West Leigh Junior School—Knowledge Organiser

Science Focus:	Classification (Living Things and their Habitats)	Year 6	Spring Term 1

Classification

The Five Kingdoms	The first division of living things in the classification system is to put them into one of five kingdoms. • animals (all multicellular animals) • plants (all green plants) • fungi (moulds, mushrooms, yeast) • protists (Amoeba, Chlorella and Plasmodium) • prokaryotes (bacteria, blue-green algae)

Living things can then be ranked according to:

Phyla	Phyla follow kingdoms and have many different organisms. The animal kingdom includes the three examples below: • chordata, which have backbones • arthropod, which have jointed legs and an exoskeleton • annelids, which are segmented worms
Class	Class is an additional sub-division, which, for example, results in the chordata phylum being divided into: • mammals • birds • amphibians • fish • reptiles
Order	Order follows class and, as an example, mammals can be further sub-divided into a variety of different groups such as: • carnivores • primates
Family	Orders are broken down into families. Here are a few examples of families that carnivores can be divided into: • canidae – dogs • felidae – cats
Genus	Genus follows on from family. The felidae family can be sub-divided into four genus examples: • acinonyx – cheetah • panthera – lion and tiger • neofelis – clouded leopard • felis – domestic cats
Species	Species is the final classification stage, and the genus panthera can be divided into: • Panthera leo (lion) • Panthera tigris (tiger)

Famous Scientist

Edward Jenner (1749-1823)	Edward Jenner was responsible for discovering the world's first-ever vaccine and his work saved so many lives – in fact Jenner's work is said to have saved more lives than the work of any other human! He was born in 1749 in Gloucestershire, where he trained as a doctor and became famous for his discovery of the smallpox vaccine. His discovery was a huge medical breakthrough; in 1980, the World Health Organisation declared the dangerous disease smallpox an eliminated disease.

Key Vocabulary

Spelling	Definition
classification	Grouping something using its features.
distinguish	Recognise a difference.
invertebrate	Animals with no backbone.
microorganism	A microscopic organism.
organism	An individual animal, plant, or single-celled life form.
taxonomy	The part of science focused on classification.
vertebrate	Animals with a backbone.

Key Features of Microorganisms

- Include algae, fungi, protozoa, bacteria and viruses
- Smallest organisms on Earth
- They perform photosynthesis, break down waste and infect other organisms