

British Wildlife: Odd One Out

Animals & Plants



British Wildlife: Odd One Out

Created by the Primary Science Teaching Trust (PSTT) and The Nature Collection

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[The Nature Collection](#) is an extraordinary collection of animal bones, skeletons, feathers, antlers, skins and photographs and was created by Susanna Ramsey.

Several of the photos were taken at the [British Wildlife Centre](#) in Surrey.

We are grateful to Dr Ralf Britz and Ritva Roesler for their assistance in creating this resource.

Guidance for using British Wildlife: Odd One Out

This resource is designed to encourage young children (ages 3-5 years) to observe closely and to stimulate thinking, talking and questioning about the features of local animals, plants and their habitats. It could also be used with older children in KS1 or KS2.

There are eight **Odd One Out** activities in this slideshow: four **animal** activities and four **plant** activities. All the animals and plants are commonly seen in the UK.

Each activity has four images shown on one slide. These reflect a common theme which Early Years children might notice (see the index on the next slide). We suggest that you share only one Odd One Out activity at any time. You can revisit the other activities another time.

Running the activity:

Choose a slide. Ask – **How are these animals/plants similar? How are these animals/plants different?**

Listen to children's suggestions. Encourage children to notice special features of each animal/plant such as the colour, the shape, the number of leaves.

Possible questions to prompt thinking & talking:

- What colours can you see?
- What shapes can you see?
- Can you see any special body parts? (wings, antlers, spines, leaves, petals, etc.)
- What type of animal/plant is this?
- Where do you think the animal lives? (in a tree, in water, on land) How do you know?
- How do you think the animal moves? (running, walking, crawling, flying, swimming) How do you know this?

Then ask everyone to decide which is the **Odd One Out** and WHY.

Encourage a reason for every answer given. There is no wrong answer here!

Background science:

The notes after each slide provide detailed information about the characteristics of each of the animals and plants shown. This is intended to support teachers' subject knowledge. We are not suggesting that Early Years children should be taught these facts.

British Wildlife: Odd One Out

Early Years

Index

Slides	Possible Theme	Images
5-6	Animal patterns (spots)	adder, ladybirds, six-spot burnet moths, fallow deer
7-8	Hair or prickles	large white butterfly, hedgehog, badger, otter
9-10	Tails	red squirrel, grey squirrel, house mouse, fox
11-12	Wings	dragonfly, peacock butterfly, blue butterfly, swan
13-14	Seasons	spring, summer, autumn, winter
15-16	Flowers	wild rose, primrose, tulip, water-lily
17-18	Trees	birch, oak, horse chestnut, beech
19-20	Leaves	beech, horse chestnut, stinging nettles, grass



adder



ladybirds



six-spot burnet moths



fallow deer

Possible theme: Spots

Moths have 6 spots on each wing.

Deer is covered in white spots.

Ladybirds have several black spots.

Adder has a brown zigzag line down the back and spots on its side.

Possible reasons for being the Odd One Out:

Colour: Ladybirds and moths are black and red. Deer is brown, white and black. Adder is brown, so she is a female. (Male adders have a black zigzag pattern.)

Skin covering: Deer has thick hair. Snake has scales. Moth and ladybird have a tough exoskeleton. Moth has microscopic scales on the wings.

Antlers: Only deer have antlers.

Antennae: Moths and ladybirds have antennae. Moth antennae are very long. Others do not have antennae.

Eyes: All have 2 eyes except for the moth which has 4. It has 2 large, compound eyes which we can see and 2 small, simple eyes.

Legs: Adder has 0 legs. Deer has 4 and the insects have 6.

Feet: Deer has 2 hooves on each foot. Insects have claws. Adder has 0 feet.

Tails: Deer has a tail. Snake has a tail but it looks like the rest of the body. Insects do not have a tail.

Flight: Moths and ladybirds can fly. The others cannot.

Size: Deer is much bigger than the others, then adder, moth and ladybird.

If using this activity with older children, you may want to discuss:

Classification: Deer is a mammal. Snake is a reptile. Others are insects. Only the deer is warm blooded.

Life cycle: Deer gives birth to live young. The others lay eggs.

Diurnal: All are active by day.

