EYFS

ELG (Understanding the world)

Children know about similarities and

differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur, and talk about changes.

<u>Year 1</u>

Classify animals/amphibians/reptiles. Mammals, Fish

Know and classify herbivore/carnivore/omnivore Know and sort living and non living

Know and name parts of body that can be seen

<u>Plants</u>

Know and name wild and garden plants Know and name petals, stems. Leaves and roots Know and name roots, trunk, branches and leaves

Everyday materials

Animals inc. humans

Know and name materials an object is made from Know properties of everyday materials

Seasonal changes

Name seasons and explain typical type of weather for each

Living things and habitats

Classify living/dead/never lived

Habitats provide basic needs for plants and animals Match living things to habitats. Name different sources of food Know and explain simple food chains

<u> Year 2</u>

Animals inc. humans

Know basic stages of life cycle in animals inc humans Know why exercise, a balanced diet and good hygiene is important

Plants

Know and explain how seeds/bulbs grow into plants Know what plants need in order to grow and stay healthy

Everyday materials

Know how materials can be changed by squashing, bending, twisting and stretching.

Know why a material might or might not be used for a specific job

<u>Year 3</u>

Animals inc. humans

Importance of a nutrition balanced diet How nutrients, water and oxygen are transported in animals/humans

Skeletal and muscular system in humans

<u>Plants</u>

Function of different parts of a flowing plant/tree Water is transported within plants

Life cycle of plant – importance of flower

Rocks

Compare/group rocks based on appearance/physical properties

Know how soil is made/how fossils are formed Difference between

sedimentary/metamorphic/igneous rock

Forces

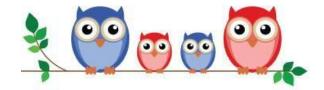
How objects move on different surfaces Simple pulley works Contact/non-contact force

Magnets – attract/repel

<u>Light</u>

Dark is absence of light Need light to see Reflected from a surface

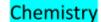
Demonstrate/explain shadows Dangers of direct sunlight



Victoria Road Primary School

Science End Points

Biology



Physics

Year 4 Animals inc. humans

Identify and name parts of the human digestive system. Know the functions of organs in human digestive system Identify and know different types /functions of human teeth. Use and construct food chains to identify producers, predators and prey

Living things and habitats

Use classification keys to group/identify/name living things Know how changes to an environment could endanger living things

Group materials based on their state of matter (solids, liquid, gas)

States of matter

Know the temperature materials change state Know and explore how materials can change state Know about evaporation/condensation in water cycle/

Electricity

Identify and name appliances that require electricity to function

Construct a series circuit

Identify/name components in series circuit

Predict/test whether lamp will light

Know function of switch

Differences between conductor/insulator with examples

<u>Sound</u>

Know how sound is made – vibrating

Know sound travels from source to ears

Year 6

Correlation between pitch and object producing a sound Correlation between volume and strength of vibrations Know what happens to a sound as it travels away from its source.

<u>Year 5</u>

Living things and habitats

Know the life cycle of different living things – mammal, amphibian, insect & bird. Know the differences between different life cycles

Process of reproduction in plants

Process of reproduction in animals

Animals inc humans

Timeline indicating stages of growth in humans

Properties and changes in materials

Compare and group materials based on properties – hard soluble, transparency, conductivity, electrical, thermal, magnetic

Know and explain how materials dissolve to form a solution

Know and show how to recover a substance from a liquid

Know and demonstrate materials can be separated

Reversible/irreversible changes

Changes can result in formation of a new material which is usually irreversible

<u>Forces</u>

Know what gravity is and its impact on our lives

Identify and show effect of air and water resistance

Identify and know effects of friction Explain levers, pulleys and gears work

Earth & space

Know about and explain movement of Earth and other planets relative to the sun Know about and explain movement of the moon relative to Earth

Know and demonstrate how day and night are created

Describe the sun, earth & moon using term spherical

Animals inc humans

Identify and name main parts of circulatory system

Know function of heart, blood vessels and blood

Know impact of diet, exercise, drugs, lifestyle on health

Know ways nutrients and water are transported in animals inc humans

Living things and habitats

Classify living things into broad groups according to observable characteristics based on similarities and differences

Know how living things have been classifies

Give reasons for classifying plants and animals in specific ways

Evolution & inheritance

Know how Earth and living things have changed over time

Know how fossils can be used to find out about the past

Know about reproduction and offspring

Know how plants and animals are adapted to suit their environment

Link adaptation over time to evolution

Know about evolution and can explain what it is

Electricity

Compare and give reasons why components work /don't work in circuits

Draw circuit diagrams using correct symbols

Know how number and voltage of cells in a circuit links to brightness of bulb or volume of buzzer

<u>Light</u>

Know how light travels

Know and demonstrate how we see objects

Know why shadows have the same shape as the objects that cast them

Know how simple optical instruments work-periscope, telescope, binoculars etc