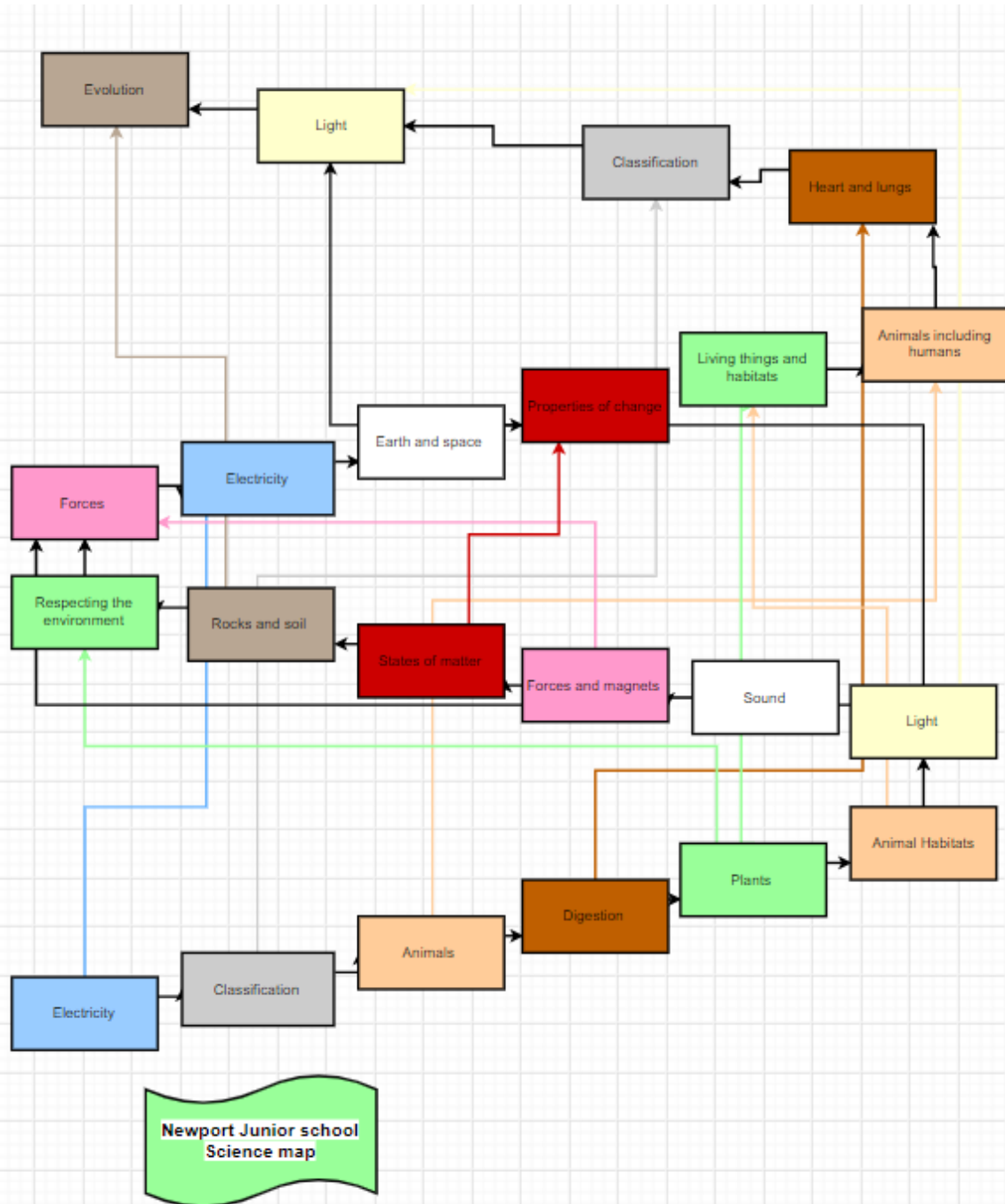


NJS Science strands

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



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)

