



PRIMARY SCIENCE: CREATURES AND COLOUR

Date: Monday, 7 December 2020

Time: 2pm

Duration: 30 minutes (approx.)

Location: bbc.co.uk/livelessons (Note: if you can't watch live, you will be able to watch the recording on the website afterwards)

Audience: Suitable for KS1 and KS2

Summary: This science Live Lesson is designed to help pupils and teachers think about and explore animal colouration and adaptation.

CURRICULUM LINKS

Key Stage 1 (1st Level in Scotland)

Students will be encouraged to:

- Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.
- Find out about and describe the basic needs of animals for survival (water, food and air).

Key Stage 2 (2nd Level in Scotland)

Students will be encouraged to:

- Construct and interpret a variety of food chains, identifying producers, predators and prey.
- Identify how animals are adapted to suit their environment in different ways.

LESSON STRUCTURE AND PREP

Join Naomi, Mr Smith and zoo ranger Sean, plus an incredible array of species at Chester Zoo to find out why animals are different colours!

Section 1: Camouflaged animals

In Section 1, we'll ask 'What is camouflage?' We'll see how camouflage is an adaptation that allows animals to blend in with their surroundings, and how animals use camouflage to hide from predators or to hide from prey. We'll think about how animals are camouflaged in different ways, including colour, shape and behaviour. We will also meet some animals that change their colour temporarily such as the octopus.

Section 2: Brightly coloured animals

In Section 2, we'll think about 'Why are some animals brightly coloured?' We'll visit the butterfly house at Chester Zoo to look at different survival strategies. Our teacher, Mr Smith, will show us how animals can be brightly coloured to warn off predators, or to mimic other animals.

Section 3: Male and Female Animals

In Section 3, we'll work together to understand 'why male and female animals are sometimes different colours?' We'll look at mandrill monkeys and think about why peacocks have a fan tail whilst peahens are smaller and duller colours. We'll learn that females are often camouflaged to hide them and their young, whilst the males are often brighter colours to attract a mate!

Section 4: Your Pledge to Wildlife

We all have a role to play in caring for wildlife. After hearing examples from 'eco-schools', Naomi and Mr Smith will be asking you and your students to think about what they can be doing at school and at home to support wildlife in your local area. We'll also 'Ask the Zoo Ranger' using questions sent in over the course of the Live Lesson.

After the Live Lesson

There are lots of simple ways you can explore some of the key questions with your class after the live lesson has finished:

- Encourage your students to think about which colours can be seen most easily in the environment. You will need about 100 small pieces of coloured wool. Include a range of bright and dull colours. Before the session, hide the pieces of wool outside. Challenge the students to find as many pieces of wool as they can in 30 seconds. Then ask the children to sort their finds out. Which colours did they spot most easily? Ask them to think about which colours were the most camouflaged?
- Watch our bonus film about frogs at bbc.co.uk/livelessons. Explore why tree frogs are brightly coloured but native UK frogs are dull green. Learn how the red eyed tree frog may look poisonous but it isn't. When they flash their bulging red eyes, their predators are startled which gives them a moment to escape!
- Ask the students to find examples of animals that use warning colours. Get them to sort out those animals into those that have stripes, spots, fake eyes, and those that are mimicking another animal. Inspired by those patterns, ask the students could make disks, coloured with different patterns which they will then hide outside. Challenge the other students to find them.

SET UP

How much space and equipment is needed?

The lesson can be screened in a classroom with a large screen linked to a reliable broadband connection. Good audio equipment isn't essential, but it will make the event more enjoyable.

How many students can participate?

It's completely up to you how many students you have participating in the session. We want to get as many students as possible engaged in this Live Lesson. Students will remain seated for this lesson, needing only their worksheet and a pen or pencil.

CONTACT US

If you're planning on watching the Live Lesson, let us know! Email us with your class/school name and we'll try to feature it during the Live Lesson. You can email us at live.lessons@bbc.co.uk, or tweet us @BBC_Teach, using #bbclivelessons. We want to see your students' ideas and comments too, so please send them in during the Live Lesson for a chance to be mentioned on the live programme. If you're sending in any images or videos that feature children, please make sure you have parental permission.

The BBC may ask you to demonstrate that you have received verifiable parental consent. In the email, please confirm your official relationship to the child/children featured, e.g. teacher, parent, teaching assistant etc. and confirm that you have sought prior parental consent. Please also ensure the material is not sensitive or controversial. Read our Terms and Conditions for more information.