Diet: Adders eat mainly small mammals like mice, and lizards. Deer eat grass. Moths drink nectar. Ladybirds eat aphids.

Venomous: Only the adder is venomous. It has a bite which is dangerous even to dogs and humans.

Vocabulary (for EYFS)

spots

colours

snake

ladybird

moth

butterfly*

deer

legs

antennae

*A butterfly is not the same as a moth but children may be more familiar with butterflies.



large white butterfly



hedgehog



badger



otter

Possible theme: Hairs/Prickles

Hedgehog is covered in prickles, which protect it from other animals (predators). It rolls into a prickly ball if it is attacked.

Badger and otter are covered in thick hair.

Otter's hair is waterproof as it spends much of the time in water.

Butterfly has a very hairy body. It is cold blooded and needs to warm up, before it can fly.

Possible reasons for being the Odd One Out:

Colour: Badger is black and white. Hedgehog and otter are medium brown. Butterfly is white and grey.

Eyes: Butterfly has 2 large, green, compound eyes with spots and 2 simple eyes. The others have black eyes.

Nose: Badger has the longest nose. Butterfly has no nose.

Ears: Hedgehog, badger and otter have small, rounded ears. Butterfly has no external ears. It has sense organs on its body and wings to feel vibrations.

Whiskers: All except the butterfly have whiskers.

Tongue: Butterfly has a very long tongue, like a tube which it uses to suck up nectar. The others have a small, pink tongue which does not extend out of the mouth.

Antennae: Butterfly has long antennae. Others do not.

Legs: Hedgehog, badger and otter have 4 short legs. Butterfly has 6 thin legs. It flies and very rarely walks. It is the only one with wings.

Claws: All have claws. Badger has big claws for digging. Otter has webbed feet for swimming.

If using this activity with older children, you may want to discuss:

Home: Badgers live underground but move around and hunt, above ground. Otters live near water. Hedgehogs live above the ground. Butterflies fly in the air and land on plants or the ground.

Nocturnal: Badger, hedgehog and otter are mainly active by night – nocturnal. Butterfly is active by day.

Vocabulary (for EYFS)

hair

fur

prickles

butterfly

hedgehog

moth

badger

otter

waterproof



red squirrel



grey squirrel



house mouse



fox

Possible theme: Tails

They all have tails which help them to balance:

Squirrels use their tails for balance when they are climbing or leaping around in the branches of trees.

Mouse is using its tail to grip the post.

Foxes use their tails for balance, when they are leaping onto prey.

Both squirrels and fox have long, bushy tails. Mouse has a long tail, covered in very short hairs.

Possible reasons for being the Odd One Out:

Hair: They are all covered in thick hair. Fox has the longest hair.

Body Colour: Grey squirrel has grey/brown hair, with white underneath. Fox and red squirrel are ginger, with white underneath. Mouse is brown all over.

Eyes: Fox has pale brown eyes. The others have black eyes.

Nose: Fox has the longest nose. It is licking its nose!

Ears: Fox has upright, pointed ears. Others have smaller, rounded ears.

Whiskers: They all have whiskers.

Legs: Fox has the long, thin legs. It chases after its prey. Squirrels and mice have long back legs and shorter front legs. Squirrels have very long, back feet; they are good for pushing off, up into the trees. (We can't see the mouse's back legs)

Claws: Squirrels and mice have tiny claws for climbing, gripping onto the trees and handling food. Can you see their claws? Fox has sharp claws for pouncing onto its prey, to kill it.

Homes: Squirrels live mainly up in the trees. Foxes and mice live on the ground. Mice can climb trees in search of food or to escape from danger.

Size: Mouse is tiny. Red squirrel is smaller than the grey squirrel. Fox is the biggest.

If using this activity with older children, you may want to discuss:

Endangered: Red squirrel is endangered in the UK. It only survives in some areas. The others are common all over the UK.

Nocturnal: Squirrels are active by day - diurnal. Fox and mouse are mainly active by night – nocturnal.

Vocabulary (for EYFS)

tail

grip

balance

hair

fur

squirrel

mouse

fox



dragonfly



peacock butterfly



blue butterfly



swan

Possible theme: Wings

Dragonfly has 4 wide, transparent wings.

