



Animals









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

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<u>The Nature Collection</u> is an extraordinary collection of animal bones, skeletons, feathers, antlers, skins and photographs and was created by Susanna Ramsey.





Guidance for using British Wildlife: Paired Pictures

Animals

This resource is designed to encourage children to observe closely and to stimulate talk about the features of animals and their habitats.

There are 14 pairs of animals in this slideshow. Some are vertebrates (birds, mammals, reptiles and amphibians) and some are invertebrates (insects and spiders). All are commonly seen in the UK.

For each pair of animals, there are three slides. We suggest that you share only one or two pairs of images at any time. You can revisit the other animal pairs.

Choose one pair of animals and show children the first slide. Ask - What are these?

Listen to children's suggestions. Ask - Why do you think this? Encourage children to notice special features of each animal such as different body parts (wings, ears, tails, beaks, etc.) which might help them to identify the type of animal.

Show the second slide to reveal the names of the two animals. Then ask — What is the same and what is different?

Encourage the children to look closely at the different body parts, the colour, the skin and the habitat.

Possible questions to prompt thinking & talking:

- What special body parts can you see? (wings, beak, fur, feathers, antennae, etc.)
- What colour is the animal? Is the animal easy to see? It is camouflaged?
- Where do you think the animal lives? (in a tree, in water, on land, in a web)
- How do you think the animal moves? (running, walking, crawling, flying, swimming) How do you know this?

Note: This resource could be used with children in Early Years, KS1 or KS2. The third slide after each set of paired pictures provides detailed information about the characteristics of each of the animals shown. This is intended to support teachers' subject knowledge. We are not suggesting that all children should be taught all these facts. The discussions with the children should be appropriate to the age and ability of the children. For example:

- very young children (ages 3-5) may notice similarities and differences in the colour and shape of the animals,
- children (ages 5-7) may identify features such as wings, beak, fur, feathers, antennae, etc.
- older children (ages 7-11) using their knowledge of living things and their habitats, could give reasons for similarities or differences in appearance or behaviour and comment on how the animal is suited to live in its habitat.





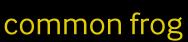
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house mouse





common frog & house mouse

SIMILARITIES

- · Both have black eyes.
- Both have very big eyes (relative to the size of their head).
- Both are the same colour as their environment (camouflaged): frog is green and patchy which camouflages with plants in the pond; mouse is brown all over which camouflages with soil & trees.
- Both have back legs longer than the front legs. Frogs have very long back legs.
- Both are quite small.

DIFFERENCES – that could be identified from the pictures

- Mouse has a long tail; frog has no tail.
- Mice have whiskers to feel their way in the dark; frogs do not.
- Mouse has small, rounded ears which stick up from the head. Frog has ear drums behind the eyes. These are circles of thin skin which picks up vibrations. Can you see one?
- Mice have claws which they use to grip onto surfaces when they climb. They can balance. Frogs have webbed feet to help them move quickly through water (though you cannot see this from the picture). They cannot climb so well.
- Frog has smooth skin; mouse has hair.
- Frog's eye has a gold ring around it; mouse's eye does not.
- Frog lives in water; mouse lives on land.
- Frogs have very big eyes which stick up beyond the head (they can see above and below the water); mice have big eyes which look out sideways so they can watch for danger.

DIFFERENCES – that cannot be identified from the pictures

- · Frog is an amphibian. Mouse is a mammal.
- · Frogs are cold blooded. Mice are warm blooded.









tawny owl

blue tit





tawny owl & blue tit

SIMILARITIES

- · Both are birds.
- Both are perched on a branch, gripping it with their claws.
- · Both have black eyes.
- · Both have a tail.
- · Both have feathers.
- · Both have a beak.

