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| **ymhcorner.jpg** | **Long Term Plan** | **Subject area - SCIENCE** | **Area of learning – SCIENCE AND TECHNOLOGY** | **Department- KS3**  | **Year- 1** |
|  | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| **Theme or Topic** | Sc2 Life ProcessesCharacteristics Of Living Things | Sc2 Life ProcessesCharacteristics Of Living Things | Sc3 MaterialsGrouping And Classifying Materials | Sc3 MaterialsGrouping And Classifying Materials | Sc4 Physical ProcessesForces And Motion | Sc4 Physical ProcessesForces And Motion |
| **Knowledge and skill** **areas covered**  | * To differentiate between alive and never alive
* To know some of the features of living things
* MRS GREN
* To know that animals include minibeasts, fish, reptiles, amphibians, birds and mammals
* To know that there is a range of ways animals move, feed, etc.
* To know that all animals move, feed, grow, use senses and reproduce
* To know that plants grow bigger and change in shape and appearance
 | * To know that plants do not take in food through the roots
* To be able to describe life processes using correct vocabulary
* To know that nutrition is eating and drinking and all animals do this
* To know that all animals move about
* To know that all animals get bigger as they get older
* To know that plants make more of themselves
 | * To be able to identify similarities and differences between materials
* To be able to sort and group materials in different ways
* To explore magnetism, transparency, floating and sinking
* To be able to name different types of materials and use some of the correct vocabulary
* To identify materials as either natural or man-made
* To be able to list different uses for particular materials
 | * To be able to test materials for properties
* To know that electricity travels through some materials and identify conductors and insulators
* To know that heat travels through some materials and identify conductors and insulators
* To be able to use a thermometer
* To be able to classify materials as solid, liquid or gas
* To know the main simple properties of solids, liquids and gases
 | * To explore and observe different pushes and pulls and describe the movements as fast, slow, turn, go round
* To describe how to make things speed up, slow down, stop or change direction
* To identify movements as pushes and pulls
* To know that squeezing, bending, twisting and stretching can change the shape of objects
* To explore what happens when magnets are put near one another
* To know that friction is a force and happens when two surfaces rub over each other
 | * To recognise some everyday examples of friction which can be useful or a nuisance
* To describe the effects of pushing and pulling springs
* To use various forcemeters to measure pushes and pulls
* To know that the bigger the force, the greater the effect and that the unit of measurement is the Newton (N)
* To know that objects fall down because of gravity
* To identify weight as a force and is due to the pull of gravity
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| **LNF Links** | * Literacy – to take an interest in information beyond their personal experience
* Numeracy – collect and record data and interpret results
 | * Literacy – to use vocabulary related to the topic
* Numeracy – compare, sort and order in terms of size
 | * Literacy – to use vocabulary related to the topic
* Numeracy – sort and classify objects using more than one criterion
 | * Literacy – follow a structure when writing a report
* Numeracy – compare temperatures using a thermometer (°C)
 | * Literacy – explain main ideas with supporting details including observations and explanations where relevant
* Numeracy – explain results and procedures clearly using mathematical language
 | * Literacy – use a range of strategies for finding information
* Numeracy – use standard units of measurement for weight / mass up to 1kg
* Numeracy – multiply by 10
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| **DCF Links** | * Citizenship – identity, image and well-being
* Data and computational thinking – problem solving and modelling
 | * Producing – planning, sourcing and searching
* Producing - creating
 | * Data and computational thinking – problem solving and modelling
 | * Data and computational thinking – data and information literacy
 | * Data and computational thinking – problem solving and modelling
 | * Producing – planning, sourcing and searching
* Producing - creating
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| **Cross curricular links** | ArtGeography | ArtGeography | D & T | D & T | PE | PE |
| **4 Purposes of the curriculum** | * Ambitious, capable learners who;

Are building up a body of knowledge and have the skills to connect and apply that knowledge in different contexts | * Healthy, confident individuals who:

Apply knowledge about the impact of diet and exercise on physical and mental health in their daily lives | * Ambitious, capable learners who:

Are questioning and enjoy solving problems* Enterprising, creative contributors who:

Think creatively to reframe and solve problems | * Ambitious, capable learners who:

Can use number effectively in different contexts | * Healthy, confident individuals who:

Take part in physical activity | * Ambitious, capable learners who:

Can explain the ideas and concepts they are learning about* Ambitious, capable learners who:

Can use number effectively in different contexts |

**Guidance on completing the Long term plan form**

The form is pretty self explanatory:-

**Area of learning** – this relates to the 6 areas of learning and experience in Donaldson’s report

**Theme or Topic –** the title / focus for the module

**Knowledge and skill areas covered -** what the pupils will learn over the course of the module

**LNF Links –** Numeracy and literacy links incorporated into the planning

**DCF Links –** Links to the new digital framework

**Cross curricular links –** across other curriculum areas not covered by LNF / DCFIncluding Welsh language and culture

**4 Purposes of the curriculum –** as taken from Donaldson Report. Each of the 4 purposes have a number of statements so place in the purpose / statements areas that are relevant to the module.