

Science Knowledge Organiser

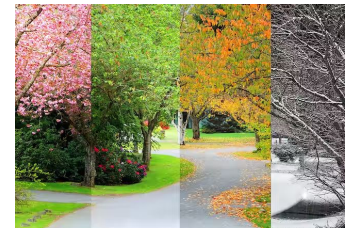
Year 4

Summer (i)

How can a classification key help with growing plants and animals?

Substantive Knowledge - Plants can be classified into groups. Classification keys support grouping

RECAP OPPORTUNITY: To know how the habitat changes throughout the year



What do you notice about your own local area at different times of the year? Think about flowers you might see, how often the grass needs cutting at different times of the year and what animals you see and hear

To know how to group vertebrates such as fish, amphibians, reptiles, birds and mammals

5 Groups of Vertebrates

Fish	Amphibians	Reptiles	Birds	Mammals
				
• Cold-blooded • Gills • Scales and fins • Lay eggs or live birth in water	• Cold-blooded • Gills and lungs • Thin moist skin • Lay jelly-like eggs in water	• Cold-blooded • Lungs • Scales • Lay leathery eggs on land or live birth	• Warm-blooded • Lungs • Feathers • Lay hard eggs on land	• Warm-blooded • Lungs • Hair • Live birth and feed young milk

Core vocabulary

vertebrate- an animal of a large group distinguished by the possession of a backbone or spinal column

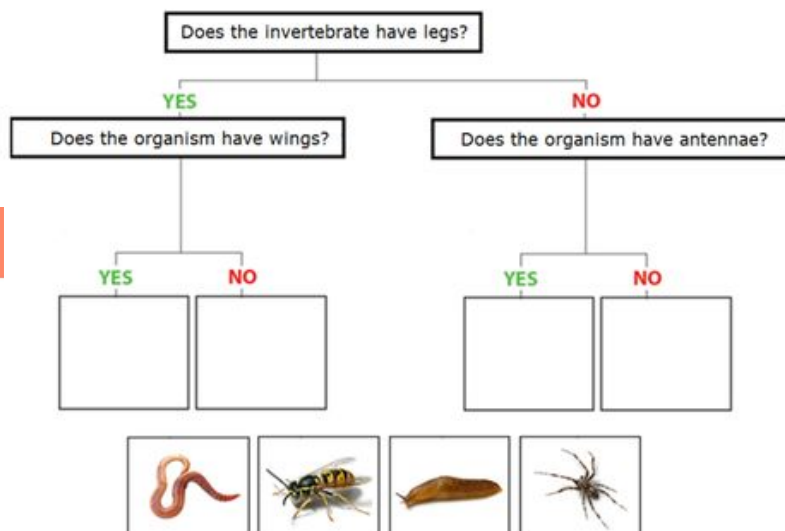
invertebrate- an animal lacking a backbone

classification - the arrangement of animals and plants into groups according to their observed similarities

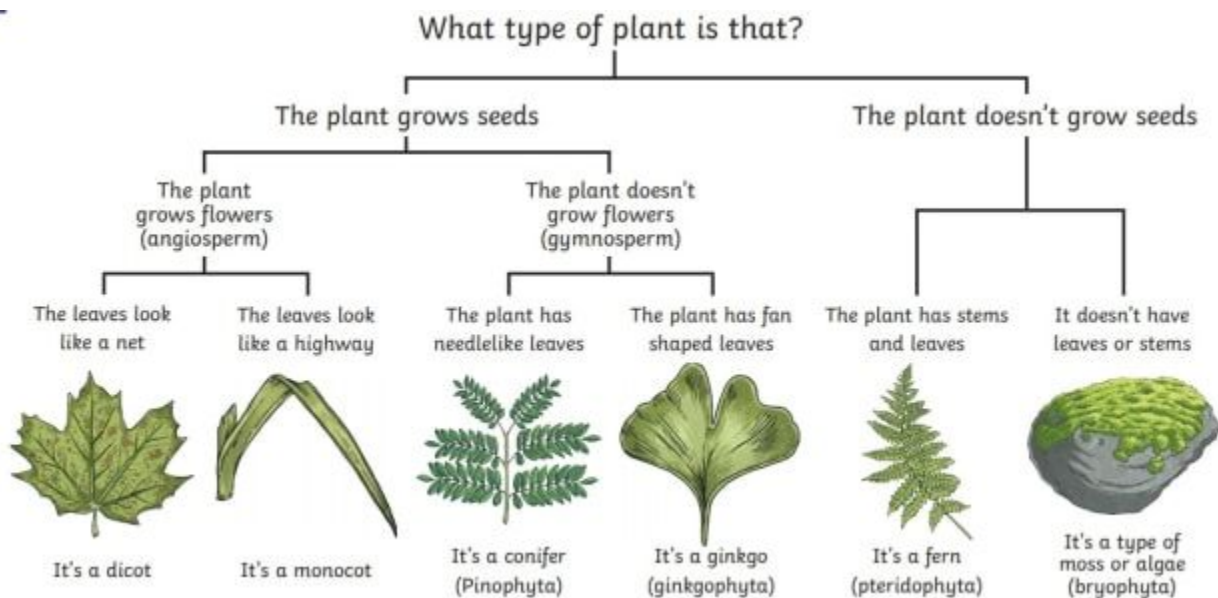
To know how to use classification keys to help group, identify and name a variety of living things in the local and wider environment

To know how to group invertebrates into snails, slugs, worms, spiders and insects

CLASSIFICATION OF INVERTEBRATES (ANIMALS WITHOUT A BACKBONE)



To know how to group plants into categories such as flowering plants (including grasses) and non flowering plants such as ferns and mosses



Mosses and liverworts



No proper roots or stems
Thin leaves that lose water
Reproduce by spores

Ferns



Strong stem, roots, leaves
Reproduces by spores

Gymnosperms (Conifers)



Strong stems and roots
Needle-like leaves
Seeds made inside cones

Angiosperms (Flowering plants)



Strong stem, roots, leaves
Flowers, that make seeds

Can you use these classification keys to identify plants in your garden?