Walking With Dinosaurs - Live Lesson

Where and when:
Date: Monday, 15 December 2025
Duration: 30 minutes
Location: bbc.co.uk/livelessons
This programme is available to view from home or school, and no sign-up is required. Simply visit the website on the day and follow the instructions on the page to watch.

Curriculum links for 7–11-year-olds:
National Curriculum, England - Key Stage 2 – Science
National Curriculum, Northern Ireland - Key Stage 1 and 2 – The World Around Us
Curriculum for Excellence, Scotland - 1st and 2nd Level – Sciences
Curriculum for Wales - Progression steps 2 and 3 – Science & Technology

Key learning objectives:

- Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.
- Describe the process of fossil formation when things that have lived are trapped within rock.
- Identify how animals and plants are adapted to suit their habitat in different ways.
- Relate physical and behavioural characteristics to the survival or extinction of an animal in an ecosystem.

Setup:

This Live Lesson can be watched on Monday 15 December 2025 from 09:00 on the Live Lessons website and at 11:00 on the CBBC channel. It will remain online and on BBC iPlayer to be used as a teaching resource whenever you need it. We will be running a live commentary page during the broadcast for teachers, parents and carers to share contributions from children watching at home and at school.

New resources for 2025/2026

- **Mission Pack:** A collection of challenges children can do during each lesson. The pack can be printed easily and folded into a booklet format using two sheets of A4 paper. Digital versions of the pack are also provided, or children can use their own paper/notebooks.

- **Mission Poster:** During each lesson, an artist will capture the main learning points in a poster. This will be available to download from the Live Lessons website after the lesson for learners to use as a visual reminder.

Lesson content

This Live Lesson is created in collaboration with the makers of 'Walking With Dinosaurs' which can be watched here on BBC iPlayer.

During the lesson, children will become 'dino detectives' under the expert guidance of top palaeontologist, Dr Nizar Ibrahim, who appeared in the main series. Their mission is to identify a mystery dinosaur by investigating fossilised evidence.

Mission: Identify the mystery dinosaur

Key learning objective: Be curious about the world, past and present, through enquiry, exploration and investigation. Draw conclusions and make judgements based on the evidence used.

Pupils are presented with a mysterious fossilised dinosaur bone. Their mission is to identify which dinosaur species it belonged to from six potential suspects: T. rex, Gastonia, Utahraptor, Lusotitan, Spinosaurus and Edmontosaurus. These are included in the Mission Pack.

Throughout the lesson pupils are encouraged to make note of any clues they spot. Completing challenges unlocks further evidence, each hiding a clue to the mystery dinosaur's identity. At the end of the lesson pupils will choose one of the suspects and we will reveal if they are correct.

Challenge 1: Put the fossilisation process in the correct order

Key learning objective: Recognise that fossils provide information about living things that inhabited the Earth millions of years ago. Describe the process of fossil formation.

- This section explores fossils and the fossilisation process. An animation shows the specific circumstances required for fossils to form over millions of years.
- To complete challenge 1, pupils are asked to put pictures of the fossilisation process in the correct order by noting down a number sequence. The correct answer is 5, 2, 1, 4, 3.

Challenge 2: Spot the adaptations

Key learning objective: Identify how animals and plants are adapted to suit their habitat in different ways. Relate physical and behavioural characteristics to the survival or extinction of an animal in an ecosystem.

In this section we uncover new evidence which provides clues as to our mystery dinosaur's habitat. This includes comparing the teeth of carnivores and herbivores. We then explore how animals are adapted to suit their habitat and ecosystem. Presenter and zoo owner Cam Whitnall visits his wildlife park to highlight adaptations in animals alive today.

- To complete challenge 2, pupils must spot adaptations in dinosaurs. Pupils are shown a clip from episode three Walking With Dinosaurs featuring two species, Gastonia and Utahraptor and are asked to circle the adaptations on an image of both dinosaurs in their Mission Pack, make written notes or discuss their ideas with a neighbour.
- Completion of this challenge will unlock another piece of fossilised evidence which is one of our mystery dinosaur's adaptations.

Mission Pack

Download the Mission Pack in preparation for the Live Lesson. There are three versions available. Choose the option which best suits your needs.

- ***Digital pack***
  Designed to be opened and edited using a tablet. Pupils will be able to type in text boxes and use the pen tool to draw.

- ***Printable booklet***
  To be printed double-sided on 2 sheets of A4 paper. Fold in half to create A5 booklet. Pages are numbered and should run from 1 to 8 when one sheet is placed inside the other. Designed to support black-and-white printing.

- ***Printable A4 sheets***
  Best option if no double-sided printing capacity. Designed to support black-and-white printing.

Note, pupils are still able to participate without access to the Mission Packs. All instructions will be on screen. We recommend that pupils have a notebook and pen or pencil to hand.

Pre-lesson activity ideas:

- Students could use a variety of information sources (information books, websites) to draw a dinosaur and find out three facts about it (e.g. its size, where it lived, what it ate). They could share their pictures with the class.
- Students could devise true/false quiz questions based on their research for a whole-class dinosaur quiz, e.g. 'Tyrannosaurus rex ate leaves. True or false? (False).'
- Students could examine and draw a bone (e.g. a chicken bone). What creature do they think the bone came from? They could try feeling their own bones through their skin and then draw what they think those bones might look like.

Follow-up activity ideas:

- Students could press a variety of natural objects (twigs, bones, shells, their thumbs) into modelling clay to leave an impression. They could fill the impressions with a mixture of PVA glue, water and torn-up newspaper, to model the mineralisation process. When their models are dry, the children could gently peel or scrape away the clay and paint their paper fossils. TOP TIPS: grease the moulds with petroleum jelly to make it easier to remove the clay. Use a 2:1 mixture of PVA and water. Dip scraps of torn paper into the glue mixture.

- Remind students of the meerkats in the Live Lesson and display a photograph of a baseball player using eye black to reduce glare from the Sun. Challenge students to collect images and make slideshows, with photos of humans copying animal adaptations to gain an advantage. e.g. a tortoise and a bike rider with a cycle helmet, a swimming elephant and scuba diver with a snorkel, a flying fox and paraglider.