DIFFERENCES – that could be identified from the pictures

- The tawny owl is big, the blue tit small.
- The tawny owl has two claws facing forwards and two backwards. It can move one toe around, to work in both directions, like our thumb. The blue tit, like most perching birds, has three toes forward and one back.
- The tawny has long, sharp claws. It catches its prey with its claws. The blue tit has thinner claws.
- The blue tit has much smaller eyes.
- Tawny owl's eyes face forwards and blue tit's eyes face out to the side.
- Tawny owl is camouflaged brown and white, to match the tree. The blue tit is many colours!
- The owl has a pale, hooked beak for holding and tearing up prey. The blue tit has a short, pointed, grey beak for picking up insects.
- The blue tit has bare legs. The tawny owl's legs are covered in feathers.

DIFFERENCES – that cannot be identified from the pictures

- The Tawny's tail is striped.
- The tawny owl has thicker feathers to keep warm when hunting at night.







chalkhill blue butterfly



peacock butterfly





chalkhill blue butterfly & peacock butterfly

SIMILARITIES

- · Both are insects butterflies.
- Both are resting on flowers, where they are searching for nectar to drink.
- Both have 4 large, colourful wings and a long, thin body covered in hairs.
- The fore (front) wings are wider than the hind (back) wings.
- Both have antennae.

SIMILARITIES – that cannot be identified from the pictures

• Both have 6 legs which you cannot see in the photos!

DIFFERENCES – that could be identified from the pictures

- The blue butterfly has blue hairs on the body. The peacock butterfly has brown hairs.
- The blue butterfly has pale blue wings with black spots around the edge. The peacock butterfly is more colourful.
- The peacock has patterns on the wings, which look like eyes. These are to frighten off predators.
- You can just about see the eyes of the blue butterfly.









red deer, calves

otter





red deer (calves) & otter

SIMILARITIES

- · Both are large mammals.
- · Both are covered in hairs.
- · Both have black noses with nostrils.
- · Both have black eyes.

DIFFERENCES – that could be identified from the pictures

- The deer are young (young red deer have soft, light brown hair with white spots. The spots are for camouflage while they are young. Adults have plain coats, soft hair and white spots) and the otter is adult. The otter has dark brown, waterproof hair.
- Deer have larger eyes, facing out sideways so they can see in all directions. They are prey animals and need to able to see predators coming. Otter's eyes face forwards. They are predators.
- Deer have large, upright ears which stick out above the head. Otter has small, rounded ears which lie flat against the body. This is better in water.
- The otter's body is streamlined for swimming in the water.

DIFFERENCES – that cannot be identified from the pictures

- Deer are larger than the otter.
- · Otter has whiskers and deer do not.
- Deer have 4 long legs, with hooves. Long legs are good for running away. Otter has 4 short legs with webbed feet (which you can't see in the photo).









wasp spider

nursery web spider





wasp spider & nursery web spider

SIMILARITIES

- · Both are spiders.
- Both have 8 legs and 2 parts to the body. Note: the nursery web spider usually rests with the two front pairs of legs, together.
- Both are hairy.

DIFFERENCES – that could be identified from the pictures

- The wasp spider is brightly coloured it imitates a wasp to scare away predators. The nursery web spider is pale brown for camouflage.
- The wasp spider is in a web, the nursery web spider is not (it is on bracken).
- The wasp spider has stripy legs and body. The nursery web spider has plain legs.

DIFFERENCES – that cannot be identified from the pictures

• The wasp spider builds a web to catch its prey. It always makes a white zigzag in it. The nursery web spider chases its prey. It does not build a web.









badger fox





badger & fox

SIMILARITIES

- Both are large animals (mammals).
- Both have hair (fur).

SIMILARITIES – that cannot be identified from pictures

- · Both are top predators.
- · Both are nocturnal.

DIFFERENCES – that could be identified from the pictures

- Badger has black and white striped face and black/grey body. Fox is gingery brown, with a white chin and chest and a white tip to the tail.
- Fox has longer ears which stand upright. Badger has shorter, rounded ears.
- · Both have a black nose with nostrils.
- Badger has small, black eyes. Fox has light brown eyes.
- Badger has an open mouth. You can see his teeth and tongue.

