

Year 6

Knowledge Organiser: Science

Ensure availability and sustainable management of water and sanitation

for all





The History of Classification



Aristotle 384BC – 322BC



Linnaeus 1707-1778





Aristotle's Ladder of Life



Human Beings Can think and be creative

Animals

Can move around to search for food and escape predators Sensitive to their surroundings

Usually green and stationary Can grow and reproduce

Non-living Things e.g. rocks Aristotle was the first person who tried to classify living things into groups.

The Seven Levels of Linnaeus' System



Linnaeus made it his life's work to develop a way to classify and name all life on Earth.

We still use Linnaeus' system of classification to this day. However, scientists are constantly refining the system based on new knowledge. Linnaeus only identified plant and animal Kingdoms but today, living things are divided into 5 broad groups called Kingdoms.



What makes yeast grow?

Experiment where we will answer the following questions:

What makes yeast grow?

What conditions does the yeast grow best in?

Aim:

Prediction:

Variables:

variables

Method:

Results:

Working Scientifically:

How do we make sure our test is fair.

What is our independent variable (changes) and our dependent variable (controlled)?

Kingdom Fungi: Yeast

Microscopic
Single-celled





How to classify plants and animals.

Chlorophyll – the green substance in plants that makes it possible for them to make food from carbon dioxide and water.

 $\label{lem:photosynthesis} \textbf{Photosynthesis} - \textbf{the process by which a green plant turns water and carbon dioxide into food when the plant is exposed to light.}$

Vertebrate - animals with a backbone.

Invertebrate - animals without a backbone.

Variation - differences between living things of the same species.

Without seeds

Without seeds

Flowers No flowers Roots, similar feeds

A bowers

Flowering Coolfee Farm Mosses

Can you find a plant in our local school environment and create your own classification tree?



Can I classify existing animals?
Can I create and classify a new species of animal?



Vocabulary Tier 2SpidersVertebratesSnailsFishWormsAmphibiansFlowerinReptilesNon-flowerin

Snails Worms Flowering Non-flowering

Birds Mammals Invertebrates Insects







Vocabulary Tier 3

Kingdom
Organism
Respire
Excrete
Micro-organism

Unicellular organism
Multicellular organism
Nucleus

Nucleus Bacteria Chlorophyll

Photosynthesis