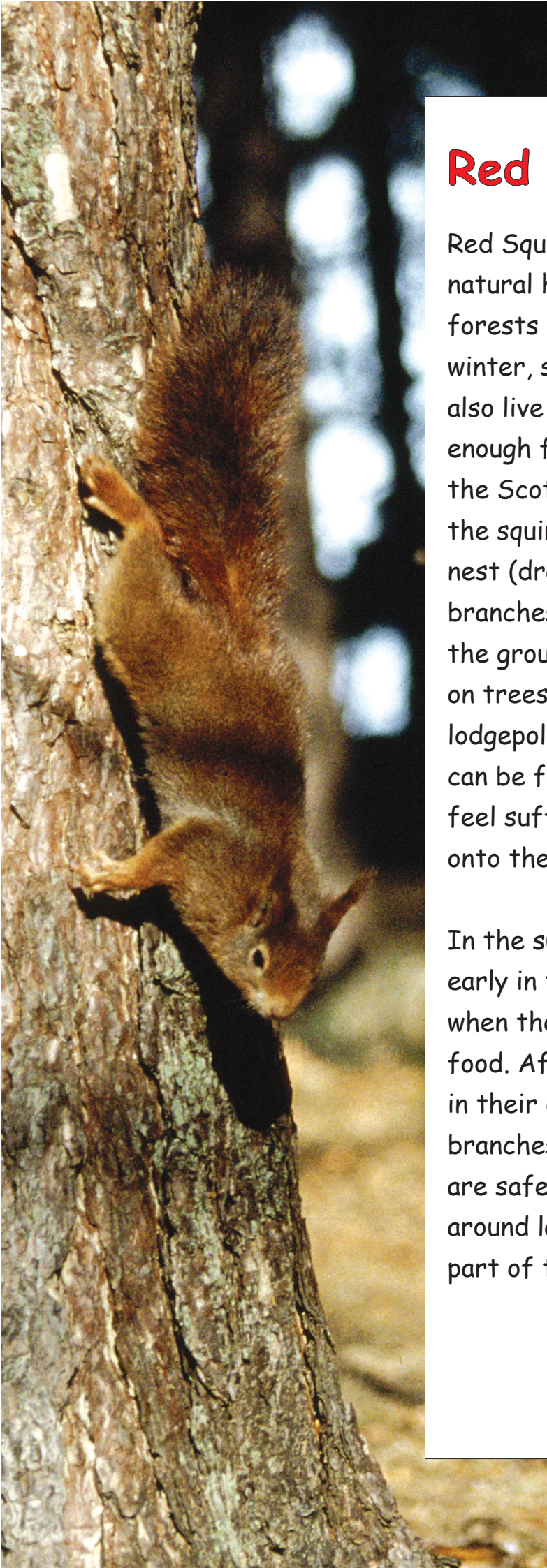




Red Squirrel Habitat

Red Squirrels like to live in woodlands. Their natural habitat is deciduous forests - that is, forests of trees which shed their leaves in winter, such as oak, hazel, ash and beech. They also live in coniferous forests provided there is enough food for them. A particular favourite is the Scots Pine which produces pine cones which the squirrels eat. Red squirrels will also create a nest (drey) of twigs and moss within its branches. The dreys are built at least 3m from the ground. The red squirrel may also be found on trees such as the Norway spruce, larch and lodgepole pine. Most of the time, red squirrels can be found high in the treetops but when they feel sufficiently confident, they will venture onto the forest floor.

In the summer, red squirrels are most active early in the morning and late in the afternoon when they wander around the forest looking for food. After lunch, they enjoy a siesta and sleep in their dreys or in a convenient hole in the branches high up off the ground so that they are safe from predators. In winter, they move around later in the morning and use the middle part of the day to forage for food.



Red Squirrel Habitat

Answer the following questions using complete sentences.

1. What is the natural habitat of red squirrels?

2. Name three trees that shed their leaves in winter

3. What is the red squirrel's favourite coniferous tree?

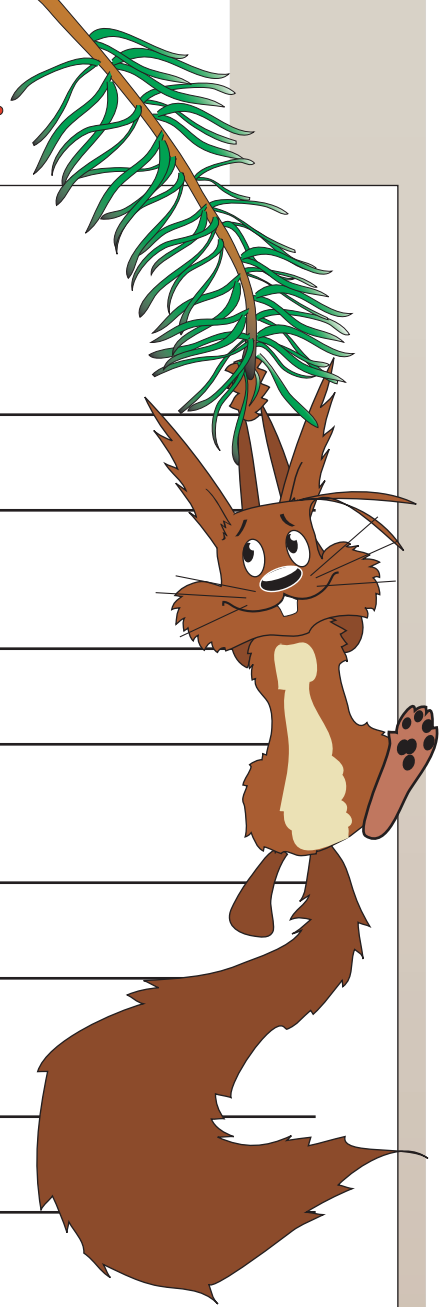
4. Where can the red squirrel normally be found?

5. What is a drey and what is it made of?

6. In winter what time of day do red squirrels forage for food?

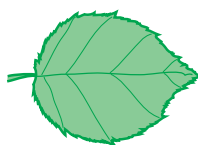
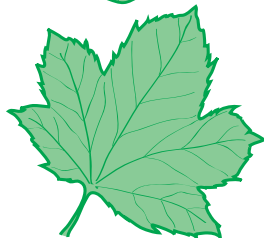
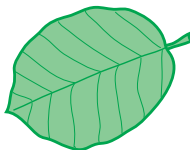
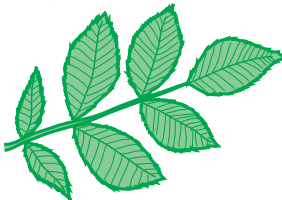
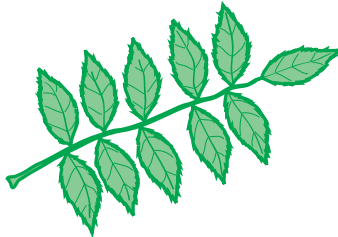
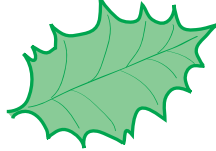
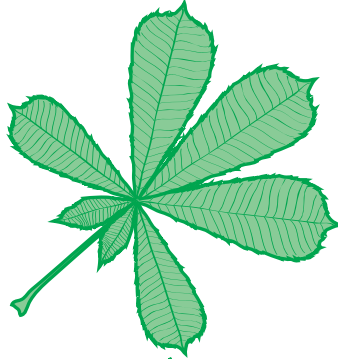
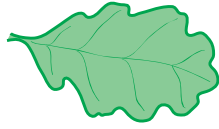
7. In summer what do red squirrels do after lunch?

8. How high off the ground will a red squirrel build its drey?



Identify the Trees

Look at the leaf shapes below and identify the trees they belong to. Write both the English and Welsh names in the spaces provided. Use text books and the internet to find the names.



Now, look carefully at the leaf shapes and texture. If possible, collect samples of the leaves so that you can examine them closely or search the internet or look in textbooks to find more information. Create a key to identify the trees. If you have not used a key before search the internet for an example. Keys are based on a series of questions which will lead you to the correct answer and can be used in a number of different situations.

Food Chain

An ecosystem is made up of lots of different plants and animals, all depending on each other for survival.

A food chain nearly always starts with a green plant.

