

Name	Modified	Modified By
Animals including humans	2 hours ago	Lawson, Elliott
Classification	About an hour ago	Lawson, Elliott
Electricity	About an hour ago	Lawson, Elliott
Environment including plants	2 hours ago	Lawson, Elliott
Forces	2 hours ago	Lawson, Elliott
Physical world inc Light and sound	About an hour ago	Lawson, Elliott
States of matter	2 hours ago	Lawson, Elliott

NJS Science strands

A look into the development of knowledge based on expectation and planning across scientific strands.

Staff Resources > Science > Ofsted folder stuff > Science planning > By strand of knowledge > Animals including humans

Y3 2 Animals and Skelet...
About an hour ago

Y3 3 Digestion
About an hour ago

Y5 5 Living things and L...
44 minutes ago

Y6 2 Heart and Lungs.zip
10 minutes ago

Y6 4 Evolution.zip
10 minutes ago

By strand of knowledge > Environment including plants

Y3 5 habitats
About an hour ago

Y3 6 Plants
About an hour ago

Y4 4 Environment
About an hour ago

Y5 5 Living things and th...
45 minutes ago

Science planning > By strand of knowledge > Classification

Y3 4 Classification
About an hour ago

Y6 1 Classification
28 minutes ago

Science planning > By strand of knowledge > Electricity

Y3 1 Electricity
About an hour ago

Y5 2 - Complete Changi...
49 minutes ago

Staff Resources > Science > Ofsted folder stuff > Science planning > By strand of knowledge > Forces

Y4 3 Forces - Magnets
About an hour ago

Y5 1 - Complete Forces I...
About an hour ago

Staff Resources > Science > Ofsted folder stuff > Science planning > By strand of knowledge > Physical world inc Light and sound

Y4 1 Light
About an hour ago

Y4 2 Sound
About an hour ago

Y4 6 Rocks and soils
About an hour ago

Y5 3 Earth and Space
10 minutes ago

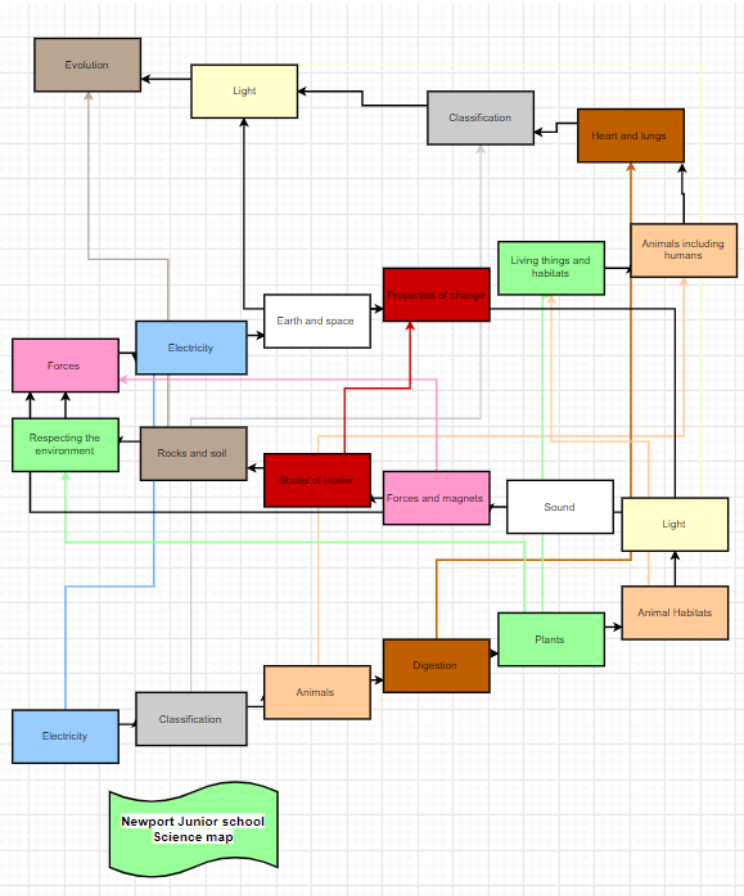
Y4 3 Light
17 minutes ago

Y6 4 Evolution.zip
14 minutes ago

TAW704 Documents > Staff Resources > Science > Ofsted folder stuff > Science planning > By strand of knowledge > States of matter

Y4 5 states of matter
About an hour ago

Y5 4 Properties of Chan...
49 minutes ago



Animals including humans

Prior learning:

