

Using natural history collections in museums to support the National Curriculum for Geography



These notes have been produced to help you think about how you can make use of natural history collections in museums to support teaching of the National Curriculum for Geography. Natural history collections present unparalleled opportunities for students to connect with many of the topics contained in the National Curriculum. By their cross-disciplinary and interdisciplinary nature, natural history collections provide students with a wide range of entry points to explore topics in ways that support their learning.

Geography

According to the guidelines for the National Curriculum, “A high-quality geography education should inspire in pupils a curiosity and fascination about the world and its people that will remain with them for the rest of their lives. Teaching should equip pupils with knowledge about diverse places, people, resources and natural and human environments, together with a deep understanding of the Earth’s key physical and human processes.” There are many opportunities for museums to support these overarching aims, drawing on rich collections from across the world and from different times, and deriving from human contact with natural environments.

The curriculum aims to ensure that all pupils:

- Develop contextual knowledge of the location of globally significant places, terrestrial and marine.
- Understand the processes that give rise to key physical and human geographical features, and their interdependence.
- Be able to collect, analyse, interpret and communicate information based on fieldwork.

These aims can be supported through museum displays, stored collections, and in association with published descriptions of places, as well as through additional information and resources on the Internet. Students can

explore museums and collections as field trips, as if going on expeditions of their own.

Locational and place knowledge

- Explore habitats and biomes through natural history displays, showing animals from different parts of the world
- Examine the structure and adaptations of animals living in hot and cold climates
- Examine plants and animals found in Britain, and explore their distribution in the rest of the world
- Explore the human cultures found in different places, and their relationships with plants and animals, both wild and domesticated
- Explore the impacts of people on natural ecosystems
- Explore the discovery of plants and animals across the world through natural history displays and collections
- Compare the plants and animals found in two different places, based on museum displays and collections

Human and physical geography

- Explore different physical structures, including sandstones, limestones, igneous and metamorphic rocks
- Examine ores and minerals and some of the products that are made from them
- Explore the geological record, showing changes in environments at particular places, and long-term major geological change as a consequence of plate tectonics

- Explore the ancient and recent climate through geological displays
- Explore how the series of ice ages and warm interstadials led to changes in the fauna and flora of Britain and other parts of the world, through exploring museum displays and collections
- Examine the evidence for changes in the climate, through fossils, pollen analysis
- Explore human exploitation of natural resources, sustainable and unsustainable
- Explore the services that the natural environment provides to people (ecosystem services), and changes in these services, for example bees and pollination, renewable and non-renewable resources, and products from eg. forests and oceans
- Explore the origins of ingredients in food, and developments of agriculture
- Explore case studies of how people have exploited natural resources, both indigenous people, and colonialists and imperialists
- Explore the history of climate change, and explore evidence of the effects of recent climate change
- Explore disasters, both natural and human-made, through museum displays and collections
- Explore the effects of long-term climate change on plants and animals by exploring the life history of particular species found on display in museums

-Explore the development of towns and cities, and explore the consequences on wild animals and plants

Geographical skills and fieldwork

-Understand the activities of collectors, travellers and expeditions who formed collections and who were instrumental in developing the understanding of world geography

-Explore museum displays to identify species from particular parts of the world, and explore the other plants and animals that live in those habitats and regions

-Use museum collections as a prompt to explore plants and animals found in the local environment

-Use museum collections to discover how species distribution has changed over time

-Use labels on museum specimens to explore where they came from, and undertake independent research. Use Google Maps, Geonames and the Getty Thesaurus of Geographic Names to identify where specimens came from, and the geographical features (natural and human-made) found there

These notes aren't intended to be exhaustive, and you will no doubt have your own ideas. They are intended to show that natural history collections and displays in museums can support the Geography curriculum in a wide variety of ways.



These notes have been produced as part of a programme of support for North West museums with natural history collections, led by Manchester Museum in association with World Museum Liverpool, Tullie House Museum and Museum Development North West. If you have any comments, please email henry.mcghie@manchester.ac.uk