



LKS2 Science Curriculum and Knowledge Map



UKS2

Living things and their habitats-lifecycles, classification and reproduction.

Materials- Changes in state.

Forces- Effects of forces.

Earth and space

Animals including humans- changes in a human over age and the circulatory system.

Light- Explaining how we see things the way we do.

Electricity- representing and investigating circuits.

Evolution and inheritance- adaptation over time.

Plants recap (Biology)

I can summarise what happens in the different parts of the plant life cycle (advancing).

I can use my knowledge to prove that roots act like straws (deep).

Electricity (Physics)

I can name common appliances that run on electricity (basic).

I can construct a simple electrical circuit, locating and naming the basic parts (basic).

I can classify some common conductors and insulators (advancing).

I can investigate whether or not a lamp will light in a simple circuit (complete loop with a battery, if a switch is closed) (deep).

Sound (Physics)

I can describe how sounds are made and that vibrations from sounds travel through a medium to the ear (basic).

I can identify patterns between the pitch of a sound and features of the object that produced it (advancing).

I can identify patterns between the volume of a sound and the strength of the vibrations that produced it (advancing).

I can investigate what happens when the distance from a sound source increases (deep).

Materials (physics)

I can draw, label and identify solids, liquids and gases (basic).

I can compare materials according to whether they are solids, liquids or gases (advancing).

I can explain how materials change state when they are heated or cooled (advancing).

I can investigate the role of evaporation and condensation in the water cycle (deep).

Living things and their habitats (Biology)

I can describe what a classification key is and how it is used (basic).

I can classify a variety of living things using a classification key (advancing).

I can organise information about producers, predators and prey using a food chain and explain what a food chain shows (advancing).

I can research how climate change is affecting the food chain (deep).

Plants (Biology)

I can describe the functions of different parts of a flowering plant (basic).

I can describe how water is transported in plants (basic).

I can compare how the requirements of plants for life and growth vary from plant to plant (advancing).

I can explain the part that flowers play in the life cycle of flowering plants (advancing).

Animals (Biology)

I can describe the simple functions of the basic parts of the human digestive system (basic).

I can locate and label the different types of human teeth and describe their function (basic).

I can summarise what a healthy diet consists of and how it is chewed and digested (Deep).

Year 4

Light (physics)

I can describe what light and dark are (basic).

I can define reflection and describe why we need it to see objects (basic).

I can describe ways to protect our eyes from the sun (basic).

I can describe how shadows are formed (basic).

I can identify patterns between the size of shadows and distance between the object and light source (advancing).

Forces (physics)

I can locate and label the two poles on a magnet and describe why two magnets will attract or repel each other (basic).

I can classify magnetic and non- magnetic materials (advancing).

I can compare the distance magnetic forces and friction act at (advancing).

I can compare how things move on different surfaces and explain why (advancing).

Materials (chemistry)

I can describe how soils are made from rocks and organic matter (basic).

I can describe how fossils have been formed (basic).

I can compare the properties of different types of rocks (advancing).

Animals including humans

I can locate and label the main bones in the human body (basic).

I can describe the roles of the skeleton and muscles in the human body (basic).

I can give reasons why animals including humans need the right types and amount of nutrition (advancing).

Year 3

KS1

Seasonal change

Animals including humans- naming animals, animal groups, what do animals and humans need to survive.

Materials- Naming objects and materials, describing properties and grouping by property.

Plants and trees- name and compare plants and trees.

Describe how seeds and bulbs grow.
Living things and their habitats- Living, dead and never been alive, habitats.