In the chain this is called a "producer" as they produce their own energy from water, sunlight and carbon dioxide through a process called photosynthesis.

Other organisms in an "ecosystem" rely on producers for energy and are termed as "consumers".

e.g. in a woodland

oak tree → caterpillar → blue tit → sparrowhawk



in this example the oak tree is the producer

Make a food chain using some of the animals and plants listed below

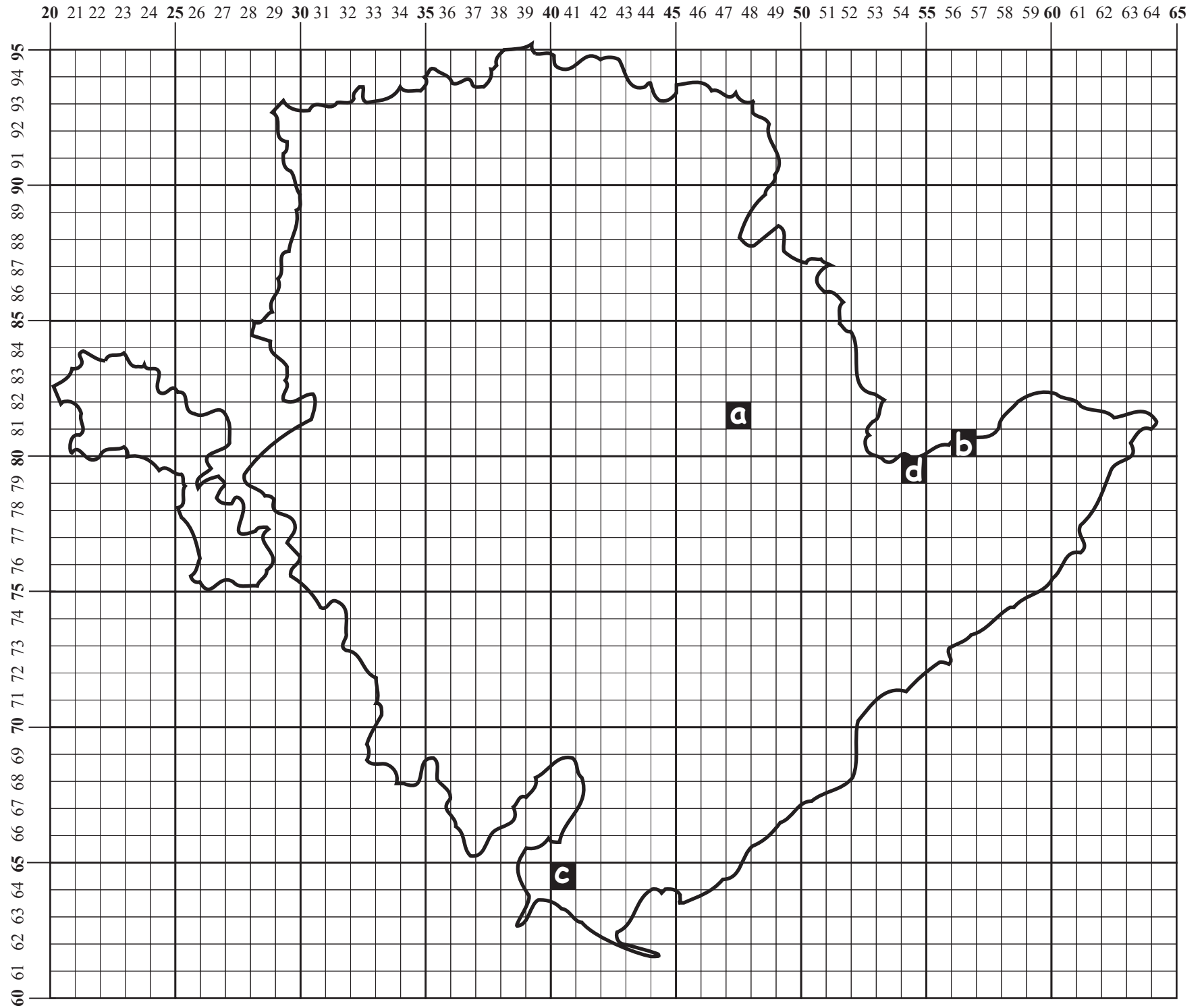


Find out about other creatures that live in a woodland ecosystem (what they eat, what eats them) and try to make a food chain for them.

Also find out about other ecosystems on Anglesey such as the Benllech beach, Aberffraw sand dunes and which organisms live there and how they depend on each other for survival.

Activity 8

Label the Map



Label the Map

Look at the map of Anglesey.
Listed are the areas in which red squirrels can be found on the island.
Use an Ordnance Survey map find the locations of these places and fill in the boxes with the correct letter from the map.

<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	Mynydd Llwydiarth
<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	

<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	Newborough Forest
<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	

<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	Wern y Wylan
<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	

<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	Cors Erddreiniog
--	-------------------------

Work out the 4 figure grid references for each and write them in the space below.

Remember: "Go down the stairs and along the corridor!"

<div><div></div><div></div><div></div><div></div><div></div></div>	a _____
--	----------------

<div><div></div><div></div><div></div><div></div><div></div></div>	b _____
--	----------------

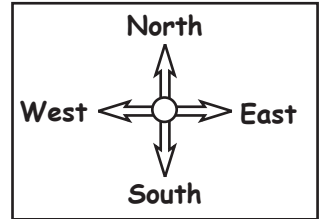
<div><div></div><div></div><div></div><div></div><div></div></div>	c _____
--	----------------

<div><div></div><div></div><div></div><div></div><div></div></div>	d _____
--	----------------

Anglesey Woodlands

Red Squirrels live in woodlands. There are several small woodlands on Anglesey. Rusty wants to explore several of these woodlands but needs your help to find his way. Can you help him?

For this exercise you will need the Ordnance Survey 1:25000 scale maps of Anglesey.



Look at the map and answer the following questions:

Question 1. Rusty is at Mynydd Llwydaiarth and wants to travel to the woodland near Mynachdy. □
Which way should he travel?

Question 2. Penrhos Nature Reserve is in which direction from Presaddfed?

Question 3. Cors Erddreiniog is in which direction from Coed Tan y Bryn?

Now use the Ordnance Survey Maps to answer the following:

Find the grid references for the following woodlands:

□ Coed Cefn □ □ _____

□ Haffoty Covert III □ _____

□ Coed Llewelyn □ □ _____

□ Coed Dinas Goch □ □ _____

Name the woodlands found at the following locations:

