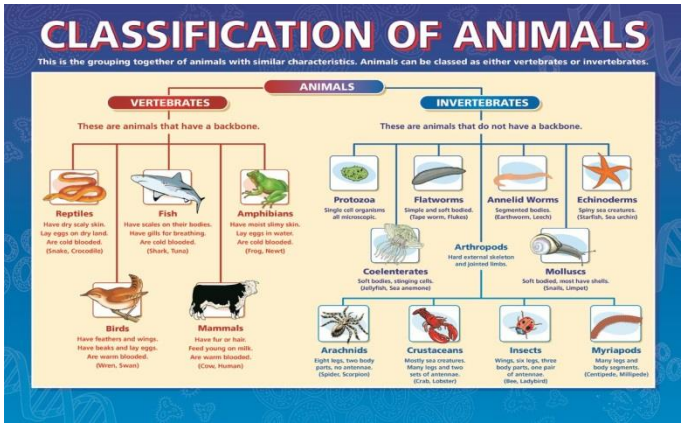
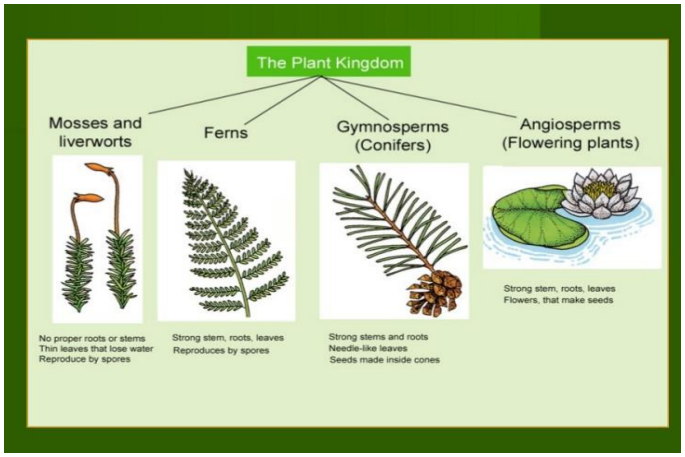
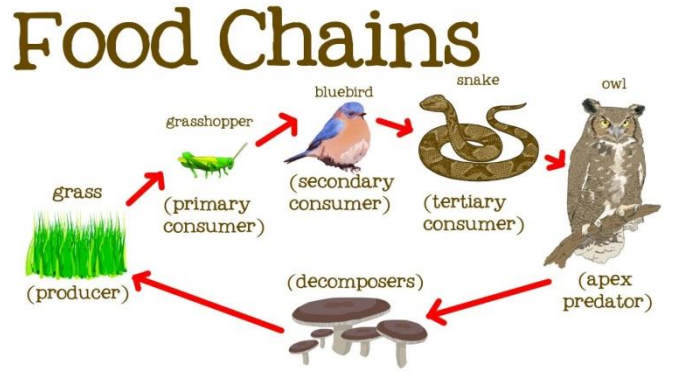
Living things and their habitats – knowledge organiser

Key knowledge	
Why do scientists use classification?	Scientists put organisms into groups to make it easier to identify them and study them.
Things can be split into three main groups:	• Plants • Animals • Micro-organisms
Micro-organisms	• Bacteria – E. coli • Protoctista - Algae • Fungi - Mushrooms
The 7 layers of classification are:	• Kingdom • Phylum • Class • Order • Family • Genus • Species
Vertebrates groups	• Mammals • Reptiles • Fish • Amphibians • Birds
Invertebrate groups	• Jellyfish and Sea Anemones • Flatworms • Roundworms • Segmented Worms • Molluscs • Starfish and Sea Urchins • Arthropods
Habitats	
What is a habitat?	Most living things live in an environment they are suited to. Habitats provide: • Shelter • Protection • Food and water
Types of habitats	Habitats can be very different. For example • Woods • Oceans • Desert • River
Choosing the right habitat	Animals live in habitats that suit them best. For example, a fish has gills so it can breathe in water and has fins to help it swim well so is adapted to live in water.
Living things can:	
M(ovement)	Animals can run, birds can fly and flowers turn towards light.
R(espiration)	Is the release of energy from food
S(ensitivity)	Animals react to inputs such as pain, flowers are sensitive to light
G(rowth)	Babies grow into adults. Seedlings grow into bigger plants
R(eproduction)	Animals have babies and plants have seeds which turn into new plants.
E(xcrete)	To get rid of waste material. Animals excrete waste material such as poo and wee. Plants lose their leaves
N(utrition)	Humans get energy from food. Animals eat plants or other animals. Green plants make their own food.
Scientists we need to know about	
5 facts about Carl Linnaeus	• Born on 23 May 1707 • Swedish • Known as the father of Taxonomy • Deeply religious. He said that studying nature helped him understand and come closer to God. • Practiced as a doctor







Key Vocabulary

Adaptation - The process of change by which an organism or species becomes better suited to its environment

Annelid – A segmented worm

Arachnid – An animal that has eight legs and a body formed of two parts

Consumer - An organism that feeds on plants or other animals for energy. There are four types of consumers; herbivores (plant eaters), carnivores (meat eaters), omnivores (plant and animal eaters), and detritivores (decomposers).

Crustaceans – Mostly live in water with a hard shell and segmented body

Ecosystem - A biological community of interacting organisms and their environment.

Environment – The surroundings or conditions in which a person, animal, or plant lives

Habitat – The natural home or environment of an animal, plant or other organism

Insect – A small animal that has six legs and generally one or two pairs of wings

Microorganism – A microscopic organism, such as a bacteria protozoa or fungus some can be helpful others can be more harmful

Producer – A plant that takes energy from the sun and makes its own food