

Twigs all look the same. Or do they?

What you need: Some different winter twigs that have lost their leaves, and a pen.

Look carefully at your twig and answer these questions.

1. Is your twig curvy or straight?

.....

2. What colour are the buds?

.....

3. What shape are the buds? Are they rounded or pointed, long or short?

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4. How are the buds arranged? Are they found in pairs or not? Look at the drawings over the page for examples – elder buds are found in pairs, hawthorn buds are not.

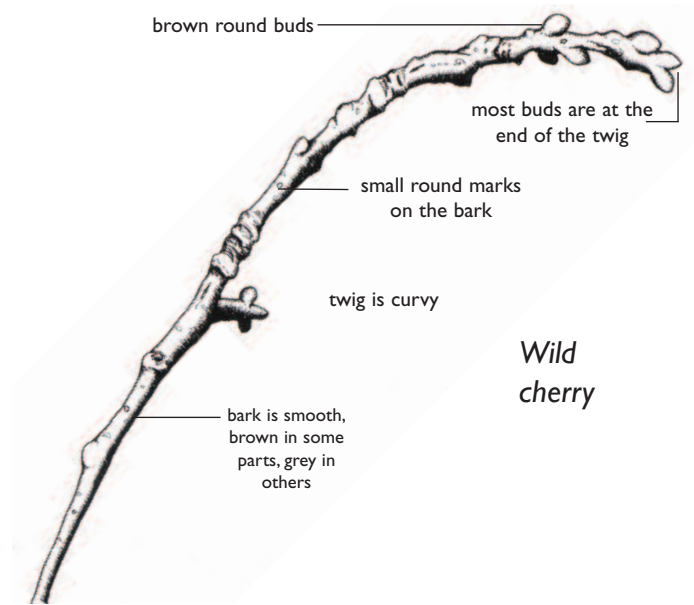
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5. What else do you notice about your twig? For example has it got thorns, or any remains of leaves or berries from last year on it? Are the buds sticky? Or can you see any green parts where the new leaves are starting to come out?

.....

.....



Questions to try if you have time.

6. What does the bark feel like? Is it rough or smooth? How would you describe it?

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7. What colour is the bark? Look carefully – is it the same colour all over? Are there any marks on it? What do the marks look like?

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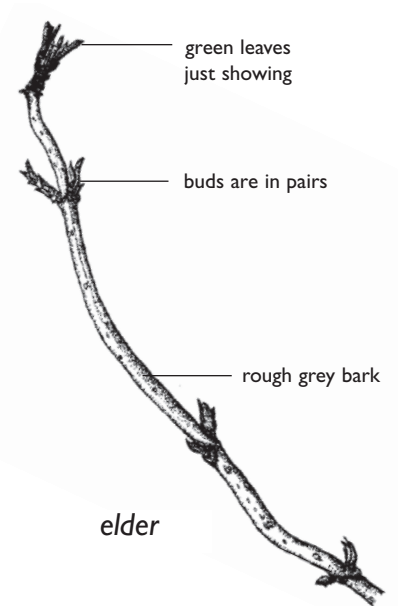
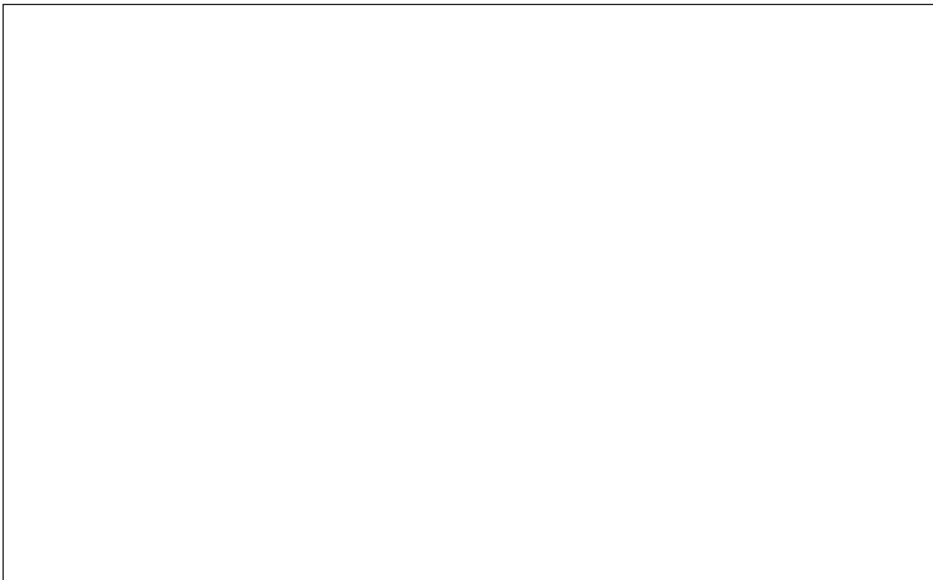
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8. Look again at the buds (if you can see them easily and they are not too small). Do they look smooth all over, or are they made up of scales?

