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| **Pendeen SCIENCE SCOPE, CONTENT and SEQUENCING Year A KEY STAGE 1** |
| Year Group: 1 / 2 | Half term: Autumn term 1 YEAR A | SCOPE: Use of everyday materials | CONTENT / INTENT * identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
* find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching
 |
| Prior Learning | Lesson 1 | Lesson 2 | Lesson 3 | Lesson 4 | Lesson 5 | Lesson 6 | Future Learning |
| **-** 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 based on their simple physical properties. | LO: To be able to investigate different properties of materials | LO: To be able to record the different properties of materials | LO: To plan model a sculpture out of clay using its physical properties | LO: To model a piece of clay using its physical properties | LO: To be able to write about and evaluate our clay models | LO: To be able to manipulate different materials, clay, plasticine and modelling clay into different objects | Yr. 3 – Rocks - Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.Memory book and use low stake questioning to embed into long-term memory. Continue learning following year B curriculum plan |
| SC:To explore materials in their local environment | SC:To use simple data recording to present their findings and classify their materials | SC:To understand a material can be used for more than one thing | SC:To make a suitable object out of the material they are using to produce and everyday object | SC:To use scientific vocabulary to evaluate the model and its particular uses | SC:To investigate and explain scientifically how materials can be manipulated in various ways |
| See previous year groups vocabulary box in this document. | **Vocabulary:**Stretchy, Bouncy, Material, Solid, Property, Elasticity, Plasticity, Compress, Strength, Stretch, Bend, Flexibility, Elasticity, Plasticity, Rigid |

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| **Pendeen SCIENCE SCOPE, CONTENT and SEQUENCING Year A KEY STAGE 1** |
| Year Group: 1 / 2 | Half term: Autumn term 2YEAR A | SCOPE:Uses of everyday materials  | CONTENT / INTENT: * identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
* find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching
 |
| Prior Learning | Lesson 1 | Lesson 2 | Lesson 3 | Lesson 4 | Lesson 5 | Lesson 6 | Future Learning |
| **-** 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 based on their simple physical properties | LO: To be able to investigate the physical properties of a parabola shape (egg shells) | LO: To be able to compare the physical properties of paper and carboard through an experiment | LO: To be able to link the physical properties of a material to its use, using floating and sinking | LO: To understand the physical properties of boat design and the use of materials | LO: To understand how materials have been used in history | LO: TO be able to write an instructional text on siege engines | Yr. 3 – Rocks - Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.Memory book and use low stake questioning to embed into long-term memory. Continue learning following year B curriculum plan |
|  | SC:To find out how to manipulate different materials | SC:To squash, bend and manipulate materials | SC:To compare the suitability of everyday materials | SC:To compare the suitability of everyday materials and their uses | SC:To understand how materials have been used for particular uses over time | SC:Write an instructional text meeting the programme of study for writing in year 2 |  |
| See previous year groups vocabulary box in this document. | **Vocabulary:**Float, Buoyancy, Density, Mass, Weight, Submerged, Springy, Elastic, Plastic, Material, Property |

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| **Pendeen SCIENCE SCOPE, CONTENT and SEQUENCING Year A KEY STAGE 1** |
| Year Group: 1 / 2 | Half term: Spring term 1 YEAR A | SCOPE: Plant growth | CONTENT / INTENT: * observe and describe how seeds and bulbs grow into mature plants
* find out and describe how plants need water, light and a suitable temperature to grow and stay healthy
 |
| Prior Learning | Lesson 1 | Lesson 2 | Lesson 3 | Lesson 4 | Lesson 5 | Lesson 6 | Future Learning |
| -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 trees. -Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees | LO: To understand the conditions that plants need to grow | LO: To identify the conditions plants need to germinate | LO: TO investigate water, light on temperature on plant growth | LO: To understand what plants need to survive | LO: To observe over time how plants grow in different habitats | LO: TO be able to record my results after observing over time | **Yr. 3 – Plants -** Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.**Yr. 3 – Plants -** Investigate the way in which water is transported within plants.**Yr. 3 – Plants -** Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.**Yr. 3 – Plants -** Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant. Memory book and use low stake questioning to embed into long-term memory.  |
| S SC:et up an experiment to observe plant growth over time | SC:Observe and record plant growth over time | SC:To observe and record the different environments on plant growth | SC:To use the local environment to understand how plants grow and survive | SC:To use simple measurements and equipment to record growth over time | SC:To use a range of ways to record their findings with the use of scientific language |
| See previous year groups vocabulary box in this document. | **Vocabulary:**Growth, Nutrients, Sunlight, Warmth, leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud, bulb, germination, shade, nutrient,  |