DIFFERENCES – that cannot be identified from the pictures

- Fox is taller.
- Fox has longer legs and a longer tail.
- Both have long whiskers to feel their way in the dark and sense movements.









common frog

common toad





common frog & common toad

SIMILARITIES

- Both have copper colouring near the eyes (not easy to see in picture).
- Both have 4 legs. The hind (back) legs are much bigger than the fore (front) legs.

SIMILARITIES – that cannot be identified from the pictures

· Both are amphibians. They can live and move on land and in water.

DIFFERENCES – that could be identified from the pictures

- The frog is camouflaged green, to match pond weed and grass. The toad is mottled brown.
- The toad's skin is covered in bumps which are toxic. The frog has smoother skin.
- The frog's eyes stick out above its head, so that it can see above and below the water, when it is resting on the surface. The toad's eyes have a ridge above them and are lower on the head.

DIFFERENCES – that cannot be identified from the pictures

- Frogs hibernate in pond mud or under log piles. Toads hibernate under log piles or stones.
- Frogs hop and jump. Toads walk.









red squirrel

rabbit





red squirrel & rabbit

SIMILARITIES

- · Both are mammals, covered in thick hair.
- Both have huge, brown eyes, which face sideways, so they can watch for danger in all directions.
- Both have longer hind legs and shorter fore legs. Large hind legs and feet are good for pushing off, to run or leap away from danger.

SIMILARITIES – that could not be identified from the pictures

- Both are prey animals.
- Both are herbivores. (They eat plants)

DIFFERENCES – that could be identified from the pictures

- The rabbit has very long, upright ears. The red squirrel has rounded ears.
- The squirrel has a much longer tail, for balance in the trees. The rabbit has a short, white tail. It stays on the ground.

DIFFERENCES – that cannot be identified from the pictures

- The rabbit is much bigger.
- The squirrel has ginger hair all over except for the belly which is white. The rabbit is medium brown all over, except for white hair under the chin and on the tail.
- The squirrel can stand up on its hind legs. The rabbit cannot.
- The squirrel can hold its food with its front feet. The rabbit just uses its mouth to feed.
- Squirrels live in trees and rabbits live underground.
- · Squirrels also eat insects and birds' eggs.
- The red squirrel is endangered in Britain. The rabbit is very common.









grass snake

adder





grass snake & adder

SIMILARITIES

- · Both are reptiles.
- · Both are covered in scales.
- Both have no legs or wings and no feet!
- Both have a long, thin body, tapering to a thin tail.

SIMILARITIES – that could not be identified from the pictures

- They are a similar size.
- They shed their skin.
- · They hibernate.

DIFFERENCES – that could be identified from the pictures

- The grass snake is grey with black patches. The adder is brown with brown patterns.
- The adder has a brown zigzag pattern down the middle of the back. It is a female. The male adder has a black zigzag.
- The grass snake has a cream and black 'collar' behind the head. The adder has no distinctive collar markings.

DIFFERENCES – that cannot be identified from the pictures

- Can you see their eyes? Adders have red eyes and vertical pupils.
- The adder is the only venomous snake in Britain. It is dangerous if it bites you or your dog! Note: An animal is 'venomous' if it has a dangerous bite. Something is 'poisonous' if it makes you ill/die, if you eat it!









red deer, male

red deer, female





red deer (male) & red deer (female)

SIMILARITIES

- · Both are large animals (mammals).
- · Both have medium brown hair.
- Both have long legs and a long neck, so they can reach up into the branches or down to feed on the ground.
- Both have large, brown eyes which face sideways, so they can look out for danger in all directions.

SIMILARITIES – that cannot be identified from the pictures

- Deer are herbivores, eating grass and leaves.
- Deer grow thick winter coats and thinner summer coats.

DIFFERENCES – that could be identified from the pictures

- Male has large antlers on his head. These are to fight with rival males, to win a female. The antlers fall of every spring and the males grow a new set. Females never have antlers.
- You can see the hooves on the feet of the male.
- The female has a notch in her ear.

