Biodiversity and Evolution Key Stage 5

Students handle and compare Museum specimens to explore the connection between taxonomy, classification and phylogeny. This is related to principles of natural selection, evolution and speciation across the natural world.



Length of Session: 90 minutes

Maximum group size:

Each workshop has a maximum capacity of 30 students accompanied by 2 members of staff

This session is based on the following curriculum themes:

- Classification and taxonomy is a means of organising and naming the variety of life. Classification is based on the relationship between organisms and is built around the concept of a species.
- Classification systems have changed and will continue to change as our knowledge of biology develops.
- Adaptation and selection are major components of evolution and make a significant contribution to the diversity of life.

Session outline

Part 1: Students take part in an interactive handling session on the theme of taxonomy, classification, phylogeny and evolution.

Part 2: Students get an opportunity to explore behind the scenes and find out how specimens are collected, stored and used.



Part 3: Students and teachers choose from a selection of self guided Museum activities highlighting fossils and modern day specimens that illustrate the curriculum themes included in the session.





Learning outcomes

- Students know what is meant by the terms taxonomy, classification and phylogeny.
- Students understand the principles of natural selection, evolution and speciation
- Students appreciate how scientific ideas change over time and have better understanding of the role of the scientific community in validating changes.
- Students take a more active interest in the natural world through close access to museum specimens.

Suggested pre- and post-visit work



Look at the selection of interactive activities available using the following links:

http://www.nhm.ac.uk/nature-online/ evolution/

http://evolution.berkeley.edu/

Read more about the great debate at http://www.oum.ox.ac.uk/learning/pdfs/ debate.pdf

For more information...

Contact Sarah Lloyd, Secondary Science Education Officer sarah.lloyd@oum.ox.ac.uk 01865 282451



Oxford University Museum of Natural History, Parks Road, Oxford, OX1 3PW