Butterflies have 4 wide, colourful wings. Peacock has symmetrical patterns on the wings, with patches of colour and large 'eye spots'. Blue butterfly has black spots along the edge of the back wings. These insects leave their wings out when they land. Swan has 2 huge, white, feathered wings. Swan can fold its wings down, when it is not flying.

Possible reasons for being the Odd One Out:

Hairs/feathers: Dragonfly has short hairs on the thorax, the middle segment of the body. A butterfly's body is covered in long hairs. Swan is covered in about 25,000 feathers.

Mouth/beak: Swan has a hard, orange beak. Butterflies have a long, coiled tongue, like a straw for sucking up nectar. Dragonfly has jaws for eating other insects.

Legs: Dragonfly, and both butterflies have 6 legs (they are insects). Swan has 2 legs and 2 wings.

Antennae: Dragonfly has 2 short antennae. Butterflies have 2 longer antennae. Swan has ear holes and no antennae.

Perch: Swan is landing on water. Others are perched on a plant.

If using this activity with older children, you may want to discuss:

Eyes: Dragonfly has 2 large, compound eyes and 3 tiny, simple eyes. Butterflies have 2 large compound eyes and 2 tiny, simple eyes. Swan has 2 large eyes.

Diet: Dragonflies are predators, catching small, flying insects. Butterflies drink nectar. Swans eat plants and insects in the water.

Vocabulary (for EYFS)

wings

dragonfly

butterfly

swan

see-through

pattern/spotty

feathers

fly



spring



summer



autumn



winter

Possible theme: Seasons

Note: Children could photograph a tree in their local environment throughout the year and observe the changes over time.

Possible reasons for being the Odd One Out:

Blossom: There is only blossom on the tree in the spring photo.

Leaves: Trees start to have leaves in the spring and leaves stay on the trees until late autumn. In autumn the leaves are golden brown. By winter, the leaves have fallen off.

Branches: You can see all the branches very clearly in winter. They are hidden by leaves or blossom for the rest of the year.

Roots: The roots and bark of a tree do not change through the seasons.

Weather: The sky is blue in the winter and summer pictures. The sun is shining in the winter picture.

Shadows: There are long shadows in the winter picture.

If using this activity with older children, you may want to discuss:

Animal visitors: Different animals feed on the trees and nest there, at different times of year. Insects (pollinators) come in spring and summer for the nectar and pollen. Caterpillars hatch out in early summer to eat the new leaves. Birds come to eat the caterpillars and nest in the branches or inside the trunk. All year round, spiders, flies, beetles and other invertebrates live in cracks on the trunk and branches, Worms and invertebrates live in the soil and leaf litter below the tree. Squirrels live up in the branches all year round. Rabbits might live in a warren, underneath the tree. Trees provide food and shelter for the animals all year round.

Vocabulary (for EYFS)

spring

summer

autumn

winter

weather

blossom

leaf/leaves

branch(es)



wild rose



primrose



tulip



water-lily

Possible theme: Flowers

Note: Teachers could provide similar real flowers for children to feel, smell and to look at with magnifiers.

Possible reasons for being the Odd One Out:

Leaves: Water-lily has large, waxy, flat, round leaves which lie on the surface of the water. The others have oval leaves. (You can only see the tip of the tulip leaf.) Primrose leaves look crumpled and have tiny spikes around the edge. They are long and tongue-shaped. Rose leaves are much smaller. They have a 'toothed' or jagged edge. They grow in pairs, opposite each other. You can see the veins on the primrose and rose leaves.

Petals: Rose petals change colour nearer the centre, as do the primrose petals. Rose and primrose have 5 petals, the others have many more. Primrose petals are notched. The petals join together at the base to form a long tube. Water-lily petals are long, thin and oval shaped. Tulip and water-lily petals are closed together to form a cup. We cannot see inside the tulip until the petals open up.

Colour: Water-lily and rose are pink. Primroses are yellow and tulip, red.

Stem: Primroses have a pale green, hairy stem. Tulip has a long, thick, smooth stem. Water-lily has a long stem, hidden underwater. Rose stem has thorns but we cannot see the stem in the picture.