DIFFERENCES – that cannot be identified from the pictures

• Male is larger than the female.











stag beetle, female





stag beetle (male) & stag beetle (female)

SIMILARITIES

- · Both are insects with a tough exoskeleton.
- Both have 3 sections to the body: head, thorax and abdomen.
- Both have antennae, which stick out at right angles to the head. They are like a comb, at the ends.
- The legs are jointed, with claws at the ends.

SIMILARITIES – which cannot be identified from the pictures

- · Both have 6 legs.
- The wings are tucked under the back segment of the body.
- Both are on the ground. Both can fly but the females rarely does.

DIFFERENCES – that could be identified from the pictures

- The male has huge jaws, which look like horns. It uses these to fight other males to win a female. The female has very small jaws.
- The male is more brown than black.

DIFFERENCES – that cannot be identified from the pictures

- The male is bigger (you would see this if the beetles were next to each other).
- Both have very small, black eyes which look out sideways.











house mouse





harvest mouse & house mouse

SIMILARITIES

- Both are very small mammals, covered in hair.
- Both have very long tails, which help with balance. Both are balancing, now.
- Both have beady, black eyes, which look forwards and out to the sides, to watch for danger from all directions. Both are prey animals.
- Both have whiskers to feel their way in the dark and sense movements in the air.
- Both have tiny feet and claws.
- Both have rounded ears which stick out from their body.

SIMILARITIES – that cannot be identified from the pictures

• Both mice also eat insects, so are predators, too.

DIFFERENCES – that could be identified from the pictures

- The harvest mouse is lighter brown and has a white belly. The house mouse is brown/grey all over.
- The house mouse is eating a seed and will have a drink soon.
- The harvest mouse is outdoors, in a field, on a teasel seed head. The house mouse is indoors, balancing on a dog's bowl. Harvest mice live outdoors. House mice often live in or near human houses or outbuildings.

^{*}The harvest mouse is one of the smallest mammals in Britain.









dragonfly

dragonfly

broad bodied chaser, male

broad bodied chaser, female





dragonfly (broad bodied chaser) male & female

SIMILARITIES

- · Both are insects.
- They have 4 wings and 3 parts to the body.
- Both have large, wide, transparent wings with black veins in them.
- Both have small, black patches at the tips of all the wings.
- Both have brown patches on the wings, next to the body.
- Both have a large, rounded head with huge eyes.
- Both have wide body.
- Both are perched on a branch. The male is on a thorny branch.

SIMILARITIES – that cannot be identified from the pictures

- · Both have 6 legs.
- Both eat smaller flying insects. They are insectivores.
- · Both emerge as adults in the summer.

DIFFERENCES – that could be identified from the pictures

• The male has a pale blue abdomen with yellow spots along the sides. The female has a golden-brown abdomen with yellow spots.







large red damselfly



blue-tailed damselfly





large red damselfly & blue-tailed damselfly

SIMILARITIES

- Both are insects, with a hard exoskeleton.
- · Both are perched on a leaf.
- Both have 4 wings and 3 parts to the body.
- Both have a long, thin abdomen, the final section of the body.
- The long, narrow wings are transparent, covered in black veins.
- Both hold their wings folded together above the abdomen, when they are resting on a leaf. (Dragonflies keep their wings out wide, to the sides. See the previous slide.)
- Both have long, thin, jointed legs with claws.
- Both have a pair of short antennae.

SIMILARITIES – that cannot be identified from the pictures

- · Both have 6 black legs.
- · Both live near water.
- Both emerge as adults in the summer.

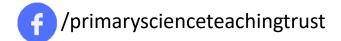
DIFFERENCES – that could be identified from the pictures

- The large red damselfly has tiny black patches at the wing tips. The blue-tailed damselfly has blue and black patches at the tips.
- The Large red damselfly has a red body with some black markings. The Blue-tailed damselfly has a pale blue and black body.
- The Large red damselfly has red eyes and the blue-tailed damselfly has pale blue eyes.

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