education session

Classification

How and why do we classify organisms?

Post 16

Learning Outcomes:

At the end of the session:

All students will know how the taxonomic hierarchy works and be able to understand how new species are grouped

Most students will remember key characteristics of specific taxonomic groups

Some students will understand the key difference between species and hybrid and will start to understand how subspecies are defined and how they lead to the evolution of new species

Session Outline:

The session begins by exploring the benefits of sorting and classifying. It then examines the taxonomic hierarchy from domain to order. Students investigate animal biofacts (skulls, furs, etc.) and work together to sort these into invertebrates and the five main vertebrate groups (fish, amphibian, reptile, bird, mammal). After this activity, the discussion covers the evidence scientists use to classify organisms (DNA, biochemistry, etc.). After the activity, the mammal group is further focused on looking at monotremes, marsupials and placental mammals, with further focus on the primate order. Definition of species is talked about which leads into what sub-species are and how they evolve, as well as why hybrids are not true species.

Curriculum Links

Biology

Understanding of the classification system

Main characteristics of subphylum vertebrata

What defines a species and how this differs from subspecies

What a hybrid is