□ SH543714 □ □ _____

□ SH472834 □ □ _____

□ SH495858 □ □ _____

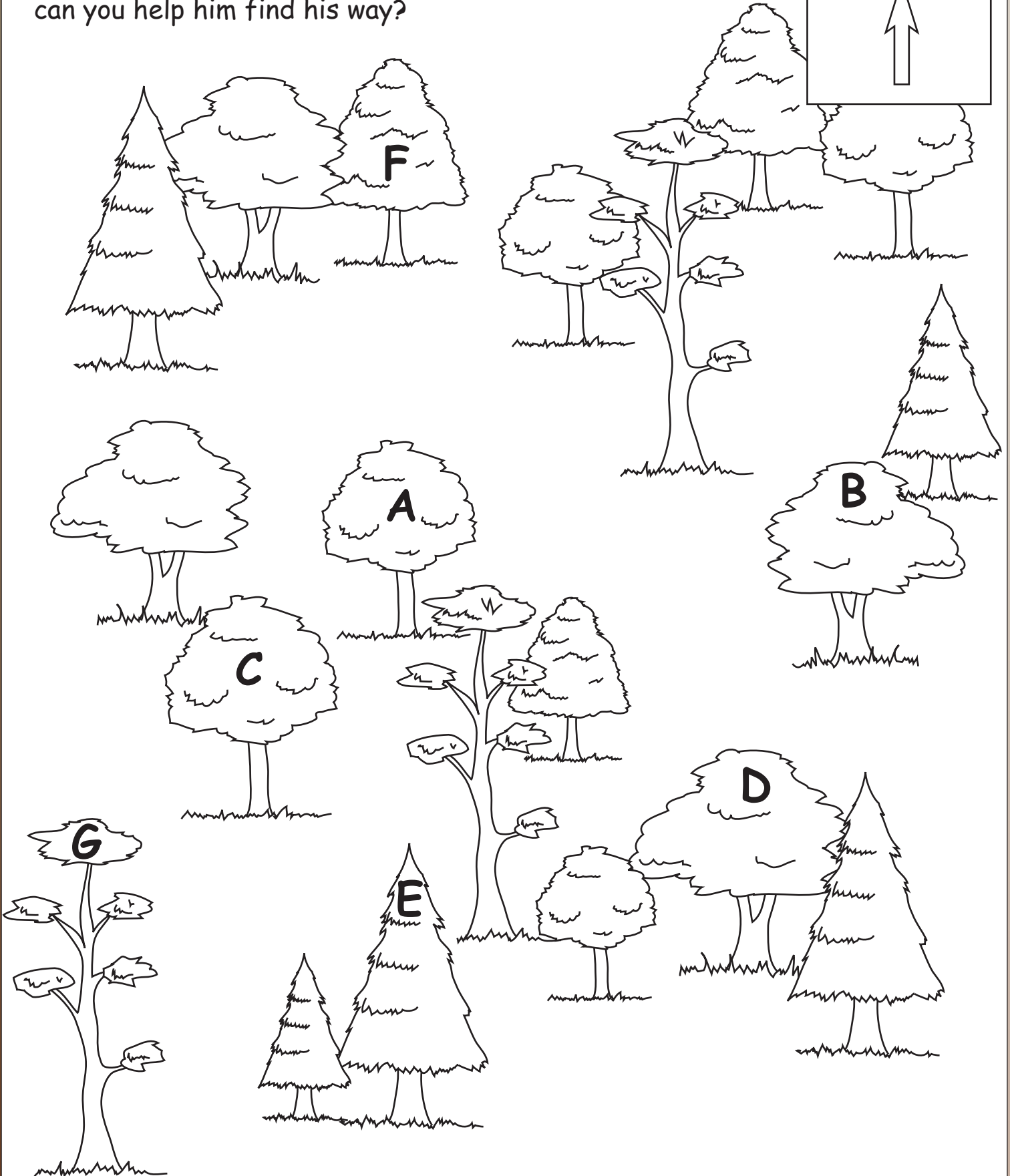
□ SH284767 □ □ _____

Find the Drey!

Rusty the red squirrel has built several dreys in the forest and regularly moves from one to the other.

However, he has forgotten where the dreys are -
can you help him find his way?

North



Find the Drey!

- Question 1.** Rusty has been spending the summer in one of his summer dreys - drey E, the fleas in the nesting material have become unbearable so he has decided to move to drey A. Which way should he travel?
-
- Question 2.** Having spent a few nights at drey A, Rusty is on the move again! This time he decides to travel south east. At which drey does he arrive?
-
- Question 3.** The drey has been leaking rain water badly and the moss inside is soaking wet. After carrying out a quick repair, Rusty decides that it is far too damp to spend the night so decides to travel to drey E. Which way must he travel to get there?
-
- Question 4.** Drey E was very comfortable so he spent a few weeks there, but the weather was starting to deteriorate as autumn turned into winter so he decided to go in search of his cosier winter retreats. He starts off in a north westerly direction. Towards which drey is he heading?
-
- Question 5.** The drey is rather draughty, so after spending a few chilly nights in the drey he thinks he should move south west - which drey will he come to?
-
- Question 6.** This drey is wonderfully cosy, it is lined with moss, thistle down and feathers so he decides to spend the winter there. Having spent a cosy winter in drey G Rusty decides that he had better check some of the other dreys to see whether or not they have survived the winter storms. He decides first of all to check drey A - how should he get there?
-
- Question 7** Crisis! Drey A has been seriously damaged in the winter storms, all the lining material has been lost and only a few twigs remain to show where the drey once stood. Rusty spends several days repairing the drey with twigs and bark and carefully lines it with leaves and moss. Worried that other dreys may also be damaged he decides to travel north in search of another of his dreys. Which drey will he find?
-
- Question 8** This drey is in a good state of repair so after a little tweaking he decides to move on to drey B - how does he get there?
-

It was a very long distance to travel to Drey B and by the time he'd arrived Rusty was extremely tired. Drey B was a snug little nest so he curled up inside and in no time at all fell fast asleep!

Rusty's Adventures

Complete the Story

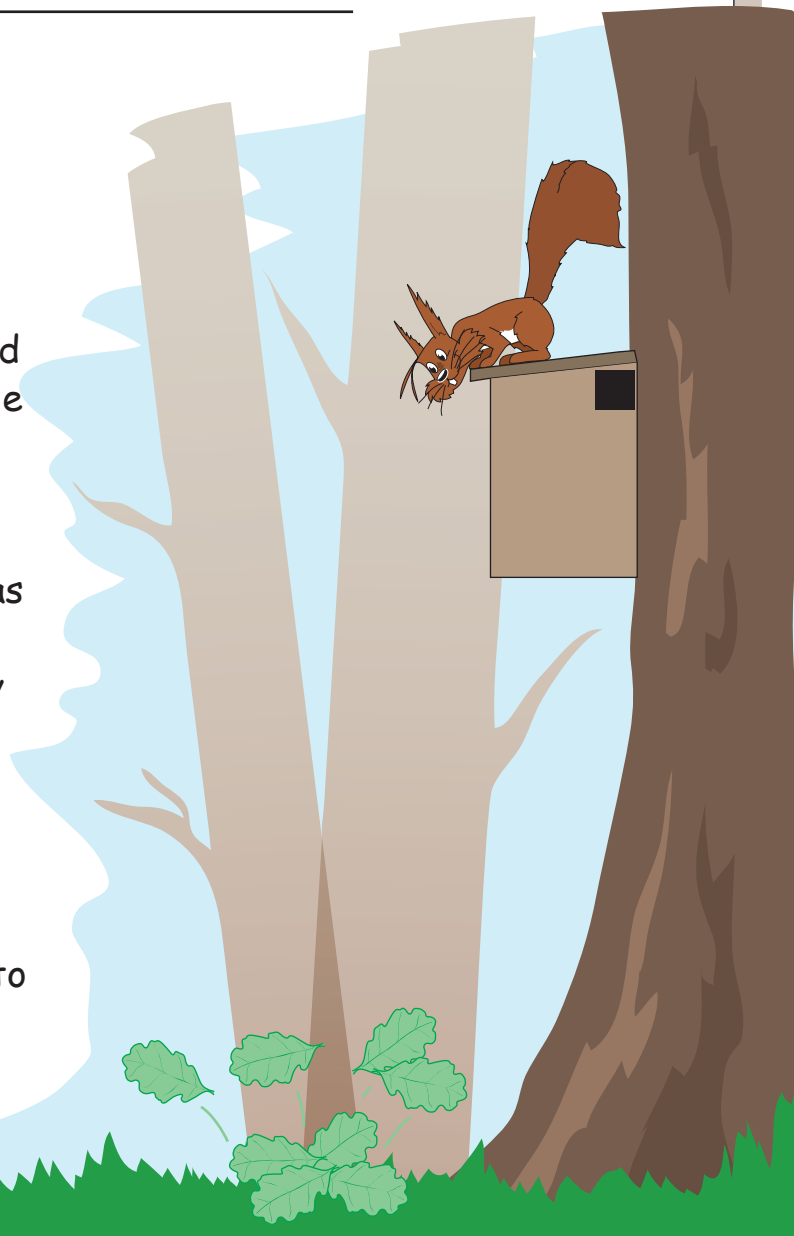
Think of some of the creatures Rusty might meet in the forest - would they be friendly? Think also about the sounds he might hear in the forest and the things he might see. Is it daytime or night time, how does he feel, is he frightened, hungry, lonely or happy?

Use some of the words below to help you. If you don't know what some of the animals/birds are ask your teacher or look in a reference book.



Rusty's Adventures

Once upon a time there was a little red squirrel called Rusty. He lived with his mother and two sisters at Twigs End - a drey in the highest branches of a large Scots Pine, deep in the forest of Mynydd Llwydiarth. Rusty was a mischievous little squirrel and was forever getting into scrapes. As he peered out through the hole of Twigs End, he heard a rustling sound down below and saw that there was something causing the leaves on the forest floor to flutter into the air. Very curious, Rusty squeezed out of the drey and scampered down the trunk of the tree "Bye Mum!" he called over his shoulder as he left, "Where are you going?" she replied, "You be careful!" Rusty hardly heard her as bounded off to investigate the cause of the mysterious rustling.



