

Evolutionary taxonomy

Outstanding Science Year 6 - Living things and their habitats - OS6A003

Learning Objective



I can use taxonomy to explain how organisms are related to each other.

Me:   

Teacher:   

Evolutionary taxonomy is the most modern way of grouping living things. In evolutionary taxonomy, all species are placed in one group. This group is then divided into smaller and smaller groups, called **taxonomic ranks**. The taxonomic ranks are called (in order) **domain, kingdom, phylum, class, order, family, genus** and **species**.

Evolutionary taxonomy shows how closely all species, both living and extinct, are related to one another. This is because biologists think that all life on Earth has **one common ancestor**, a simple organism that lived billions of years ago. This organism **reproduced** and its offspring **evolved** into all of the different species that have ever lived on Earth.

Activity

Cut out the pictures of mammals on the following page. Use the information below to complete the taxonomy diagram. Use the **genus** and **species** names to create the **binomial name** for each mammal. An example has been done for you.

National Curriculum Statutory Requirements

6A1 - describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals; **6A2** - give reasons for classifying plants and animals based on specific characteristics



Human

Class: Animalia
Order: Primates
Family: Hominidae
Genus: Homo
Species: Sapiens



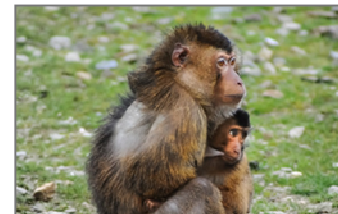
Neanderthal †

Class: Animalia
Order: Primates
Family: Hominidae
Genus: Homo
Species: Neanderthalensis



Common Chimpanzee

Class: Animalia
Order: Primates
Family: Hominidae
Genus: Pan
Species: Troglodytes



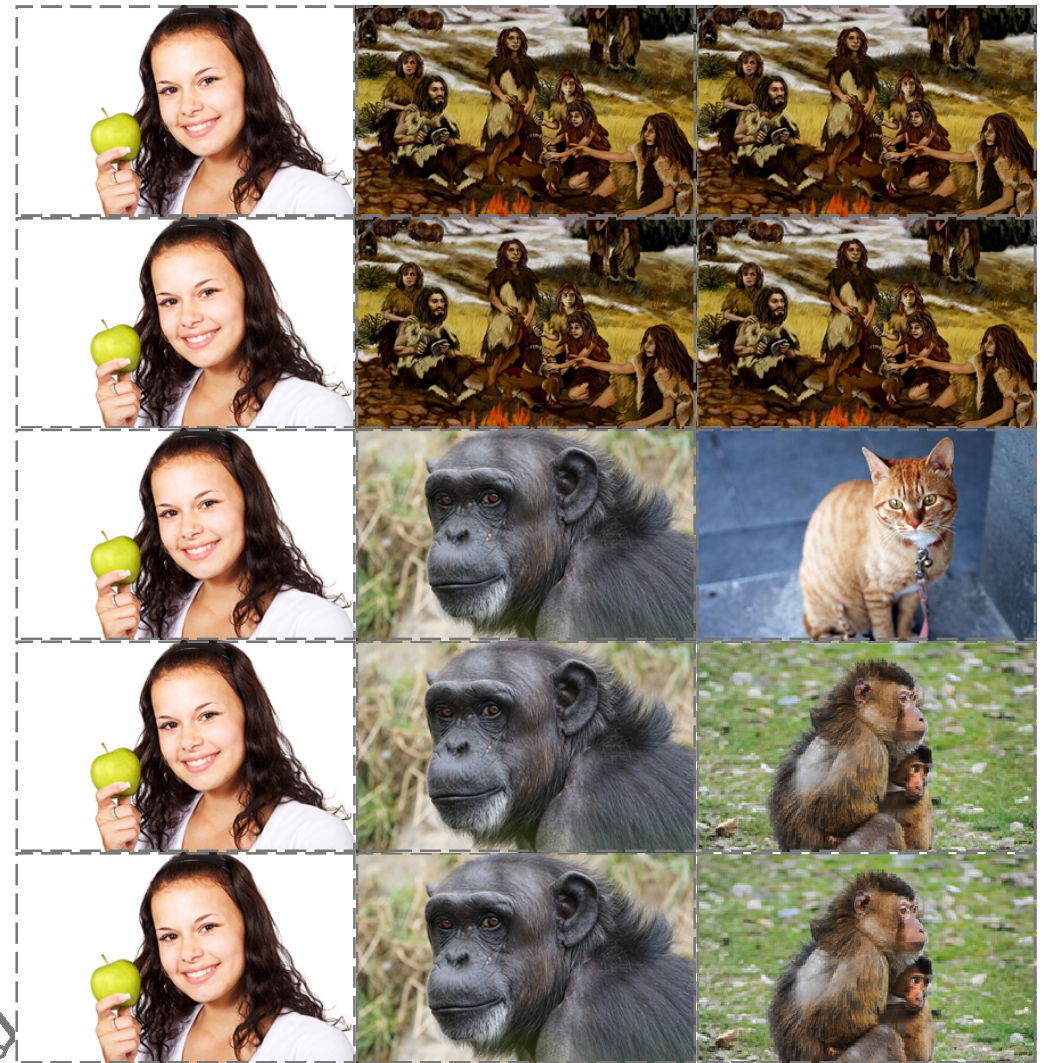
Barbary Macaque

Class: Animalia
Order: Primates
Family: Cercopithecidae
Genus: Macaca
Species: Sylvanus



Domestic Cat

Class: Animalia
Order: Carnivora
Family: Felidae
Genus: Felis
Species: Catus



Teacher's note - there are enough pictures on this page for 2 children, in order to save on printing and photocopying resources.

Evolutionary taxonomy diagram showing Homo sapiens and 4 other mammals

Class Mammalia					
Order Primates					
Family Hominidae					
Genus Homo					
Species Homo Sapiens					

Human
Binomial name:



Neanderthal
Binomial name:



Common chimpanzee
Binomial name:



Barbary macaque
Binomial name:



Domestic cat
Binomial name:
Felis Catus



Which of these mammals is most closely related to Homo sapiens?

Which of these mammals is least closely related to Homo sapiens?