Find out about and describe the basic needs of animals, including humans, for survival (water, food and air). (Y2 -Animals, including humans.
Identify and name a variety of common animals that are carnivores, herbivores and omnivores. (Y1 - Animals, including humans)

Future learning:

The mechanism of breathing to move air in and out of the lungs (KS3)

Differences between species (KS3)

Heredity as the process by which genetic information is transmitted from one generation to the next. (KS3)

Key Vocab

Carnivore,
herbivore,
omnivore,
skeleton, bones,
muscles, joints,
support, protect,
move,
spine
Digest, absorb,
mouth,
oesophagus,
stomach, small
intestine, excrete,
reproduction, life
cycle, babyhood,
childhood,
adolescence,
adulthood
Heart, circulation,
pulse,
muscle, blood
vessel, lung,
breathe
natural selection,
variation,
inherited,
adaption, DNA,
mutation, fossil,
characteristic

- I can explain the need for food in animals.
- I can name and describe parts of the human digestive system.
- I can compare functions of teeth.

- I understand animals need nutrients to survive.
- I understand nutrients need to be broken down and digested.
- I understand different food produces different nutrients.

- I understand all living things need to grow.
- I understand the importance of reproduction to living things.
- I understand the differences in organisms.

- I understand living things grow as they get older.
- I understand living things reproduce.
- I understand the change in humans that enables reproduction.

- I understand that body systems work together.
- I understand the importance of body systems to a healthy body.
- I understand how circulatory and respiration systems effect gas exchange.

- I understand plants and animals have changed over time.
- I understand that Charles Darwin formed the theory of evolution.
- I understand animals need to adapt to survive.

Y3 - Animals

Y3 – Animal habitats

Y5 – Living things and habitats

Y5 – Animals
including humans

Y6- Heart and lungs

Y6 – Evolution

- L1- Diets
- L2- Food Groups
- L3- Nutrition
- L4- Skeletons
- L5- Naming Bones
- L6- Functions of skeleton
- L7- Muscles

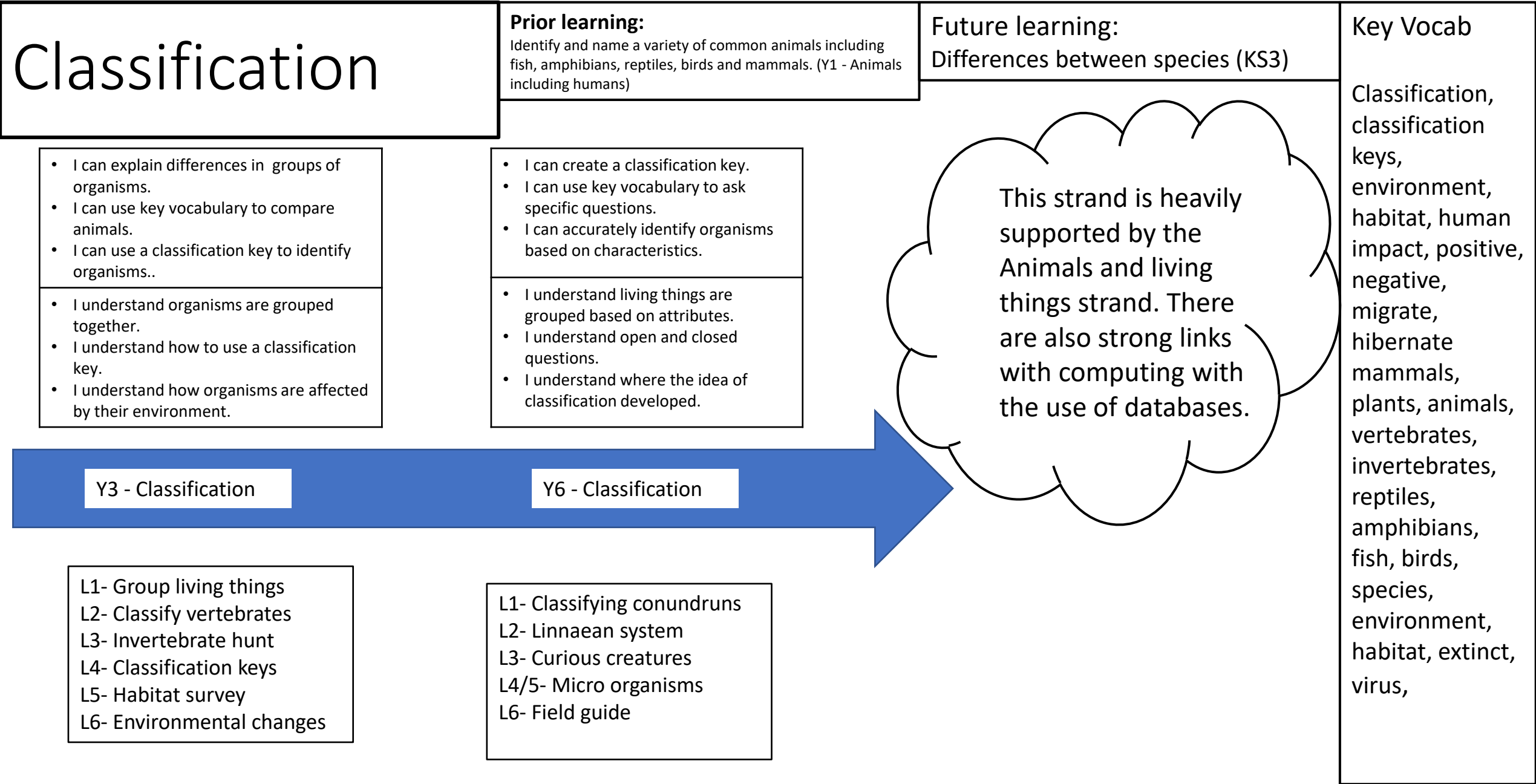
- L1-Parts of DS
- L2- Functions of DS
- L3- Types of teeth
- L4/5-Tooth decay enquiry
- L6- Food chains