Red Squirrel Diet



Fill in the gaps using the words listed below.

Red Squirrels feed mainly on _____ especially from pine cones.

The squirrels hold the cones between their hands and raise them to their mouths.

The front _____ are used to extract the small seeds from the cones.

Red squirrels often have a favourite spot in the forest such as _____, where they like to eat. Here you may be able to see the discarded _____ on the forest floor when the seeds have been eaten.

The _____ is one of the squirrel's favourite _____ trees. Red Squirrels will also eat _____ seeds. The seeds of this tree are larger and the seeds remain in the cones until _____. Lodgepole pine and the European larch also provide cones that are suitable for the red squirrels. The seed of both the lodgepole pine and the European Larch are _____ than those of the Scots pine.

Hazelnuts are eaten by red squirrels. They can split a hazelnut cleanly in half to get at the _____ rich _____ inside. Red squirrels will also eat _____ after removing them from the acorn cup. The squirrel will raise a nut to its mouth using its two hands. On the hands there are _____ fingers and a _____ and the squirrel uses these very deftly. Most squirrels are _____ handed. The squirrel will squat on its hind legs to eat cones, nuts and acorns and will use its two hands to raise the food to its mouth. In the Spring it feeds on _____ and _____. It will also eat fruits, berries, tree bark and _____. Occasionally red squirrels will eat insects and bird's _____.

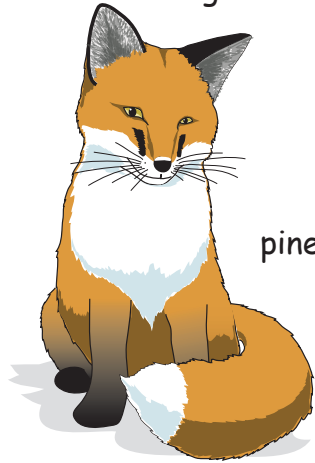
Red squirrels collect hazelnuts and cones and bury them for later use. Occasionally they forget where they have been buried and new growth will appear from the buried seeds. This means that the squirrel is of great assistance in seed _____ and this results in new growth of young _____, sometimes some distance from the tree where the seeds were collected.

The red squirrel is a _____ mammal and it's easier to find its traces than see the animal itself. The most obvious signs are the _____ left in the forest floor marking the site where the red squirrel has been feeding.

shy	dispersal	insects	scales	four	eggs	spring	cones	conifer
young shoots	thumb	tree stumps	teeth	acorns	flowers	smaller	nut	
seeds	Scot's pine	fungi	trees	Norway spruce	right	protein		

Dangers Facing the Red Squirrel

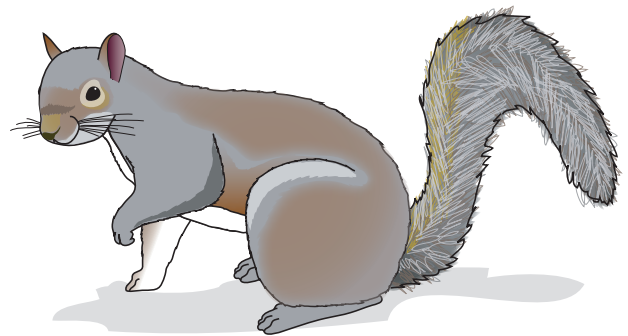
The red squirrel has been in Wales since the end of the last Ice Age, around 10,000 years ago. The animal is a native of these islands but its numbers have, unfortunately, been greatly reduced during the last century.



The red squirrel has a few enemies in the wild such as the fox, stoat, pine marten and goshawk. The main reason why the red squirrel has become increasingly scarce is the appearance of the grey squirrel.

At the end of the nineteenth century, around 1876, a few grey squirrels were brought over from North America to Britain, and unfortunately for the red squirrel, its grey cousin succeeded in adapting itself to its new environment and is now flourishing.

The red squirrel has now been driven from its natural habitat as the grey squirrel lives in similar habitat to that of the red squirrel - habitats such as deciduous woodland and coniferous forests.



The grey squirrel is also a carrier of a virus called Parapox; although this virus does not harm the grey squirrel, it kills the red squirrels.

We are very lucky on Anglesey that we have a remaining population of red squirrels.

Scientists have been examining the population and have found that they have been here for centuries, but that they are now in danger of extinction. Dr. Craig Shuttleworth has been appointed to study the red squirrels of Mynydd Llwydiarth. He has been studying these red squirrels carefully over the last few years. He has also been trapping the grey squirrels and disposing of them, so that the red squirrels will survive. If red squirrels are to survive on Anglesey, the grey squirrels must be removed to allow the red squirrels to re-occupy the habitats from which they have been excluded so that the island may once more be a safe haven for the red squirrel.

Dangers Facing the Red Squirrel

Read the text then answer the questions - True or False

	True	False
The grey squirrel was introduced to Britain from China	<input type="checkbox"/>	<input type="checkbox"/>
Dr Craig Shuttleworth is trying to save the grey squirrel	<input type="checkbox"/>	<input type="checkbox"/>
Red and grey squirrels live in deciduous woodland	<input type="checkbox"/>	<input type="checkbox"/>
The hedgehog is one of the red squirrel's enemies	<input type="checkbox"/>	<input type="checkbox"/>
Grey squirrels carry the Parapox virus	<input type="checkbox"/>	<input type="checkbox"/>
Red Squirrels are in danger of becoming extinct	<input type="checkbox"/>	<input type="checkbox"/>
Red squirrels must be trapped to allow the grey squirrels to survive	<input type="checkbox"/>	<input type="checkbox"/>
The remaining population of red squirrels on Anglesey are at Mynydd Bodafon	<input type="checkbox"/>	<input type="checkbox"/>
The grey squirrel has adapted to life in Britain and is flourishing	<input type="checkbox"/>	<input type="checkbox"/>
The fox is one of the red squirrel's enemies	<input type="checkbox"/>	<input type="checkbox"/>

To help the squirrels on Anglesey, the Anglesey Red Squirrel Project provides nest boxes for them to use as shelter.

Below you will find instructions on how to build a nest box of your own, so that you too can help the red squirrels.

You will need:

2cm thick plywood

Non-toxic water based wood preserver (it is very important to use non toxic water based preserver so that it doesn't harm the squirrels)

