The science in our skies

Spectacular Camouflage





This worksheet accompanies our

'The Science in our Skies' module.

To watch the videos, **sign in** to the S4 portal:

www.s4scienceportal.co.uk

And click on the 'Online Science Workshops' button!

What are we learning?

Owls hunt at night, which means they need to sleep during the day. This makes them vulnerable to daytime predators.

To avoid being seen and attacked while they sleep, owl feathers are camouflaged – helping them blend in with their environment:

- Short-eared owl feathers are mostly brown and black They sleep on the ground where these feathers help them match the colours of the dirt.
- Snowy owls are white with dark flecks They live in the cold north where these colours help them blend in with snowy ground.

Feathers

Feathers get their colouring from a pigment called **melanin**. We have the same pigment in our skin and hair. The more melanin there is in the feather the darker it is.

As well as providing the colours in feathers melanin determines how strong they are. Darker feathers are stronger. You might notice even lightly coloured birds have dark feathers in their wings and tails because these parts need to be strong.

What is the name of the pigment that gives feathers their colour?
What is the name of the pigment that gives feathers their colour?
Describe or draw what you'd expect an owl living in a rocky location to look like. Think about how it would camouflage itself.

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Spot the Owl

What you have experienced is similar to how an owl uses its facial disk. Why do you think owls have a facial disk but other birds of prey, for example eagles or hawks, do not?















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Teacher information

Curriculum links

This worksheet is designed to complement the National Curriculum for Wales, with links provided to the former KS3 science curriculum as well as the new Science and Technology AOLE.

Key Stage 3 Science (Interdependence of organisms): 1. the basic structure and function of some cells, tissues, organs and organ systems and how they support vital life processes

Key Stage 3 Science (Interdependence of organisms): 4. the interdependence of organisms and their representation as food webs, pyramids of numbers and simple energy-flow diagrams

Area of Learning and Experience: Science and Technology: The world around us is full of living things which depend on each other for survival

- The role of owls as predators within a food web.
- How owls are adapted to successfully hunt at night and camouflage during the day.