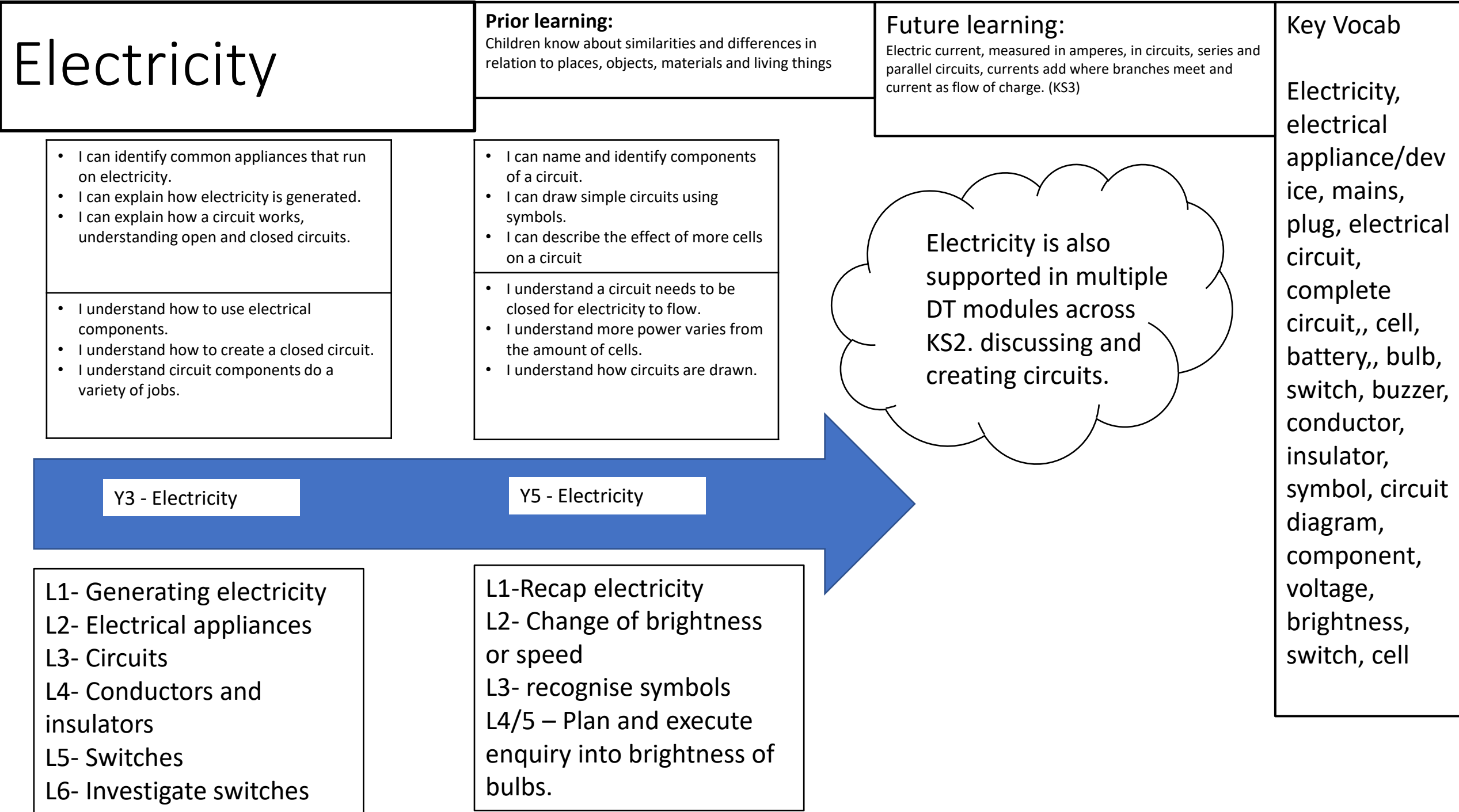
L1/2- Making new plants
L3- mammals
L4- Jane Goodall
L5- Metamorphosis
L6- Compare life cycles