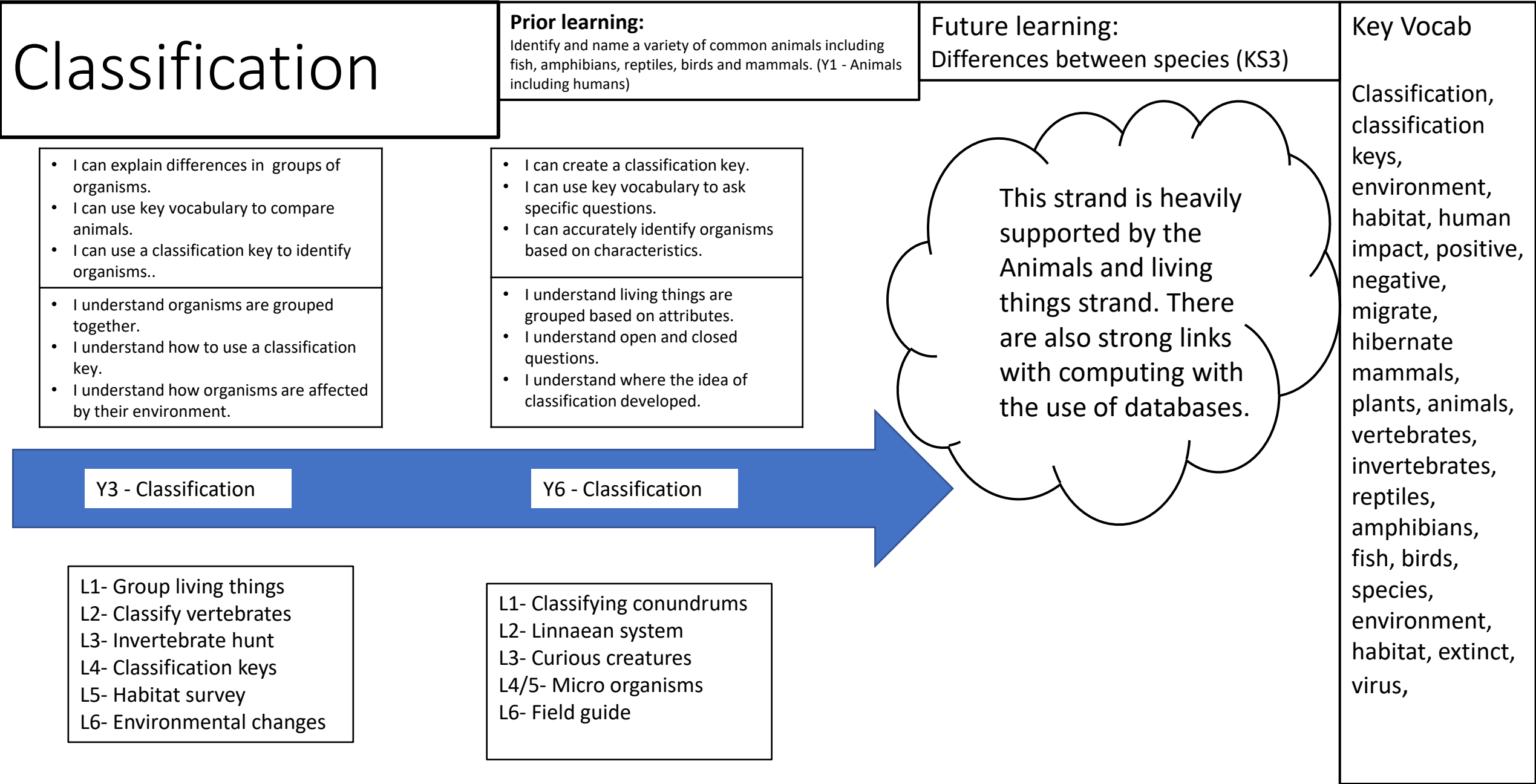
Key Vocab

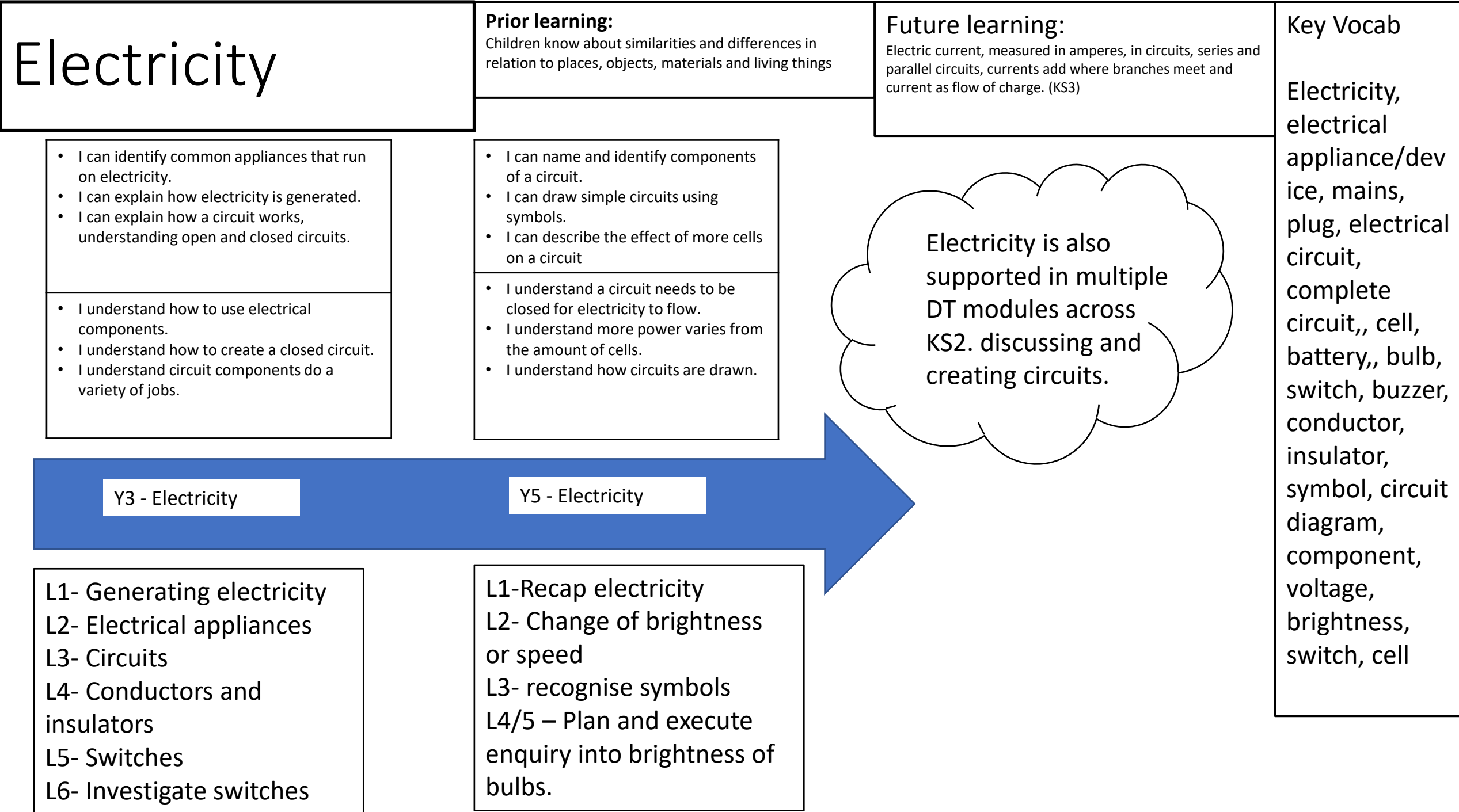
Carnivore,
herbivore,
omnivore,
skeleton, bones,
muscles, joints,
support, protect,
move,
spine
Digest, absorb,
mouth,
oesophagus,
stomach, small
intestine, excrete,
reproduction, life
cycle, babyhood,
childhood,
adolescence,
adulthood
Heart, circulation,
pulse,
muscle, blood
vessel, lung,
breathe
natural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

