Year 6- Living Things and their Habitats

Key Vocabulary	Definition
cell	The basic structural unit of living things.
unicellular	Organism made of a single cell.
multicellular	Organism made of many cells.
Taxonomy	The study of classification.
Taxonomist	A biologist who studies classification.
Kingdom	There are 5 kingdoms: Animal, Plant, Protocista, Fungi and Monera (bacteria).
Phylum	There are more than 30 phyla in the Animal Kingdom and 9 or 10 in the Plant Kingdom. Phylum Chordata is the one we are most familiar with as it includes humans, birds, fish and all other vertebrates.
Class	The various phyla are divided into classes. Phylum Chordata is divided into amphibians, birds, mammals, reptiles and fish.
Order	There is often disagreement about the order of a living thing. Different sources group creatures in different orders or families.
Family	This is a way scientists group similar genera (genus) together.
Genus	Two or more species that share unique characteristics
Species	A group of individuals that breed together to produce fertile offspring.

Living things can be classified into broad groups according to observable characteristics that are similar or different.

Naming species

The genus is the first part of the scientific name of a species

Felis catus

The species is the second part of the name
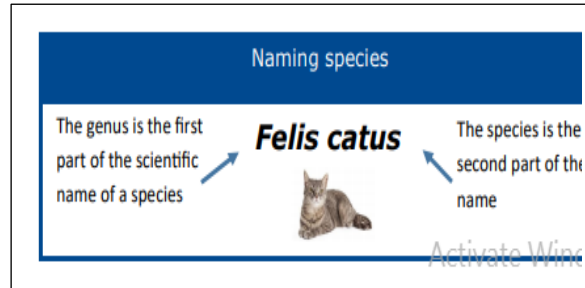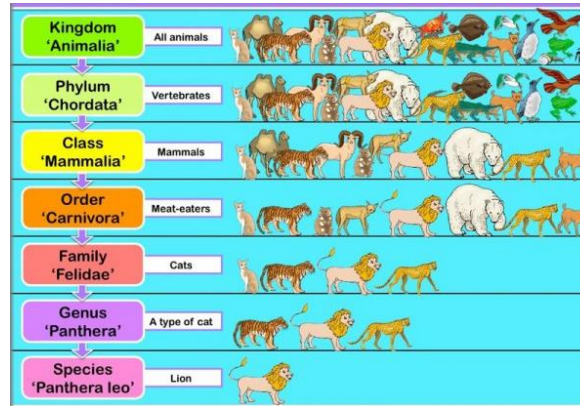
1707 – 1778

Scientists Link:
Carl Linnaeus

Carl Linnaeus is famous for his work in Taxonomy, the science of identifying, naming and classifying organisms (Plants, animals, bacteria, fungi etc.).

Sticky Knowledge

- Scientists have divided living things into five large groups called Kingdoms.
- Each Kingdom is divided into smaller groupings as follows-
  - Kingdom
  - Phylum
  - Class
  - Order
  - Family
  - Genus
  - Species
  - Variety
- When classifying living things, scientists use special names made up of Latin words (or words made to sound like Latin words), which help scientists around the world understand each other and ensure that they are using the same names for the same living things.
- Example of how an animal can be classified:
  A collie dog is classified as follows:
  - Kingdom: Animalia
  - Phylum: Chordata (Subphylum: Vertebrata)
  - Class: Mammalia (mammal)
  - Order: Carnivora (eats meat)
  - Family: Canidae (a group with doglike characteristics)
  - Genus: Canis (a coyote, wolf, or dog)
  - Species: Familiaris (a domestic dog)
  - Variety: Collie (a breed of dog).

9 hours

Lesson 1- **Finding Linnaeus**

Can I describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences?
Can I give reasons for classifying plants and animals based on specific characteristics?

Lesson 2 – **Odd One Out**

Can I describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences?
Can I give reasons for classifying plants and animals based on specific characteristics?

Lesson 3- **The Sweetness of Classification**

Can I describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences?
Can I give reasons for classifying plants and animals based on specific characteristics?

Lesson 4- **Classification in Your Back Yard**

Can I give reasons for classifying plants and animals based on specific characteristics?

Lesson 5 - **Quirky Creatures**

Can I describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences?
Can I give reasons for classifying plants and animals based on specific characteristics?

Lesson 6- **New Creature Features**

Can I describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences?
Can I give reasons for classifying plants and animals based on specific characteristics?

Extended writing - a non-chronological report about their 'new' creature.

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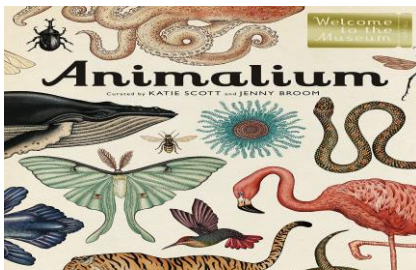
Scientific Enquiry

Pupils will work scientifically by: using classification systems and keys to identify some animals and plants in the immediate environment.
They will research unfamiliar animals and plants from a broad range of other habitats and decide where they belong in the classification system.