Science linked to the Curriculum Drivers

|  |  |
| --- | --- |
| **Curriculum Driver** | **Links to Science** |
| Christianity and Faith | In Science we promote spiritual awareness by asking the children the bigger questions to allow them to be more engaged and motivated within their learning. This will help the children flourish and have a more positive approach to their learning. You will also see Christian values within science lessons such as teamwork (working together on a science investigation), trust, respect (respect each other’s views and ideas) and creation (linked to evolution and inheritance in Upper KS2 where they learn about characteristics which are passed from parents to their offspring. Creating ideas on how to answer the bigger questions or how to present their findings in different ways). |
| Our Local Area | In reception they will explore the local area looking at similarities and differences between contrasting environments.  In KS1: we will learn about identifying a variety of plants within the local area as well as learning about what local farmers produce. This will also link into animals including humans where we look at offspring and identifying a range of animals. Look at their pets. (school chicks, caterpillars in the school yard).  In Lower KS2: They will explore different kinds of rocks and soils within the local area and identify differences and similarities between the different samples. They will also be observing different stages of plant life cycles.  In Upper KS2: They will observe life-cycle changes in a variety of living things, for example plants in the vegetable garden and animals within the local area. They will discuss how where we live will impact our lifestyles. (Diet, exercise, drugs) |
| Outdoor Growing, Learning and Environment | In reception they will learn to understand the effect the different seasons has on the environment around them and will use their senses to explore the outdoor area.  Making observations of different animals and plants within the surrounding area.  In KS1: observe plants and how they grow from bulbs and seeds and look at what we can grow ourselves (different plants and vegetables), look at what animals we may find within different habitats (including micro habitats). Look at the seasonal changes and observe the different weather within each season and how the environment changes.  In Lower KS2: They will explore light sources and know ways to protect their eyes from the sun and will also explore shadows.  They will also learn how to use a classification key to help group and identify living things within their local area as well as the wider environment.  Upper KS2 will observe and compare the life cycles of animals and plants within our environment as well as in the wider world. |
| Wider World and Diversity | In Reception they will talk about different factors that effect our overall health and wellbeing and begin to understand that everyone’s way of life is different.  In KS1: we will explore the uses of different materials which will have an effect on the wider world, for example which materials would be best to use to build different buildings, for example: a shed, house, greenhouse.  In Lower KS2: They will learn about forces and magnets where they will learn how forces help a range of objects to move within the wider worlds. They will also explore examples of human impact (both negative and positive) on environments within the locality or wider world.  Lower KS2 will also explore and identify the way sound is made through a range of different musical instruments from around the world.  Upper KS2: they will find out about the work of David Attenborough and Jane Goodall, as well as life cycles of animals within the wider world (in oceans, rainforest)  They will also learn about Earth and space (including the eight planets) and will be able to explain how we have day and night look at the work of some scientists such as Isaac Newton and Ptolemy.  During evolution and inheritance upper KS2 will learn about how living things on earth has changed over time. (Different breeds of dogs) |

School trips ideas linked to Science:

* Life Centre in Newcastle <https://www.life.org.uk/schools/workshops/>
* Discover museum (Newcastle) [Virtual School Workshops | Discovery Museum](https://discoverymuseum.org.uk/virtual-learning-opportunities)
* [Directory - Provider Type - School Workshops - A-life Interactive Health & Wellbeing Workshops (ukschooltrips.co.uk)](https://www.ukschooltrips.co.uk/school-workshops/2344-a-life-health-fitness-workshops-for-schools.html)
* Talkin Tarn, Brampton linked to naming plants.
* <https://www.ukschooltrips.co.uk/school-day-trip-destinations/2016-science-dinosaur-digital-mobile-dome>