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| **Pendeen SCIENCE SCOPE, CONTENT and SEQUENCING Year A KEY STAGE 1** |
| Year Group: 1 / 2 | Half term: Spring term 2YEAR A | SCOPE: Planting and growing | CONTENT / INTENT: * observe and describe how seeds and bulbs grow into mature plants
* find out and describe how plants need water, light and a suitable temperature to grow and stay healthy
 |
| Prior Learning | Lesson 1 | Lesson 2 | Lesson 3 | Lesson 4 | Lesson 5 | Lesson 6 | Future Learning |
| -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 trees. -Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees | LO: To be able to use their growing knowledge to grow some vegetables | LO: To be able to use the school garden and polytunnel to compare plant growth | LO: To be able to observe and record data of plant growth in garden and poly tunnel | LO: To be able to write a fact file about successful plant germination  | LO: To be able to write a fact file about successful plant germination | LO: To be able to harvest their plants and compare plant growth and explain findings | **Yr. 3 – Plants -** Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.**Yr. 3 – Plants -** Investigate the way in which water is transported within plants.**Yr. 3 – Plants -** Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.**Yr. 3 – Plants -** Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant. Memory book and use low stake questioning to embed into long-term memory.  |
|  | SC:To use the local environment to observe and ask scientific questions about growing  | SC:To use simple equipment to set up experiment | SC:To observe in small groups and present their findings using scientific language | SC:To use their results to write a fact file meeting the programme of study for writing in year 2 | SC:To use their results to write a fact file meeting the programme of study for writing in year 2 | SC:To present their findings to the class and begin to understand ways they can answer scientific questions |  |
| See previous year groups vocabulary box in this document. | **Vocabulary:**Growth, Nutrients, Sunlight, Warmth, leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud, bulb, germination, shade, nutrient, |

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| **Pendeen SCIENCE SCOPE, CONTENT and SEQUENCING Year A KEY STAGE 1** |
| Year Group: 1 / 2 | Half term: Summer term 1YEAR A | SCOPE: Animals including humans | CONTENT / INTENT: * notice that animals, including humans, have offspring which grow into adults
* find out about and describe the basic needs of animals, including humans, for survival (water, food and air)
* describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene
 |
| Prior Learning | Lesson 1 | Lesson 2 | Lesson 3 | Lesson 4 | Lesson 5 | Lesson 6 | Future Learning |
| Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. | LO: To understand the life cycle of a human and animal | LO: To be able to understand what animals need to survive | LO:To understand the need of a balanced nutritious diet | LO: To be able to understand the need for exercise and the impact on the body | LO: To be able to understand the importance of hygiene in our personal care and for others around us | LO: to be able to write a fact file on caring for a pet | **Yr.3 – Animals including Humans -** identify that humans and some other animals have skeletons and muscles for support, protection and movement.Memory book and use low stake questioning to embed into long-term memory. Continue learning following year B curriculum plan |
| SC:To know that all animals and humans can have off spring and they grow into adults | SC:Find out about and describe the basic needs of animals, including humans, for survival (water, food and air) | SC:Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene | SC:Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene | SC:Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene | SC:To use their knowledge to write a fact file meeting the programme of study for writing in year 2 |
| See previous year groups vocabulary box in this document. | **Vocabulary:**Life Cycle, Gestation, Adult, Adolescent, Survival, Necessary, Nutrition, Survival, Cardiovascular, Resistance, Strength, Stamina, Health, Benefit, Long-term, Hygiene, Germ, Bacteria, Virus, Health, Antibacterial, Health, Dental, Oral |

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| **Pendeen SCIENCE SCOPE, CONTENT and SEQUENCING Year A KEY STAGE 1** |
| Year Group: 1 / 2 | Half term: Summer term 2YEAR A | SCOPE: Living things and their habitats | CONTENT / INTENT: * explore and compare the differences between things that are living, dead, and things that have never been alive
* identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other
* identify and name a variety of plants and animals in their habitats, including microhabitats
* describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food
 |
| Prior Learning | Lesson 1 | Lesson 2 | Lesson 3 | Lesson 4 | Lesson 5 | Lesson 6 | Future Learning |
| describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). | LO: To understand what is dead, living and never alive | LO: To be able to name different habitats | LO To be able to build a micro habitat | LO: To be able to observe a micro habitat over time | LO: To be able to understand carnivores, herbivores and omnivores | LO: to be able to understand a food chain | **Yr. 4 Living Things and their Habitats -** Recognise that living things can be grouped in a variety of ways.**Yr. 4 Living Things and their Habitats -** Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.**Yr. 4 Living Things and their Habitats -** Recognise that environments can change and that this can sometimes pose dangers to living things.-Memory book and use low stake questioning to embed into long-term memory. Continue learning following year B curriculum plan |
| SC:Explore and compare the differences between things that are living, dead, and things that have never been alive. | SC:Identify that most living things live in habitats to which they are suited  | SC:Identify different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other | SC:Identify different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other | SC:Describe simple food chain, and identify and name different sources of food.Describe how animals obtain their food from plants and other animals | SC:Describe simple food chain, and identify and name different sources of food. |
| See previous year groups vocabulary box in this document. | **Vocabulary:**Dead, Alive, Animate, Inanimate, Sensitive, Respiration, Excretion, Reproduction, Habitat, Adaption, Insect, Organism, Classify, Food Chain, Predator, Prey, Producer, Carnivore, Herbivore, Omnivore, Hunter, Apex |