Nails, Pencil, Ruler, Hammer, Saw, Drill, Workbench, Safety Goggles

Constructing the box

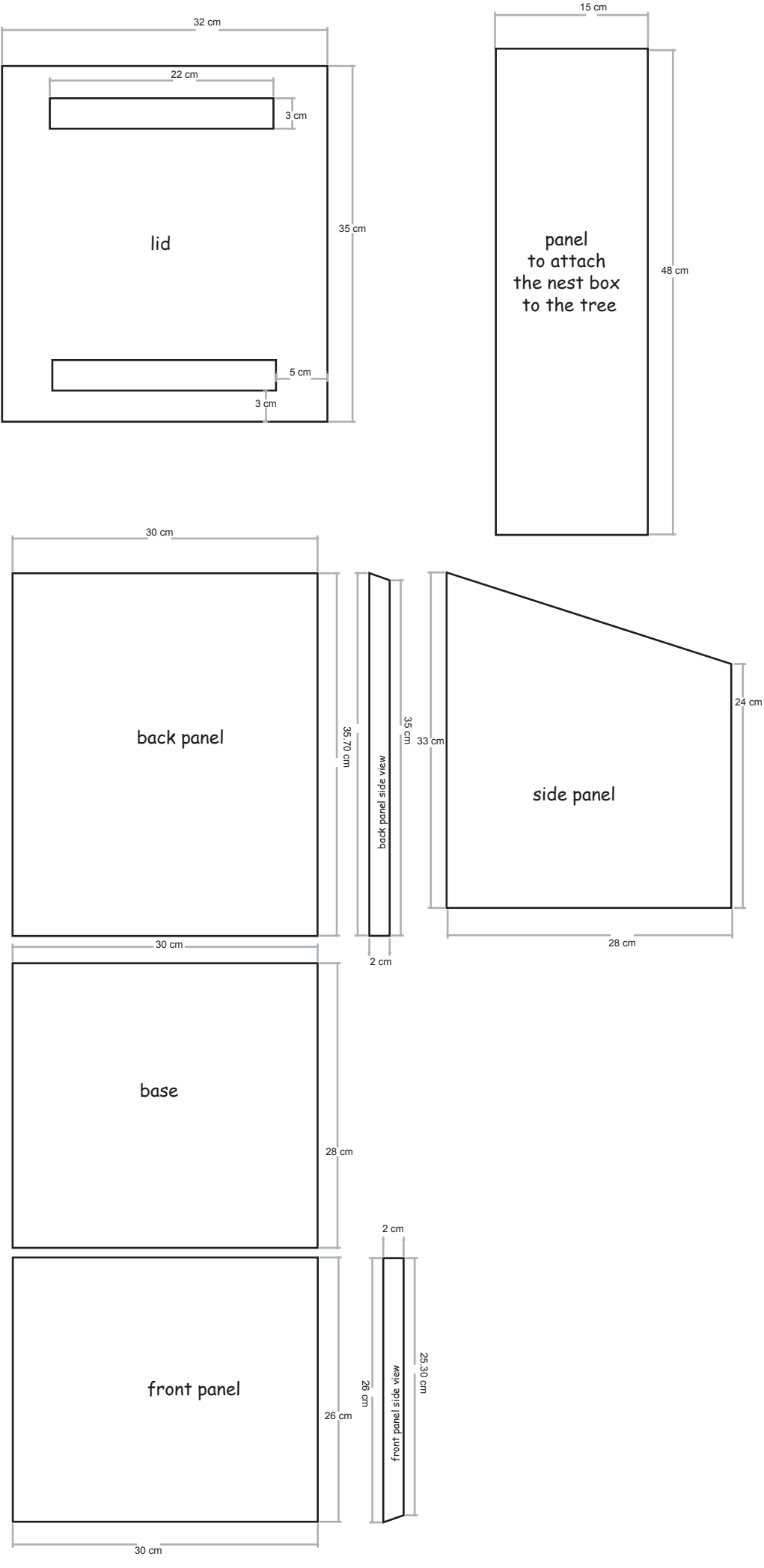
1. □ On your length of plywood, measure and mark in pencil the outline of all the templates required to make the □ nest box i.e. bottom panel, 2 side panels, front panel, back panel, lid and tree attachment panel using the □ measurements supplied.
2. □ Cut out the templates of the box as marked using the workbench and saw. Also drill a hole in the tree □ attachment panel for fixing the box onto a tree. Make sure to wear your safety goggles at all times.
3. □ Mark out the entrance hole in one of the side panels then cut it out.
4. □ Mark out and cut two lengths of plywood to attach to the internal side of the lid as per the diagram.
5. □ Attach the back panel to the base panel using 4 nails evenly spread out.
6. □ Next, attach the side panels. Nail the side panels to the base panel and to the back panel again using □ approximately 4 nails spread out evenly. Make sure that the entrance hole is near the back panel of the □ box.
7. □ To complete the box, attach the front panel to the two side panels and to the bottom panel.
8. □ Next attach the tree attachment panel to the back of the box using several nails - it is very important that □ this is securely attached to the box so that the box doesn't fall off the tree when the squirrels are using □ it.
9. □ Finally, nail the lengths of plywood to the interior side of the lid and place on top of the box.
10. □ Once the box is complete, paint the external parts with non toxic water based preserver so that it can □ withstand the weather and allow to dry. Do not paint the inside of the box.

The box should be placed as high as safely possible on the main trunk of a tree.

The red squirrel is fully protected under UK wildlife legislation. The nests of red squirrels are also legally protected therefore a licence is required to inspect the contents of a box used by red squirrels.

Activity 14

Build a Nest Box



Adaptations to the Environment

Red Squirrel

Nose

Good sense of smell to find food and detect other animals

Ears

They have sensitive hearing to sense when predators are near.

Eyes

They have very good eyesight, they can spot danger and predators from a distance.

Coat

The squirrel needs a thick coat in the winter to keep warm.

Front legs

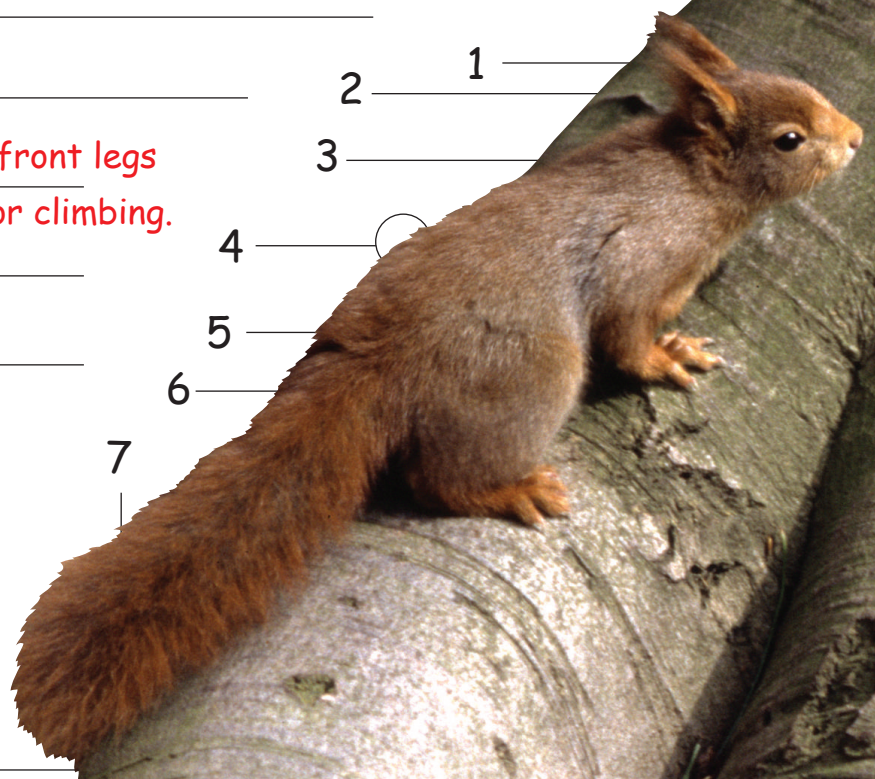
The front legs have five deft fingers which are used to handle food.

Back Legs

The back legs are longer than the front legs and they have strong, long claws for climbing.

Tail

The squirrel's tail is large and furry and helps the squirrel balance as it runs, climbs and jumps. It is also used like a flag to warn other squirrels of nearby danger, and when sleeping, the squirrel wraps the tail around itself like a duvet to keep warm.



Red Squirrel Habitat

Answer the following questions using complete sentences.

1. What is the natural habitat of red squirrels?

The natural habitat of red squirrels is deciduous woodland.

2. Name three trees that shed their leaves in winter

Oak trees, hazel trees and ash trees (or beech trees) shed their leaves in the winter.

3. What is the red squirrel's favourite coniferous tree?

The Scot's pine is the red squirrels favourite coniferous tree.

4. Where can the red squirrel normally be found?

Red squirrels are normally found high in the treetops.

5. What is a drey and what is it made of?

A drey is the name for a red squirrel nest and it is made of twigs and moss.

6. In winter what time of day do red squirrels forage for food?

In winter red squirrels forage for food in the early morning and late in the afternoon.

7. In summer what do red squirrels do after lunch?

In summer red squirrels sleep after lunch.

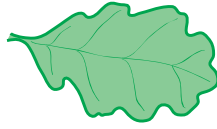
8. How high off the ground will a red squirrel build its drey?

Red squirrels will build their dreys at least three metres above the ground.



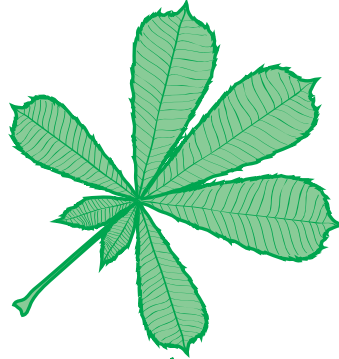
Look at the leaf shapes below and identify the trees they belong to. Write both the English and Welsh names in the spaces provided. Use text books and the internet to find the names.