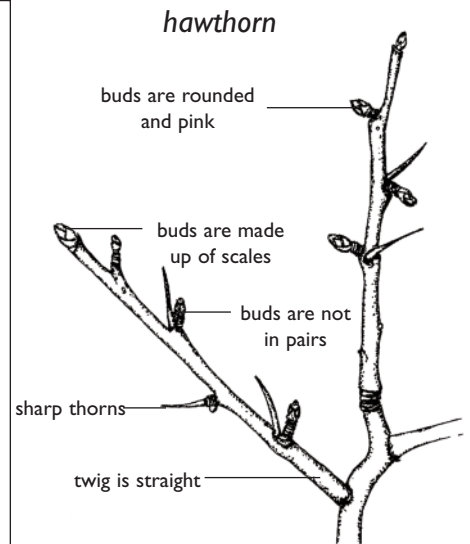
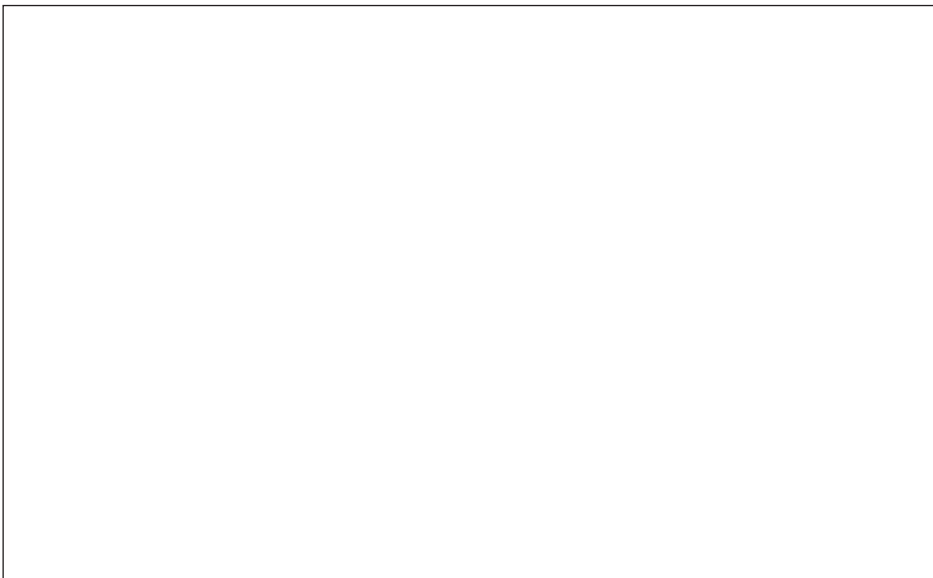
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Twigs all look the same. Or do they?

Make a careful drawing of your twig here and add labels to it.



Now choose another twig that looks very different from the first one. Draw it and add labels to show in what ways you think it is different.



Question

Can you think why some trees might lose their leaves in winter? Clue: think about the difference in the weather and amount of daylight between winter and summer.

Exploring a hedge

What you need: A pen.

Hedges are usually made up of different kinds of shrubs. Shrubs are small bushy trees.

Choose a leaf from your hedge and answer the following questions:

1. What kind of shrub is the leaf from? (Ask your teacher if you don't know).

.....

2. What kind of shape is the leaf? Circle the closest picture below.

Simple
Roundish



Compound (leaf made up of smaller leaves)



Linear



Lobed



3. What is the edge of the leaf like? Circle the closest answer or write your own.

Smooth Hairy

Jagged Prickly

My description.....