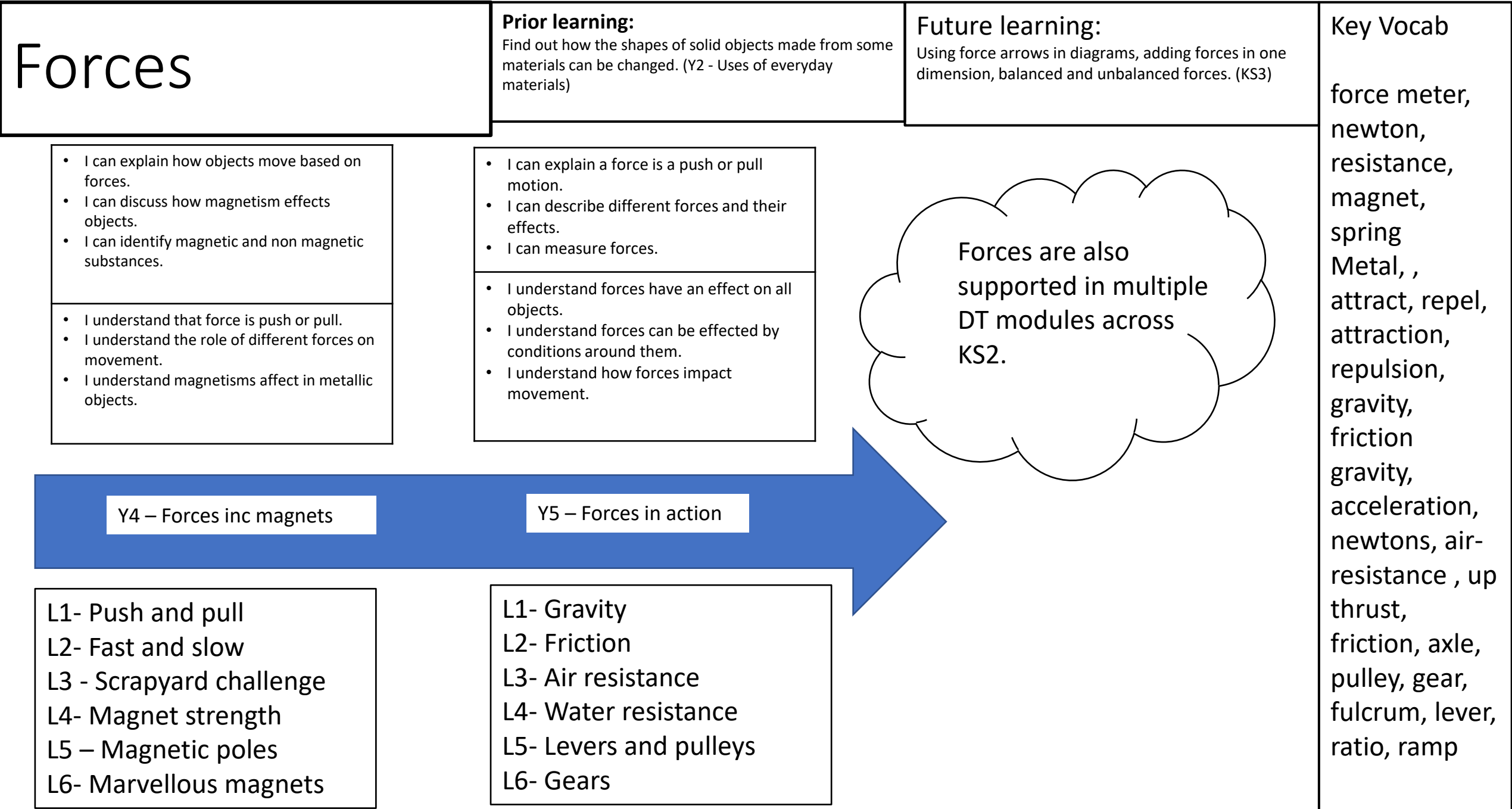
- L1-Life stages
- L2- Change in puberty
- L3 – Reproduction
- L4- change in old age
- L5- Life cycles