Oak



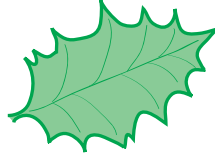
Derwen

Horse chestnut



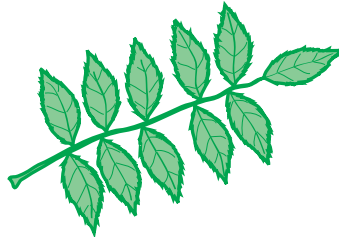
Castanwydden

Holly



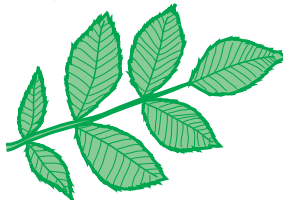
Celynnen

Rowan



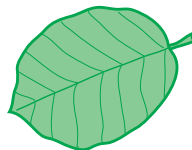
Criafolen

Ash



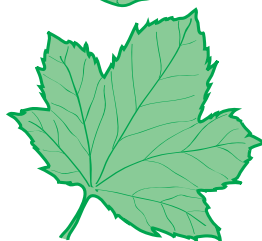
Onnen

Beech



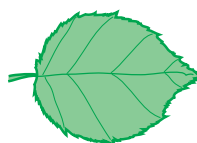
Ffawydd

Sycamore



Sycamorwydden

Hazel



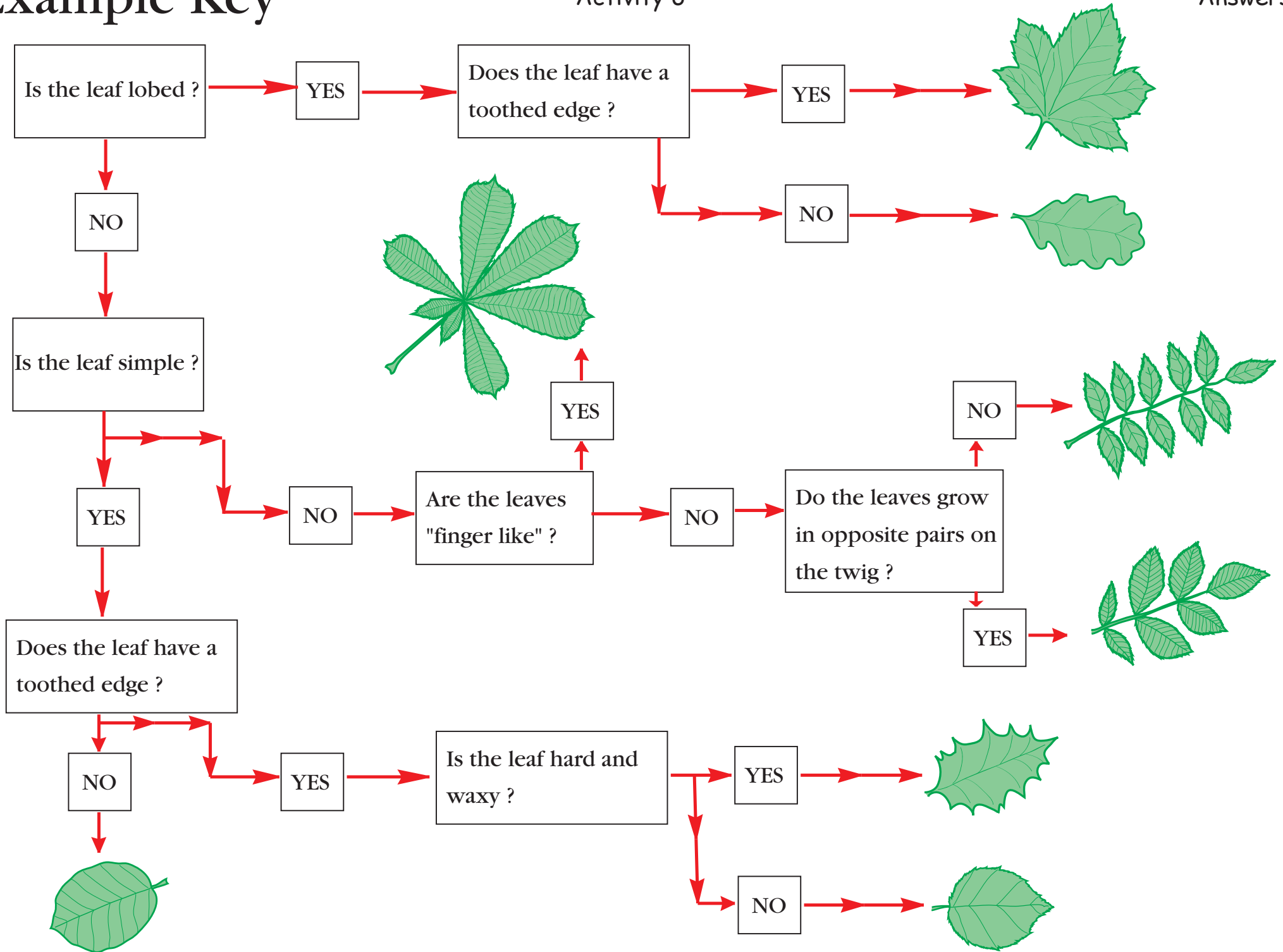
Collen

Now, look carefully at the leaf shapes and texture. If possible, collect samples of the leaves so that you can examine them closely or search the internet or look in textbooks to find more information. Create a key to identify the trees. If you have not used a key before search the internet for an example. Keys are based on a series of questions which will lead you to the correct answer and can be used in a number of different situations.

Example Key

Activity 6

Answers



Look at the map of Anglesey.

Listed are the areas in which red squirrels can be found on the island.

Use an Ordnance Survey map find the locations of these places and fill in the boxes with the correct letter from the map.

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="d"/>	<input type="text"/>	Mynydd Llwydiarth
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="c"/>	<input type="text"/>	Newborough Forest
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="b"/>	<input type="text"/>	Wern y Wylan
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="a"/>	<input type="text"/>	Cors Erddreiniog

Work out the 4 figure grid references for each and write them in the space below.

Remember: "Go down the stairs and along the corridor!"

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	a	<u>SH 4781</u>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	b	<u>SH 5680</u>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	c	<u>SH 4064</u>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	d	<u>SH 5479</u>

Look at the map and answer the following questions:

Question 1. Rusty is at Mynydd Llwydaiarth and wants to travel to the woodland near Mynachdy. □
Which way should he travel?

North West

Question 2. Penrhos Nature Reserve is in which direction from Presaddfed?

West

Question 3. Cors Erddreiniog is in which direction from Coed Tan y Bryn?

North East

Now use the Ordnance Survey Maps to answer the following:

Find the grid references for the following woodlands:

□ Coed Cefn □ □ SH580759

□ Haffoty Covert ■ □ SH565775

□ Coed Llewelyn □ □ SH387682

□ Coed Dinas Goch □ □ SH278768

Name the woodlands found at the following locations:

□ SH543714 □ □ Coed Môr

□ SH472834 □ □ Coed Cefn Du

□ SH495858 □ □ Coed Pen yr Orsedd

□ SH284767 □ □ Coed Fadog

- Question 1.** Rusty has been spending the summer in one of his summer dreys - drey E, the fleas in the nesting material have become unbearable so he has decided to move to drey A. Which way should he travel?

Rusty should travel north.

- Question 2.** Having spent a few nights at drey A, Rusty is on the move again! This time he decides to travel south east. At which drey does he arrive?

Rusty arrives at drey D.

- Question 3.** The drey has been leaking rain water badly and the moss inside is soaking wet. After carrying out a quick repair, Rusty decides that it is far too damp to spend the night so decides to travel to drey E. Which way must he travel to get there?

Rusty must travel south west.

- Question 4.** Drey E was very comfortable so he spent a few weeks there, but the weather was starting to deteriorate as autumn turned into winter so he decided to go in search of his cosier winter retreats. He starts off in a north westerly direction. Towards which drey is he heading?

Rusty is heading towards Drey C.

- Question 5.** The drey is rather draughty, so after spending a few chilly nights in the drey he thinks he should move south west - which drey will he come to?