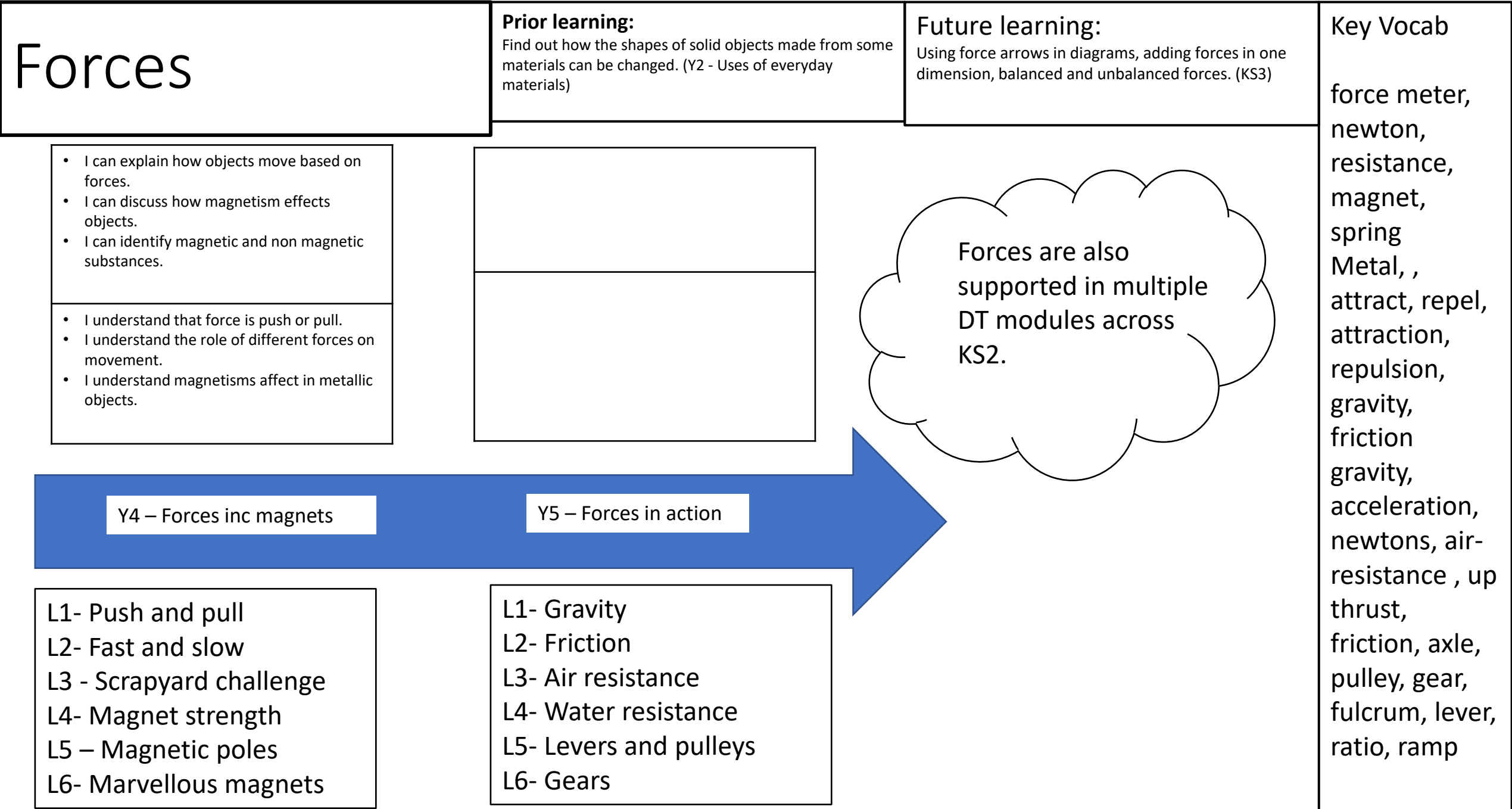
- I understand plants and animals have changed over time.
- I understand that Charles Darwin formed the theory of evolution.
- I understand animals need to adapt to survive.

Y6 – Evolution

- 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

