|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Subject** | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| **EYFS** | **Woodland walks in Class 1 (Each visit has been documented on the Class 1 website page)**  Over the year the children will be going up to the woods to explore and learning about a variety of things. Some of these being:   * Using **observational** skills to see the seasonal changes throughout the year. * Looking at animals and exploring their habitats. * **Comparing** the different animals we see in the woods compared to school. * **Grouping** and **classifying** the lifecycles of animals we find e.g. caterpillars, spiders. * **Predicting** what has made the tracks/marks on the grounds. * Discussing our thoughts on how shadows are formed. * **Predicting** and **discussing** which direction the sounds are coming from and what is making the sounds. * **Exploring** puddles, how these are formed and how deep they are. * **Observing** the weather changes over the year as we visit. * Using our 5 senses to explore the world around us. * Finding different things that are edible e.g. blackberries. | | | | | |
| **Bodies**  Focussing on ourselves – naming body parts and understanding why it is important to look after our bodies.  Looking at the 5 senses, what these are and how these help us to experience the world. **Grouping** different objects into the different senses understanding that we may use more than 1 sense at a time.  Keeping healthy – washing hands and how to prevent germs spreading, brushing teeth.  Looking at healthy choices for food – making a healthy pizza and fruit kebabs. | **Seasonal changes**  **Observing** the seasonal changes from summer to autumn and then autumn to winter.  Looking at **changes over time** to see if there are any patterns in the weather changes within that season.  Birds – using a real bird’s nest to **explore** how these are made and why birds have next. (Went on to make signs for people to peg their own animal fur to the fence to help the birds make their nests).  Looking at animals that hibernate and migrate (understanding this vocabulary).  Making our own hedgehog house. | **Dinosaurs**  **Grouping** and **classifying** herbivores, carnivores and omnivores and understanding what they eat and the dinosaur features.  Looking at the different types of dinosaurs and what they used to defend themselves. | **Life cycles**  **Exploring** living things and their lifecycles (frogs, caterpillars, plants, farm animals).  **Observing** and discussing findings of lifecycles in our classroom (frogspawn, seeds and caterpillars).  **Grouping** and **classifying** animals into their habitats.  Farm animals – what makes them farm animals, what produce do they provide us?  **Planting** seeds – understanding where seeds come from, how they grow and what they need (air, soil, sunshine and water).  Being able to identify the simple parts of a plant and talk about their purpose.  **Observing** the seasonal changes from summer to autumn and then autumn to winter.  Looking at **changes over time** to see if there are any patterns in the weather changes within that season. | **Floating and Sinking**  **Exploring**, **predicting** and **testing** what floats and what sinks – linking this to space and touching on gravity being the invisible force that holds us down.  Exploring the forces of pushes and pulls and investigating which injects travels the furthest and why.  **Space**  Looking at the planets within our solar system.  Linking what we know we need to survive and how we achieve these basic human needs on earth. Discussing why we wouldn’t be able to live on other planets use to the lack of elements we need. | **Animals**  Looking at animals around the world and comparing them different types of animal’s e.g. Antarctic animals and safari animals.  **Sorting** and **grouping** the animals into their natural habitats. Looking at their coats to **discuss** camouflage from predators.  Matching animals to their young.  **Observing** the seasonal changes from summer to autumn and then autumn to winter.  Looking at **changes over time** to see if there are any patterns in the weather changes within that season. |
| **1 and 2** | **Materials**  Different types of material - **classification**  **History link – house materials**  **Investigate** the different uses of materials i.e. waterproofing**,** floating and sinking –**Prediction, conclusion, observations**  **English link Mr. Grinling`s new hat**  **History link – Grace Darling -lifeboats**  Plastic project looking at Reduce, Reuse and Recycle –**Classifying objects, discussion**  **English link – story Life of a Plastic Bottle**  **Research- Scientist who discovered materials**   * Cameron Mackintosh - waterproofing * Alexander Parkes – plastic - | | **Seasons**  **Observations**  **Changes over time**  Seasonal changes  Weather – weather station  **Maths links reading scales**  Hot and Cold climates  **Geography Link**  **China** | **Plants**  Naming plants/trees –**Classifying**  **English link – trees and fruit**  Naming parts of a plant, plant hunt  **Investigating** **and predicting**  **Changes over time**  What plants need to survive including germination  Lifecycle of a plant  Planting and growing vegetables for cooking    **Discussion**  Greenhouses and climate change – **Blue Planet Live Teach**  **Inventors – Eden Project** | **Animals**  Different animal groups – **classifying habitats,comparing**  Different habitats  Migration  Offspring – lifecycles – Osprey  Food chains  **Discussion, research, comparing**  **Assembly and workshop from Rutland Osprey Team**  **Geography Link – countries the Osprey fly across**  **Link –Geography migration** | **Animal and humans**  **basic needs** – food, air, habitat, food chains  **Healthy Eating –**  Food groups **- Classifying**  Link to:  **Where does our food come from?** Farm Link  Link to plants topic – growing food  **English link – book – How did that get in the lunch box?** |
| **3 and 4**  **Following Year 4 curriculum 2018/19** | **States of Matter**  **Compare and group** materials together, according to whether they are solids, liquids or gases  **Observe** that some materials change state when they are heated or cooled  Identify the part played by evaporation and condensation in the water cycle | **Sound**  **Identify** how sounds are made  **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 | **Electricity**  To know that a complete circuit is needed for a device to work  To **investigate** switches and changes to circuits  To **investigate** electrical conductors  To understand the difference between energy sources and forms  To understand how we have save energy when using electricity | **Animals including humans**  Simple functions of the digestive system.  **Investigate** what happens to food once we have swallowed it.  Different teeth in both humans and animals.  To identify the different types of teeth  To explain how to look after our teeth and prevent tooth decay | **Living things and their habitats**  Grouping living things in a variety of ways-**classifying objects**  **Investigate** what can effect an animal’s environment or endanger it. | **Animals including humans**  Food chains and identifying predators and producers etc.- **classifying objects**  SRE |
| **5 and 6**  **Following Year 6 curriculum 2018/19** | **Light**  How light travels  How we see things  The eye  Reflective materials (music videos)  Sc6/1.1     **Pupils plan investigations to prove that line does travel in a straight line.**  Pupils plan investigation into length of shadows changing. They identify variables which must remain controlled and the importance of only one variable in order to ensure fair testing.  **Sc6/1.2 Pupils record results with accuracy and make conclusions from these.** | **Electricity**  Circuits and components recap from previous year.  Sc6/4.2a    associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. This is done through practical experiments and observations  Sc6/4.2b    compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches. Predictions are then made based upon observations  Sc6/4.2c    use recognised symbols when representing a simple circuit in a diagram.  Eco-friendly and renewable energy sources  How we can conserve energy (including current technologies) and ‘energy conserved, life preserved’ | Evolution and Inheritance  Sc6/2.3a    recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago  Sc6/3.2b    recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. This is done through the study of animals, and by studying photographs of their parents and themselves to identify which physical characteristics have been passed on via their DNA.  Sc6/2.3c    identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. Study the work of Charles Darwin (history link) as a pioneer and how his theory of evolution was supported by the evidence he collected whilst voyaging on the HMS Beagle.  Visit from ‘Animal Interactions’  Animals including humans  Sc6/2.2a    identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. Link to English by writing an explanation text or story of from the perspective of a red blood cell.  Sc6/2.2b    recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function Link to maths and creating line graphs from the data collected from the relationship between HR and exercise intensity  Sc6/2.2c    describe the ways in which nutrients and water are transported within animals, including humans. | | SRE | Investigation skills  **Working Scientifically**  [**Lung Volume**](http://www.sciencekids.co.nz/experiments/lungvolume.html)  Test how fit and healthy you are by completing this experiment that measures how much air your lungs can hold  Bending water  with static electricity. Children make predictions about what will happen. Observation and explanation as to how and why. |