

Animal Vision

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



Your workshop

Workshop name	Animal Vision
Location	Attenborough Studio, Darwin Centre, Orange Zone. Please ensure you are ready and waiting to enter the studio 10 minutes before the start time. Unfortunately, we are unable to admit latecomers.
Start times	10.30, 11.30, 12.20, 13.10
Duration	30 minutes
Minimum ratio	1 adult : 10 pupils
Maximum group size	60 pupils, 6 adults Please ensure you meet the minimum adult : pupil ratio.

About the workshop

Can we really see everything that goes on in our environment? This live animal show demonstrates that there is a world that is only visible to certain animals and invertebrates.

Pupils will discover that eye adaptations in iguanas and chameleons allow individuals to escape predators and locate prey. They will also find out that snakes can make use of infrared light to hunt at night and that bees can see with ultraviolet light, an ability that some flowers use to their advantage.

Finally, we will end on a mystery: why do scorpions glow in ultraviolet light? In the future, maybe one of your pupils will be the scientist who works it out.

Before and after your visit

Please tell your pupils they will be attending a science show that includes live animals. Some of them may wish to volunteer to help with demonstrations, but nobody will have to touch an animal if they do not wish to. There are also many other parts of the show where pupils can try out ideas altogether and answer questions, etc.

Please see our web page on *Animal Vision* for pre-visit activities for Years 5–8. www.nhm.ac.uk/education/school-activities/science-shows/animal-vision/

A note about behaviour

An experienced science educator will present the show with an animal expert. We work to make it an inspiring and inclusive experience for all pupils and we rarely have problems with behaviour. However, teachers have overall responsibility for the conduct of their pupils and we expect you to support us with this where necessary. Pupils benefit significantly when teachers and accompanying adults get involved in workshops, so please do join in when appropriate.

Health and safety

- this show involves the following live animals: a royal python, a milk snake, a chameleon, an emperor scorpion and an iguana or a bearded dragon
- the handlers are experienced but it is important that your pupils behave calmly
- volunteers will be selected to handle certain live animals, if any of your pupils should not be selected, please inform the science educator at the start of the session
- scorpions will be shown under ultraviolet light pupils will not be permitted to touch the scorpions and the ultraviolet light will not radiate near the audience

Please assist staff when seating pupils in the Attenborough Studio to ensure that gaps are not left between seats. Please be aware that hand-held devices are located in seat armrests and attached via cables. These will not be used during this show. To avoid trip hazards, please ensure pupils do not remove these devices from their housing.

Evaluation of the show

To help us assess the show, we will ask you to complete a feedback form afterwards. This will help us ensure the show meets your needs so please fill it in as fully as possible.

Learning objectives

Pupils will

- enhance their knowledge and understanding of adaptation
- enjoy engaging with animals and staff
- increase their awe, wonder and respect for the natural world

- be inspired to learn more about invertebrates and vertebrates
- develop their observation skills

National Curriculum links

This activity's content falls within the following statements, but does not necessarily support the breadth of content to which the statement refers.

Science

Key Stage 2 – Year 3 Plants

Pupils should be taught to:

• explore the part that flowers play in the life cycle of flowering plants, including pollination

Light

Pupils should be taught to:

- recognise that they need light in order to see things and that dark is the absence of light
- recognise that light from the sun can be dangerous and that there are ways to protect their eyes

Key Stage 2 – Year 6

Evolution and inheritance Pupils should be taught to:

• identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution

Key Stage 3 science

Genetics and evolution

• the variation between species and between individuals of the same species means some organisms compete more successfully, which can drive natural selection