- L1- circulatory system
- L2- the heart
- L3- Blood
- L4- Lungs
- L5- risks and effects
- L6- healthy bodies

- L1- Inheritance
- L2- Adaptation
- L3 – Theory of evolution
- L4- evidence
- L5- evidence in humans
- L6- human intervention







Environment including plants

Prior learning:

Identify and name a variety of plants and animals in their habitats, including microhabitats. (Y2 - Living things and their habitats)
Find out and describe how plants need water, sunlight and suitable temperature to grow.(Y2)

Future learning:

Reproduction in plants, including flower structure, wind and insect pollination, fertilisation, seed and fruit formation and dispersal,. (KS3)

Key Vocab

environment,
habitat, human
impact, positive,
negative,
migrate,
hibernate
Photosynthesis,
pollen,
insect/wind
pollination,
seed formation,
seed dispersal
(wind dispersal,
animal
dispersal, water
dispersal)
Reproduce/
reproduction,
stamen, stigma,
sepal, petal,
ovary, pollen,
Style,
Germinate/
germination,

- I can describe different habitats.
- I can explain how animals live in different habitats.
- I can discuss how animals have adapted to live in certain environments

- I understand how environments can be different.
- I understand specific animals live in certain environments.
- I understand that certain animals have adaptations based on habitat.

- I can name parts of a plant.
- I can describe functions of a plant.
- I can explain pollination in plants

- I understand parts of a plant have different functions.
- I understand some plants need pollinators.
- I understand plants need conditions to grow.

- I can explain what an environment is.
- I can identify natural and man made environments.
- I can describe how humans affect the environment.

- I understand humans impact the environment.
- I understand the effect of pollution on water.
- I understand some affects are reversible and others are not.

- I can explain the difference between types of organisms.
- I can identify differences in life cycles of types of animals.
- I can describe the reproduction of plants.

- I understand all living things need to grow.
- I understand the importance of reproduction to living things.
- I understand the differences in organisms.

Y3 – Habitats

Y3 - Plants

Y4 - Environment

Y5 – living things and habitat

L1- Desert Habitats
L2-Polar Habitats
L3- Rainforest Habitats

L1- Parts of a plant
L2- What is needed to grow investigation
L3- Results
L4- moving water
L5-fantastic flowers
L6-Life cycle

L1- Environments
L2-Plastic
L3-Climate change
L4-Deforestation
L5- Make a difference

L1/2- Making new plants
L3- mammals
L4- Jane Goodall
L5- Metamorphosis
L6- Compare life cycles

States of matter

Prior learning:

Find out how the shapes of solid objects made from some materials can be changed. (Y2 - Uses of everyday materials)

Future learning:

Using force arrows in diagrams, adding forces in one dimension, balanced and unbalanced forces. (KS3)

Key Vocab

material,
solid, liquid,
gas, melt,
freeze,
dissolve,
solution
oxygen,
carbon
dioxide, air,
evaporation,
condensation
mixture,
dissolve,
solvent,
solute, soluble
, Insoluble,
filtration,
evaporation,
condensation,
solidify,
insulate

- I can explain how objects move based on forces.
- I can discuss how magnetism effects objects.
- I can identify magnetic and non magnetic substances.

- I understand that force is push or pull.
- I understand the role of different forces on movement.
- I understand magnetisms affect in metallic objects.

- I can explain a force is a push or pull motion.
- I can describe different forces and their effects.
- I can measure forces.

- I understand forces have an effect on all objects.
- I understand forces can be effected by conditions around them.
- I understand how forces impact movement.

Forces are also supported in multiple DT modules across KS2.

Y4 – Forces inc magnets

Y5 – Forces in action

L1- Solid liquid gas
L2- Investigate gas
L3 – Heat and cool
L4- Water
L5- Evaporation
L 6 – Water cycle

L1- Gravity
L2- Friction
L3- Air resistance
L4- Water resistance
L5- Levers and pulleys
L6- Gears