Rusty will come to drey G.

- Question 6.** This drey is wonderfully cosy, it is lined with moss, thistledown and feathers so he decides to spend the winter there. Having spent a cosy winter in drey G Rusty decides that he had better check some of the other dreys to see whether or not they have survived the winter storms. He decides first of all to check drey A - how should he get there?

Rusty should travel in a north easterly direction.

- Question 7** Crisis! Drey A has been seriously damaged in the winter storms, all the lining material has been lost and only a few twigs remain to show where the drey once stood. Rusty spends several days repairing the drey with twigs and bark and carefully lines it with leaves and moss. Worried that other dreys may also be damaged he decides to travel north in search of another of his dreys. Which drey will he find?

Rusty will find drey F.

- Question 8** This drey is in a good state of repair so after a little tweaking he decides to move on to drey B - how does he get there?

Rusty should travel east.

It was a very long distance to travel to Drey B and by the time he'd arrived Rusty was extremely tired. Drey B was a snug little nest so he curled up inside and in no time at all fell fast asleep!

Red Squirrel Diet

Answers



Fill in the gaps using the words listed below.

Red Squirrels feed mainly on seeds especially from pine cones.

The squirrels hold the cones between their hands and raise them to their mouths.

The front teeth are used to extract the small seeds from the cones.

Red squirrels often have a favourite spot in the forest such as tree stumps, where they like to eat. Here you may be able to see the discarded scales on the forest floor when the seeds have been eaten.

The Scot's pine is one of the squirrel's favourite conifer trees. Red Squirrels will also eat Norway spruce seeds. The seeds of this tree are larger and the seeds remain in the cones until spring. Lodgepole pine and the European larch also provide cones that are suitable for the red squirrels. The seed of both the lodgepole pine and the European Larch are smaller than those of the Scots pine.

Hazelnuts are eaten by red squirrels. They can split a hazelnut cleanly in half to get at the protein rich nut inside. Red squirrels will also eat acorns after removing them from the acorn cup. The squirrel will raise a nut to its mouth using its two hands. On the hands there are four fingers and a thumb and the squirrel uses these very deftly. Most squirrels are right handed. The squirrel will squat on its hind legs to eat cones, nuts and acorns and will use its two hands to raise the food to its mouth. In the Spring it feeds on young shoots and flowers. It will also eat fruits, berries, tree bark and fungi. Occasionally red squirrels will eat insects and bird's eggs.

Red squirrels collect hazelnuts and cones and bury them for later use. Occasionally they forget where they have been buried and new growth will appear from the buried seeds. This means that the squirrel is of great assistance in seed dispersal and this results in new growth of young trees, sometimes some distance from the tree where the seeds were collected.

The red squirrel is a shy mammal and it's easier to find its traces than see the animal itself. The most obvious signs are the cones left in the forest floor marking the site where the red squirrel has been feeding.

shy	dispersal	insects	scales	four	eggs	spring	cones	conifer
young shoots	thumb	tree stumps	teeth	acorns	flowers	smaller	nut	
seeds	Scot's pine	fungi	trees	Norway spruce	right	protein		

Dangers Facing the Red Squirrel

Read the text then answer the questions - True or False

	True	False
The grey squirrel was introduced to Britain from China	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Dr Craig Shuttleworth is trying to save the grey squirrel	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Red and grey squirrels live in deciduous woodland	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The hedgehog is one of the red squirrel's enemies	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Grey squirrels carry the Parapox virus	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Red Squirrels are in danger of becoming extinct	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Red squirrels must be trapped to allow the grey squirrels to survive	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The remaining population of red squirrels on Anglesey are at Mynydd Bodafon	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The grey squirrel has adapted to life in Britain and is flourishing	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The fox is one of the red squirrel's enemies	<input checked="" type="checkbox"/>	<input type="checkbox"/>

National Curriculum in Wales

Key Stage 2

Activity 1

Subject

Science

Life Processes and Living Things

4. Living Things in their Environment



Task

Worksheet: Write a short sentence about each adaptation the red squirrel has to suit its environment

Objectives

To understand:

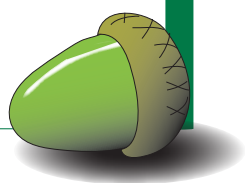
- that animals have different adaptations suited to different lifestyles

Resources

Worksheet: Adaptations to the environment

Extension Activities

- Discover how other Anglesey mammals such as otters, water voles and bats such as the noctule, are adapted to their habitats
- Discover how other animals are adapted to extreme environments such as the desert, deep sea and the arctic



National Curriculum in Wales

Key Stage 2

Activity 2

Subject

Mathematics

Using and applying mathematics

1. Making and Monitoring Decisions to Solve Problems

Task

Worksheet: Use combinations of mathematical formulas to equate the weight of everyday items to the weight of a red squirrel.

Objectives

To understand:

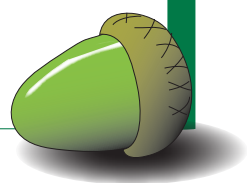
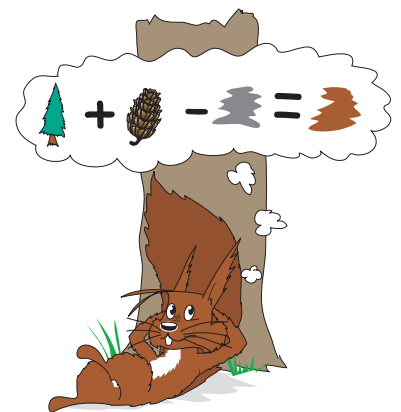
- that red squirrels are quite light weight and therefore are well adapted to an arboreal lifestyle.

Resources

Worksheet - How much does a squirrel weigh?

Extension Activities

- Compare the weights of other species that live in woodlands either in the tree canopy or on the woodland floor such as woodland birds, hedgehogs and mice.



National Curriculum in Wales

Key Stage 2

Activity 3

Subject

Art

2. Making



Task

Worksheet: Colour in the internal part of the card and create a design for the front of the card

Objectives

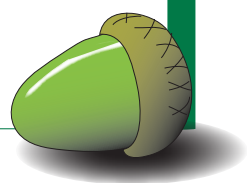
- To make a creative 3D greeting card based on a red squirrel theme

Resources

Worksheet: Red Squirrel 3D card

Extension Activities

- Create a card with moving parts
- Experiment with aperture cards and create different designs, e.g, a cross stitch design
- Experiment with découpage



National Curriculum in Wales

Key Stage 2

Activity 4

Subject

Art

2. Making



Task

Worksheet: Make a red squirrel desk tidy by following the instructions given

Objectives

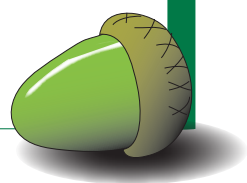
- To make a useful object using a variety of skills based on a red squirrel theme

Resources

Worksheet: Red Squirrel Desk Tidy

Extension Activities

- Create other red squirrel artefacts using a range of skills
e.g. a red squirrel or acorn pin cushion, a red squirrel model,
a red squirrel game



National Curriculum in Wales

Key Stage 2

Activity 5

Science

Life Processes and Living Things

4. Living things in their Environment



Task

Worksheet: Read the text, then answer the questions

Objectives

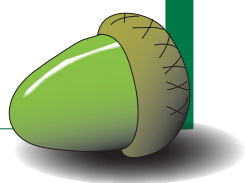
- To understand that red squirrels live in woodlands and rely on a variety of tree species to survive
- To learn that squirrels build dreys for shelter
- To learn about the daily activities of the red squirrel

Resources

Worksheet - Red Squirrel Habitat

Extension Activities

- Compare the drey with the homes of other mammals such as otter holts, water vole burrows etc
- Arrange a field visit with the Education Officer to look at the habitat and search for a drey
- Look in more detail at the variety of fruits and seeds produced by different trees and at which time of the year they are available to the red squirrels to eat



National Curriculum in Wales

Key Stage 2

Activity 6

Subject

English

2. Skills

Science

Scientific Enquiry

2. Communication in Science

Life Processes and Living Things

4. Living things in their environment

Task

Worksheet: Use leaf shapes to discover the identity of the different trees.
Find the English and Welsh names for the trees.
Prepare a key to identify the trees.