4. What is the colour of the leaf like? Circle the closest answer or write your own.

Light green Dark green

Yellow green Blue green

Brown green Yellow

Orange Brown

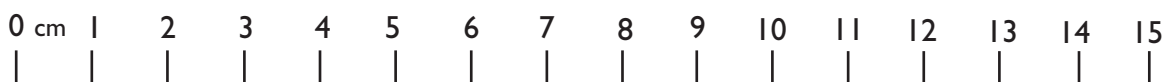
My description.....

5. Use the ruler on the edge of this worksheet to measure the leaf. How long is it from the tip to where it joins the stem?

.....cm

Can you find out more?

Choose one of the shrubs found in your hedge and find out more about it. Find out where in the countryside it prefers to live, how tall it can grow, if it produces flowers or fruit, what animals rely on it for food and maybe some of its uses.



Measuring your hedge

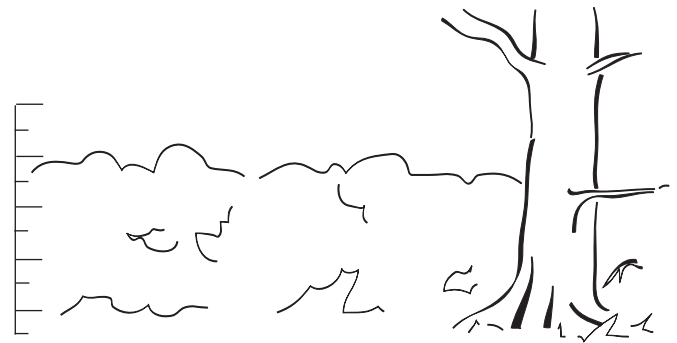
What you need: A pen, and a long ruler or measuring tape.

Use this sheet to make a record of what you can see in and around your hedge today.

Today's date:

Today's weather:
.....

Wildlife I have seen nearby today:
.....
.....



Choose one of the types of shrub in the hedge

I've chosen (write its name below)
.....

Estimate the height of your hedge in centimetres: (If there is a lot of difference in the heights of the shrubs, estimate the height for both the shortest and the tallest shrub).

I estimate the height iscm OR

I estimate the tallest iscm

I estimate the shortest iscm

Measure the actual height of your hedge in centimetres: (If there is a lot of difference in the heights of the shrubs, measure both the shortest and the tallest shrub in the hedge).

Our hedge measurescm OR

The tallest shrub iscm

The shortest shrub iscm

How tall are all the shrubs in the hedge of this type? Measure each one and record here.

.....cm

.....cm

.....cm

.....cm

.....cm

Exploring an old hedge

Hedges are habitats

What you need: A pen.

What is a habitat?

A habitat is a place where animals and plants live.

A hedge is a type of habitat.

What are the conditions of this hedge habitat?

Describe the hedge habitat. Is it dense, spiky, damp, shady? Try to use your own words.

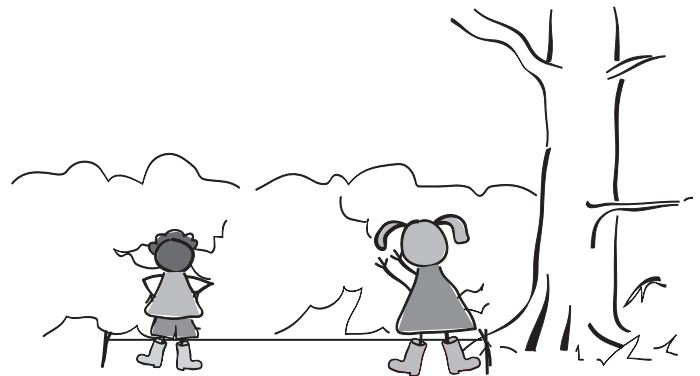
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What kind of animals do you think might live in a hedge that has been growing for many years? Name some here.

.....
.....
.....

What animals can you find in and around this hedge today?

.....
.....
.....
.....



Why do you think they live here?

.....
.....
.....

How old is the hedge?

What you need: two sticks, some sticky tape.

Hedges have been part of the countryside for hundreds of years. They were first planted to keep cattle and sheep enclosed in fields and stop them wandering away. Some of the very old hedges can still be found today.

Older hedges usually have a greater variety of shrubs in them because seeds from different species arrive and slowly become part of the hedge. Now turn over this page.



