

Rocks the House

Please use this information to help you and your students get the most from your visit.



Your show

Show name	Rocks the House		
Meeting point	Underneath the Earth Hall escalator in the Red Zone. Please be here 10 minutes before the start of the show. You will be met by a member of staff who will lead your group to the lecture theatre. If they are not there when you arrive, please wait as they will be taking another group in and will return in a few minutes.		
Start time	10.45	12.15	13.45
Duration	45 minutes		
Minimum ratio	1 adult : 10 students		
Maximum group size	120		
Please ensure you meet the required minimum adult : student ratio.			

About the show

The show is a structural survey of the Earth and the tectonic activity at the plate boundaries. There are engaging demonstrations involving large props, messy experiments, volunteers and lots of audience participation.

Before and after your visit

The show can be used as an introduction or to consolidate your teaching of the rock cycle in KS3 Science or tectonic processes in KS3 Geography. It uses the drama of Earth's structure and tectonic movements to set the rock cycle in context. The overlap of plate tectonics in KS4 Science and KS3 Geography means this show can also be used as an excellent preparation for Science at GCSE.

Evaluation of the show

To continually assess the show's effectiveness, we would be grateful if you and your students could complete feedback on the day. The teacher form will be given to you at the start of the show. On leaving the theatre, feedback slips with just two questions are provided for the students to quickly complete at tables in the foyer.

A note about behaviour

Our experienced science educators will lead the show. We work to make it an inspiring and inclusive experience for all students and find we rarely have problems with behaviour. However, teachers have overall responsibility for the behaviour of their students and we expect you to support us with this where necessary. Students benefit significantly when teachers and accompanying adults also get involved, so please do join in.

Learning objectives

Students will gain a deeper understanding of:

- the structure of the Earth
- the effect on landscape and people when plates separate, slide past each other and collide, including the causes and effects of volcanoes and earthquakes
- separation of plates: rift valleys on land, seafloor spreading, mid-ocean ridges
- plates sliding past each other, for example at the San Andreas Fault
- plate collision: oceanic/continental plate and continental/continental plate collision
- formation of igneous, sedimentary and metamorphic rocks
- the devastating human impact of earthquakes, drawing on examples including the 2004 Asian tsunami
- assessing vulnerability of regions to volcanic activity, including the Ring of Fire and hotspot volcanoes

The show supports KS3 Science and Geography.

National Curriculum links

Key Stage 3 Science

- 3.4 **The environment, Earth and universe**
 - a Geological activity is caused by chemical and physical processes.
 - c Human activity and natural processes can lead to changes in the environment.
- 4 **Curriculum opportunities**
 - k Make links between science and other subjects and areas of the curriculum.

Key Stage 3 Geography

- 1.1 **Place**
 - a Understanding the physical and human characteristics of real places.
- 1.5 **Physical and human processes**
 - a Understanding how sequences of events and activities in the physical and human worlds lead to change in places, landscapes and societies.
- 3 **Range and content**
 - f Physical geography, physical processes and natural landscapes.
- 4 **Curriculum opportunities**
 - b Explore real and relevant contemporary contexts.