

Cultural Services : Bradford Museums and Galleries Cliffe Castle Museum

Education

Bones, Muscles and Movement KS2

The children will attempt to decipher which skull belongs to which animal in an interesting and different handling session. Through role play they explore which bone and muscle structures help different animals move in different ways.

1 hour Education Officer led hands on session.

£60 per session (max 35 pupils)

What happens in the workshop ?

The workshop leader will meet you and your class in the museum entrance area. The workshop will take place in the Insight Education Room on the ground floor of the museum.

Using animal bones the workshop leader will prompt discussion around differences and similarities between animal skeletons and suggest reasons for this. Through a role play activity pupils will be encouraged to think about and identify how different animals move. Skeletons of some of these animals will then be examined and discussed. In pairs pupils then have the task of matching up 10 animal skulls to the correct animal through consideration of size, teeth and other features.

Children will be taught:

- Why humans and animals need bones.
- Some of the differences and similarities between the skeletons of humans and animals.
- That animals use their skeletons to help them move in different ways.
- What the skeletons of some animals look like.
- How the skeletons of animals can show us different adaptations.
- That some animals have exoskeletons.
- To recognise the skulls of different animals by examining and comparing different features.

National Curriculum links:

KS2 Sc2;2e.QCA scheme of work: Unit 4A Moving and Growing.

Group Organisation

As part of this workshop pupils will work in pairs. You may want to identify these groups in advance of the visit.

Is there anything else in the museum that is relevant to the workshop?

There are animal skeletons, skulls and bones on display in the Natural History Gallery.

How can I give feedback about the session?

Your feedback is essential to the development of the education service at Cliffe Castle Museum. We will give you and sometimes the students an evaluation form to fill in at the end of the session. Please complete this and return to the workshop leader.

Pre and post visit information and activities.

- **Inside, outside.**

Start a discussion about animal skeletons – do all animals have skeletons? Which animals have exoskeletons? Why do they have exoskeletons? Ask pupils to consider some of the advantages and disadvantages of having an internal or an external skeleton.

- **Animals on the move**

As an extension of the how animals move activity, ask pupils to think of an animal and how it moves-how could they make themselves move like this animal? Ask some volunteers to move like their animal and the rest of the class to guess what they are. Ask pupils to consider what special features the skeletons of these animals might have to help it – run fast, dig, jump etc. Pupils could draw and label pictures of the animals they chose.

An alternative for outdoors or in the hall is for a leader to call out the names of various animals and get the whole class to all move around like the chosen animal.

- **Similarities/differences**

Recap on the similarities and differences between animal and human skeletons – which bones are the same? Are they the same size and weight? Use this activity to reinforce this:

http://www.bbc.co.uk/schools/ks2bitesize/science/living_things/moving_growing/play.shtml

Websites

- Find out how the Natural History Museum get animal skeletons with the flesh eating bug cam !
<http://www.nhm.ac.uk/kids-only/naturecams/beetlecam/>
- Find out more about how joints help us move:
<http://www.rigb.org/contentControl?action=displayContent&id=00000001878>