**MORE TREES
MORE GOOD**

Exploring an old hedge

How old is the hedge?

1. Put one of your sticks in the ground near the hedge.
2. Walk 40 long steps and put in the second stick.
3. Take a leaf from each different kind of shrub you can find along the hedge between the two sticks. Use the sticky tape to attach the leaves to the bottom of this sheet.

Tips:

Only collect leaves from the shrubs – these are plants with woody, not soft stems

Count each kind of shrub once – check new leaves against the ones you have already stuck to the sheet.

4. Count how many different leaves you have collected.

I found different kinds.

For every different kind of shrub the hedge is approximately one hundred years old.

This means my hedge could be hundred years old.

Question

Can you think of any reasons why for some hedges, this exercise would give the wrong answer? Clue: What kind of hedges do people plant nowadays?

stick your leaves below

Food chains

What you need: A pen.

What is a food chain?

A food chain shows how different animals and plants rely on each other.

A food chain starts with a green plant, the producer. Plants use the sun to grow and make (produce) leaves, seeds and fruits. These can be used as food by other animals.

Animals are called consumers, because they eat (consume) plants or other animals.

Below is one example of a food chain:



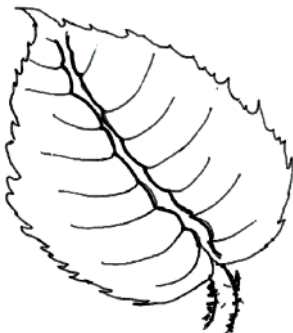
blue tit

blue tits eat caterpillars
(Consumer)



caterpillar

caterpillars eat green plants
(Consumer)



hazel

hazel is a green plant
(Producer)



Here is some more information about the plants and animals in the picture

Producers

- Green plants
- Dead leaves which fell off green plants
- Acorns – from a large green plant (an oak tree)

Consumers that eat plants

- Worms eat dead leaves
- Snails and caterpillars eat green plants
- Squirrels eat acorns

Consumers that eat other animals

- Badgers eat worms
- Blue tits eat caterpillars
- Thrushes eat snails
- Foxes eat thrushes, bluetits and squirrels

Now use this information to fill in four food chains

Food chains

- Green plants caterpillar
- Green plants thrush
- Dead leaves
- Acorns fox

Question

Explain why you think plants are such an important part of food chains.

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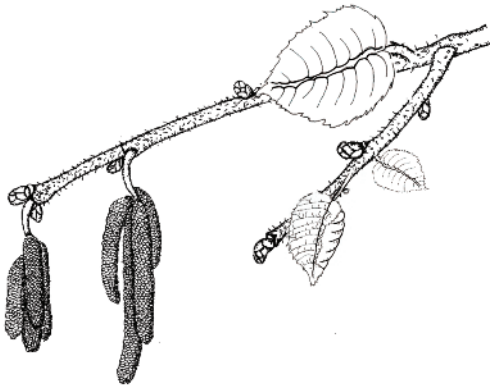
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What you need: A pen.

Read these folk stories about different common shrubs:

Hazel



The Celtic people believed that eating hazelnuts made you wise. They had an ancient tale about nine hazel trees that grew around a sacred pool. There were some salmon living in the pool and they ate the nuts that fell from the hazel tree and absorbed the wisdom from the nuts. The number of bright spots on the salmon's skin showed how many nuts they had eaten.

Elder



The elder tree was a symbol of sadness. Some people believed that the cross on which Jesus Christ was crucified, was made from it. Maybe this was the reason why country people avoided using it.

People in Denmark believed a spirit called the Elder-tree mother lived in elder branches. If furniture was made from the wood, the Elder-tree mother would follow and haunt the owners. To avoid this, she had to be asked before the wood was cut.

Hawthorn



In the old days, when people celebrated May Day, instead of dancing around the maypole, they danced around a hawthorn tree. Hawthorn blossom is called "may" and people used to gather garlands of may blossom.

If you've ever heard of the saying "ne'er cast a clout till May is out" it means don't wear less layers of clothes until the may blossom is flowering.

Now make up your own folk story about a shrub of your choice. You may like to use one of these ideas.

1. Another name for hawthorn is the bread and cheese tree

2. Elder means "fire tree"