Objectives

To learn:

- about some of the tree species in the local environment and to learn their names in English and Welsh.
- that leaves vary in terms of shape, colour, texture and size.
- that it is possible to distinguish between species by comparing characteristics of similar elements - in this example comparing the characteristics of the leaf.
- To use reference books and other media to carry out research.
- To understand that using keys to identify species can be an important and useful tool.

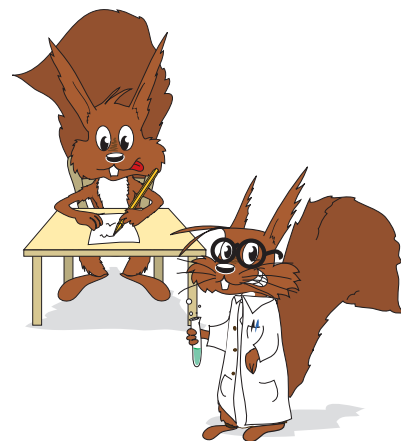
Resources

Worksheet: Identify the Trees

Worksheet (KS1) - Leaf mobile - This activity could be modified for KS2.

Extension Activities

- In winter when deciduous trees have dropped their leaves, other characteristics have to be used to identify the species. Research the characteristics that can be used at this time of year such as bark, buds etc and prepare corresponding identification keys.
- Keys have a variety of uses. Prepare some other keys to identify mammals and/or birds by first investigating the differences and similarities between species.



National Curriculum in Wales

Key Stage 2

Activity 7

Subject

Science

Life Processes and Living Things

4. Living things in their environment



Task

Worksheet: create a food chain based on a woodland ecosystem

Objectives

To understand:

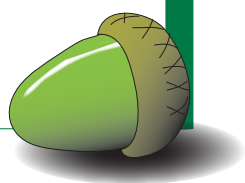
- that a relationship exists between plants and animals in a habitat
- that all living things depend on one another

Resources

Worksheet: Food Chain

Extension Activities

- Make food chains for other habitats on Anglesey such as:
 - Benllech beach (sandy beach)
 - Aberffraw sand dunes (sand dune system)
 - Llyn Cefni (lake habitat)
 - Holyhead Mountain (heathland)
- Use reference material to discover what organisms might live in these types of habitat and the relationships between them



National Curriculum in Wales

Key Stage 2

Activity 8

Subject

Geography

1. Geographical enquiry and skills



Task

Worksheet: use grid references to locate the marked areas on the map

Objectives

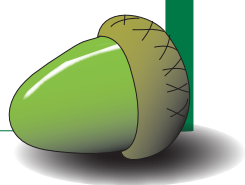
- To use and understand grid references
- To learn about the location of red squirrels on Anglesey

Resources

Worksheet: Label the Map

Extension Activities

- Mark other areas on the map using an OS map
e.g. Find all of the lakes on Anglesey



National Curriculum in Wales

Key Stage 2

Activity 9

Subject

Geography

1. Geographical Enquiry and Skills



Task

Worksheet: Give directions, work out grid references and follow given grid references to find woodlands on a map.

Objectives

- To learn about the distribution of woodlands on Anglesey
- To practice the use of grid referencing

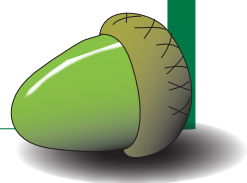
Resources

Worksheet - Anglesey Woodlands

Worksheet - Label the Map

Extension Activities

- Measure the distances between the woodlands to see how far a red squirrel would have to travel to move from one woodland to the other
- Use the symbols on the map to locate deciduous, coniferous and mixed woodlands.



National Curriculum in Wales

Key Stage 2

Activity 10

Subject

Geography

1. Geographical Enquiry and Skills



Task

Worksheet: Answer the questions by giving and following directions

Objectives

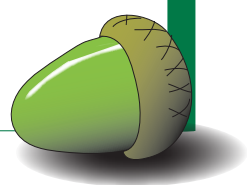
- To understand that red squirrels have several dreys and move from one to the other
- To practice using and giving directions to find locations

Resources

Worksheet: Find the drey!

Extension Activities

- Create a map of the local area including features such as telephone boxes, chapels, shops etc then write a series of directions on how to get to each them from the school
- Look at a map of Anglesey and give directions to different towns and villages from the school
- Look at a map of the world and compare the locations of various countries e.g. Ireland is to the west of Wales



National Curriculum in Wales

Key Stage 2

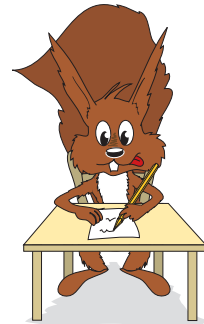
Activity 11

Subject

English

Writing

1. Range



Task

Worksheet: To read the opening paragraph and then complete the story using some of the words provided.

Objectives

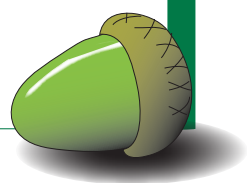
- To practice the art of creative writing and by doing so explore the world of the red squirrel

Resources

Worksheet: Rusty's Adventures

Extension Activities

- Write a short poem about the red squirrel
- Create a short play using woodland characters



National Curriculum in Wales

Key Stage 2

Activity 12

Subject

English

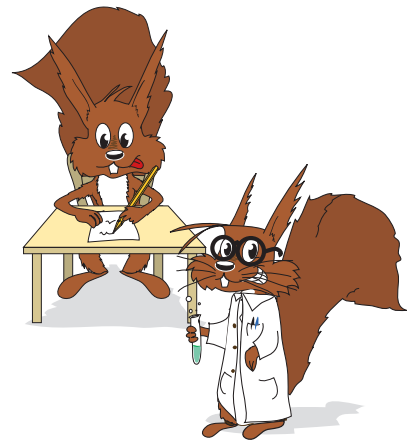
Reading

1. Range
2. Skills

Science

Life Processes and Living Things

4. Living Things in their Environment



Task

Worksheet: fill in the gaps in the text using the words provided
(use of a dictionary and reference material may be required)

Objectives

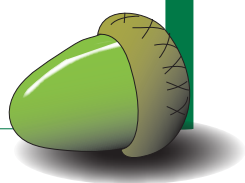
- To learn about the various food resources exploited by red squirrels throughout the seasons

Resources

Worksheet: Red Squirrel Diet

Extension Activities

- Create a red squirrel calendar - use books and the internet to search for information.
- Investigate the diets of other British Mammals
- The children to create a menu of their favourite foods



National Curriculum in Wales

Key Stage 2

Activity 13

Science

Life Processes and Living Things

4. Living things in their Environment



Task

Worksheet: Read the text then answer the questions true or false

Objectives

To learn that:

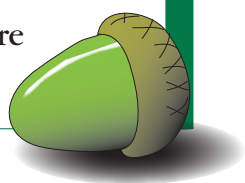
- red squirrels are native to Britain
- grey squirrels were brought over to Britain from America
- grey squirrels carry a virus called Parapox which is lethal to red squirrels
- work is underway on Anglesey to save the red squirrels
- red squirrels have several predators

Resources

Worksheet: Dangers Facing the Red Squirrel

Extension Activities

- Look at other species that are under threat in Britain and in other areas of the world and discuss the reasons for their decline
- Look at other species that have been artificially introduced to Britain and other parts of the world and the affect they have had on the native species e.g.American mink in Britain, ferret in New Zealand and rabbit in Australia
- Look at the predators of the red squirrel e.g. the fox and learn about their habits and lifestyle - are they themselves under threat?
- Create a food pyramid with the producers at the bottom, the herbivores in the middle and the carnivores at the top. Then create a woodland food web and think about how the links in the web would be affected if different species were removed, i.e. in real terms, if species were to become extinct



National Curriculum in Wales

Key Stage 2

Activity 14

Subject

Design and Technology

3. Making Skills



Task

Worksheet: Create a red squirrel nest box by following the instructions

Objectives

- To understand that it is possible to enhance the habitat for red squirrels by providing nest boxes

Resources

Worksheet: Build a Nest Box

Extension Activities

- Think of other ways to help the red squirrels e.g. planting trees
- Create a squirrel friendly area in the school grounds
e.g. plant a copse of hazel and pine

