Habitats Science Show

Information for teachers and group leaders

What will the show involve?

Habitats is an entertaining 30-minute show where children will connect their classroom-based learning about animals and their habitats with the world around them and empowers students to discover more about the climate through a series of interactive demonstrations. It is led by a member of our team and will require some student volunteers to bring to life some of the demonstrations.

This science show uses a pre-determined dialogue to create conversations that build upon students' knowledge. By asking a series of open ended questions supported by factual information, students are encouraged to explore and discover the theme.

This science show recognises that students have a range of learning needs and creates an accessible learning environment to support their education journeys. Facilitators do not make assumptions about the learning levels and behaviours of students, encouraging them to engage using multiple access points throughout the session.

Is there anything I need to do to prepare the children before the visit?

Not particularly. We link all demonstrations to familiar things so even if the topics haven't been covered, the children will be able to relate to the content. Let us know if there are particular vocabulary that you are struggling with in your classroom and we'll see if we can emphasise these more in the show.

Risk assessment

- Please visit our website education.eureka.org.uk/resources to download both the general museum risk assessment and the one for your chosen session.
- We advise you to make a preview visit to carry out your own risk assessment for the overall visit.

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Evaluation

Eureka! constantly aims to improve its programmes for school groups and feedback from adults and children is an essential part of this. We value all comments made and will always try our best to act upon them. You will be sent a link to an online survey following your visit and we'd be extremely grateful if you could complete and return as soon as possible after your visit. You are also welcome to share thoughts and reflections with staff during your visit.

Show Content and Objectives

Habitats Learning Outcomes

Aims and objectives – by the end of this science show,

Students will:

- Deepen their understanding of habitats, the natural environment, and the climate.
- Be inspired to take responsibility for their personal actions to preserve local habitats.
- Will discover possible solutions to climate change as well as causes and impacts.
- Be encouraged to generate their own opinions about habitats and climate, widening their ability to empathise on the subject.
- be inspired to find out more about 'green careers'.

Overview

Through a series of interactive activities, powerpoint presentation, and discussion, children will learn about a selection of local habitats and animals that can be found there, how some animals have adapted to their environment, and the types of jobs that are protecting, preserving, and promoting climate awareness.

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Activities	Learning Outcomes
Introduction What is a habitat. What is an adaptation. We'll be looking at some habitats around Eureka! Science + Discovery.	To have a shared understanding of what a habitat is and what an adaptation is. Our local area has a variety of different habitats.
Honeybee demonstration Volunteers required. One will put legwarmers on and the other won't. They both roll over a mat with Velcro balls on them. The one wearing the legwarmers will collect lots of Velcro balls or 'pollen' while the other won't collect any.	Honeybees are important pollinators. Pollinators are important for habitats. Honeybees have adapted to spread pollen.
Natterjack toad and its adaptations – camouflage, strong back legs.	Natterjack toads are quite rare but can be found on the Wirral and in Sefton. Their adaptations help them to hide and run away from predators.
Cormorant bird and its adaptations. Demonstration. A volunteer holds a bunch of feathers in front of their face while the Enabler sprays water at the them.	Cormorants have adapted to catch fish – they have a long beak and big wings that allow them to swoop close to the water. Cormorant feathers are aquaphobic, meaning that they repel water.
Fox – night vision demonstration The lights are turned off and a night vision camera connects to the big screen. The audience will see	Foxes usually hunt for food at night so they have adapted to see well in the dark.

themselves as a fox might see them in the dark.	
Climate explanation	Climate and weather are different – climate is the long-term pattern of weather of a region, while weather is what we experience every day. Climate change is having an impact on habitats.
Climate action	There are lots of ways that we can help animals and their habitats.
Green careers and roles We will see 2 people who work in a related field. There is Hannah, a Ranger in a local park, and Kirstie, a forensic ecologist.	People are finding innovative and creative ways to help the environment and slow down the effects of climate change.
Use of microscope At the end of the show, if there is time, we will connect our microscope to the big screen and show some specimens.	There is no particular learning associated with this – it is a fun and memorable way to end the show!

Sensory considerations

Sense	Items
Smell	None expected
Sound	Audience and Enabler shouting, the sound of Velcro,
Touch	Water spray – it should not reach the student but there is a chance it may get through; feel of Velcro; putting on legwarmers in the honeybee demo; feel of faux feathers.

Sight	The lighting will be switched off for the night vision demonstration. Students will see themselves on the big screen in night vision.
Taste	None