

Where and when:

Date: Monday, 9 March 2026

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:

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:

- Understand that light travels in a straight line and that objects can be seen because they emit or reflect light into the eye.
- Be able to identify different light sources.
- Know that light from the Sun can be dangerous to their eyes, and to never look directly at it.
- Use knowledge of the properties of light to show how it can be used in a creative way through the use of mirrors.
- Describe the relative movements of the Earth, Moon and Sun and understand our place in the Solar System.
- Use simple models to communicate an understanding of size, scale, time and relative motion in our Solar System.
- Understand that the Earth's rotation gives us night and day.
- Observe, research and ask questions about features of our Solar System.

Setup:

This Live Lesson can be watched on Monday 9 March 2026 from 09:00 on the [Live Lessons website](https://bbc.co.uk/livelessons) 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.
- **Live Lessons song:** This lesson includes a rap by 'The Rapping Science Teacher' Matt Green, which describes the planetary orbits.

Lesson content

This space-themed Live Lesson inspires children to ask questions about our Moon, the way light travels, and planetary orbits as part of their mission to make 'Moon: The Movie'. The movie stars the character of the Moon from CBBC's Horrible Science, a children's comedy sketch series, from the makers of the multi-award-winning Horrible Histories.

This movie-making mission contains three challenges: lights, camera, and action. With each completed challenge, pupils will unlock a Moon fact from astronaut Tim Peake.

Challenge 1: Lights - identify the light sources

Key learning objectives: Understand that light travels in a straight line and that objects can be seen because they emit or reflect light into the eye. Be able to identify different light sources.

- This section explores light and light sources.
- To complete challenge 1, pupils must identify the light sources from a range of objects.

Challenge 2: Camera – draw a diagram to reflect a light beam to the target

Key learning objectives: Understand that light travels in a straight line, reflects off surfaces, and is blocked by opaque objects. Know that light from the Sun can be dangerous to our eyes, and that we should never look directly at it. Use knowledge of the properties of light to show how it can be used in a creative way.

- In this section, we further investigate how light travels by taking a closer look at a reflector telescope. Pupils are asked to use their knowledge of light and reflections to solve a puzzle.
- To complete challenge 2, pupils are asked to complete a diagram by drawing angled mirrors and light beams.

Challenge 3: Action – fill in the blanks to finish the Moon’s script

Key learning objective: Describe the relative movements of the Earth, Moon and Sun and understand our place in the universe. Use the idea of the Earth’s rotation to explain day and night. Use simple models to communicate an understanding of size, scale, time and relative motion.

- In this section, we learn about the orbits and rotation of planets and moons in the Solar System. ‘The Rapping Science Teacher’ Matt Green performs an ‘Orbits’ rap which explores the relative movements of the eight planets, Earth’s Moon and the Sun.
- To complete Challenge 3, pupils must use what they have learnt from the rap as well as the entire Live Lesson to complete a fill-in-the-blanks activity. Once completed they will have created the script for Moon: The Movie.

Final challenge: Plan your own movie about the Moon and our Solar System

Key learning objective: Observe, research and ask questions about features of our Solar System.

- In the final section, viewers are encouraged to use the script they created in challenge 3 or write and plan their own script to make their own movie about the Moon. Pupils are encouraged to conduct their own research to find interesting facts to include.

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 an 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:

- Watch these curriculum-linked Horrible Science clips: [The Moon Wants A Day Off – Horrible Science Bitesize - BBC Bitesize](#); [The Planets Song – Horrible Science guide - BBC Bitesize](#)
- Do a 'light source scavenger hunt' where children try to find natural and man-made light sources around the classroom or at home.
- Shine a torch at a variety of objects (for example, mirrors, toys and coloured paper) and observe how the light reflects.
- Take a photo of the night sky (including the moon) and discuss what you can see.

Follow-up activity ideas:

- Plan and film your very own 'Moon: The Movie'. As a class, go on a fact-finding mission to find the most interesting and unusual facts about the Moon and our Solar System to include in this project. Alternatively, plan a presentation, inspired by 'Tim Peake's Lunar Lowdowns'.
- Students could create their own model of the Solar System by acting out how planets orbit the Sun and the Moon orbits Earth. They can start by researching the sizes of the different parts of the Solar System and find different objects to represent each planet and their relative sizes or colours. Discuss as a class how it might not be possible to accurately represent the different sizes of the planet with the objects you have, due to their vastly different dimensions.
- Pupils can make their own 'Box of Darkness' and fill it with different objects to see which of them produce light and which objects don't. Instead of using a camera to observe what is happening inside the box, you can simply look through a peep hole.
- 'The Rapping Science Teacher' Matt Green's rap taught us about the orbits of the planets. Challenge students to write their own rap or poem to help them remember the order of the planets and the duration of their orbits.
- This year's theme for British Science Week is 'Curiosity: what's your question?'. White Rose Science have [new classroom resources](#) that support teachers in developing children's curiosity and skill of asking questions in the classroom. The resources have been designed to lead on from the Live Lesson, but can also be used flexibly.
- Horrible Science is now available in [short video clips on BBC Bitesize](#) - designed with classroom use in mind and aligned with the National Curriculum for Primary Science.