Numbers: Primroses grow in a clump. The others grow singly.

Habitat: Water-lily grows on ponds; its roots are in the soil at the bottom of the pond. The others grow from the ground, with their roots in the soil.

If using this activity with older children, you may want to discuss:

Stamens: Flowers have a centre with stamens (male) and female parts. We can see these in the rose and water-lily. In the primrose, the stamens are tucked inside the tube, at the base of the flower.

Pollen: Flowers produce nectar and pollen to attract bees, butterflies and other insects. We can see the pollen in the rose.

Vocabulary (for EYFS)

petal

stem

leaf/leaves



trunk of a birch tree



trunk of an oak tree



twig from a horse chestnut tree



trunk and branches of a beech tree

Possible theme: Trees

Note: Children could collect twigs or photograph tree bark from different trees in their local environment and look at the similarities and differences.

Possible reasons for being the Odd One Out:

Form: The trunk is the central part of the tree. It is very wide and sturdy. Thick branches grow out of the trunk. Twigs are much smaller and grow on the branches. Twigs are thin and can easily break. Leaves and blossom grow on the twigs.

Colours: Birch tree bark is white and brown/grey. The others are brown.

Bark (texture): Beech trees have smooth bark. Birch trees have smooth white bark which cracks open to show grey/brown patches. Oak trees have rough (rugged) bark with deep cracks. This one has a hole, where a small bird (e.g. a blue tit) might nest!

Direction: Trunks grow upwards out of the ground, towards the sky. Branches grow out of the trunk at different angles. Twigs spread out in all directions from the branches.

Twig markings: Twigs have different markings on them. Twigs from the horse chestnut tree have horseshoe-shaped marks on. These are the scars where the leaves have fallen off.

Season: Beech tree is in autumn. It is in a wood. You cannot tell the season for the other pictures.

Roots: The trunk has roots which attach it to the ground and stop the tree blowing over. Branches and twigs do not have roots.

Leaves: There are leaves on the beech tree.

If using this activity with older children, you may want to discuss:

Age rings: Trunks get wider each year, as they grow. You can cut a slice through the trunk and count the number of age rings, to see how old a tree is. You can also do this with branches and twigs but because they started their individual life as a branch or twig much later than the main trunk, their growth rings will be fewer.

Vocabulary (for EYFS)

leaves

twig

branch(es)

trunk

bark



beech leaves



horse chestnut leaves



stinging nettles



grass

Possible theme: Leaves

Note: Teachers could provide similar leaves for children to feel, smell and to look at with magnifiers.

Possible reasons for being the Odd One Out:

Shape: Beech leaves are oval. Nettles leaves are more pointed (ovate). Each horse chestnut leaf has many parts like outstretched fingers (5-7 leaflets) and each leaflet is wider at the top than the bottom (spoon-shaped). Grass leaves are long and thin (sword-shaped).

Edges: Stinging nettle and horse chestnut leaves have a toothed or jagged edge. Beech and grass leaves have smooth edges.

Width: Blades of grass are leaves. They are very thin. The other leaves are much wider. There are many different types of grass, like there are different types of flower or tree.

Colour: They are all green except for the beech leaves, which have changed from green (in the summer) to brown (in the autumn).

Season: Beech leaves are in autumn (they would be green in the spring and summer). The others are in spring or summer.

Place (habitat): Nettles and grass grow out of the ground and have roots. The other leaves grow on twigs, on a tree.

Stinging leaves: Only stinging nettle leaves can sting you. Nettles are covered in hairs. When a nettle is touched, the hair tips break off and release acid. This causes the painful rash.

If using this activity with older children, you may want to discuss:

Veins: All leaves have veins. You can see the veins branching out from the base of each leaf on all except the grasses.

Insects: Leaves provide food and habitats for many different insects. Even stinging nettles are the perfect habitat for some types of caterpillar!

Function: Leaves produce food for the plant, by photosynthesis.

Vocabulary (for EYFS)

leaves

shape

edge

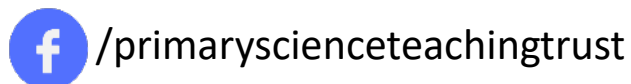
colour (green, brown)

rough/smooth

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