Science Long term plan

 **Cycle B – 2021 - 2022**

Brisons Class Year 1/2

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| Autumn Term 1 | Autumn Term 2 | Spring Term 1 | Spring Term 2 | Summer Term 1 | Summer Term 2 |
| **All About me**Animals including humans-identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense |  | **Marvellous Mixtures**Everyday Materials-distinguish between an object and the material from which it is made-identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock-describe the simple physical properties of a variety of everyday materials-compare and group together a variety of everyday materials on the basis of their simple physical properties | **Our Magical Garden** Plants-identify and name a variety of common wild and garden plants, including deciduous and evergreen trees-identify and describe the basic structure of a variety of common flowering plants, including treesSeasonal Changes-observe changes across the 4 seasons-observe and describe weather associated with the seasons and how day length varies. | **Mad about Minibeasts**Animals including humans-identify and name a variety of common animals including, fish, amphibians, reptiles, birds and mammals-identify and name a variety of common animals that are carnivores, herbivores and omnivores-describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets) | **Our Local Environment**Seasonal Changes -observe changes across the 4 seasons-observe and describe weather associated with the seasons and how day length varies. |

Longships Class Year 3/4

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| Autumn Term 1 | Autumn Term 2 | Spring Term 1 | Spring Term 2 | Summer Term 1 | Summer Term 2 |
|  | **Predators**Animals including humans-identify that humans and some other animals have skeletons and muscles for support, protection and movement-construct and interpret a variety of food chains, identifying producers, predators and prey |  | **The Deep Blue**Electricity-identify common appliances that run on electricity-construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers-identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery-recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit-recognise some common conductors and insulators, and associate metals with being good conductors | **Tremors**Forces & Magnets-compare how things move on different surfaces-notice that some forces need contact between 2 objects, but magnetic forces can act at a distance-observe how magnets attract or repel each other and attract some materials and not others-compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials-describe magnets as having 2 poles-predict whether 2 magnets will attract or repel each other, depending on which poles are facingRocks-compare and group together different kinds of rocks on the basis of their appearance and simple physical properties-describe in simple terms how fossils are formed when things that have lived are trapped within rock-recognise that soils are made from rocks and organic matter | **The Human Body**Animals including Humans- identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat-describe the simple functions of the basic parts of the digestive system in humans-identify the different types of teeth in humans and their simple functionsSound-identify how sounds are made, associating some of them with something vibrating-recognise that vibrations from sounds travel through a medium to the ear-find patterns between the pitch of a sound and features of the object that produced it-find patterns between the volume of a sound and the strength of the vibrations that produced it-recognise that sounds get fainter as the distance from the sound source increases |

**Cycle B – 2021 - 2022**

Cowloe Class Year 5/6

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| Autumn Term 1 | Autumn Term 2 | Spring Term 1 | Spring Term 2 | Summer Term 1 | Summer Term 2 |
| **Space** - describe the movement of the Earth and other planets relative to the sun in the solar system-describe the movement of the moon relative to the Earth.-describe the sun, Earth and moon as approximately spherical bodies.-use the idea of the Earth’s rotation to explain day and night and the apparent movement of the sun across the sky.Forces-explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object | **Crime & Punishment** | **Frozen Planet**Living things and their habitats -describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird-describe the life process of reproduction in some plants and animals-describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals-give reasons for classifying plants and animals based on specific characteristics | **Darwin’s Delights**Evolution and inheritancerecognise that living -things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago-recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents-identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution |  | **Rivers / Local Study**Properties and changes of Materials-compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets-know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution-use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating-give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plasticdemonstrate that dissolving, mixing and changes of state are reversible changesexplain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda. |