| **Science Year 2 Medium Term Planning – Advent 1: Living things and their habitats** | | | | | | | | | | | | | |
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| **National Curriculum**   * 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 vocabulary knowledge**  habitat, animal, plant, living, carnivore, herbivore, omnivore | | | | | | | | | | | | | |
|  | | Lesson 1 | | Lesson 2 | | Lesson 3 | | Lesson 4 | | Lesson 5 | | Lesson 6 | |
| **Learning intention** | | What is alive and what is not? | | What do all living things have  in common? | | Where do plants and animals live? | | What plants and animals live in our local environment? | | What are food chains? How are they connected? | | Why do plants and animals need each other? | |
| **Working Scientifically** | | Observing closely, using simple equipment. | | Asking simple questions and recognising that they can be answered in different ways. | | Observing closely, using simple equipment. | | Observing closely, using simple equipment.  Gathering and recording data to help in answering questions. | | Researching from secondary sources. | |  | |
| **Recall and retrieval** | | CQ: 1-6 | | CQ: 1-6 | | CQ: 7-9 | | CQ: 7-9 | | CQ: 10-13 | | CQ: 14-16 | |
| **Sequence of knowledge throughout the lesson** | | **Key knowledge**  To know the meaning of vocabulary that will be used throughout the topic.  To know if something is alive, once alive or has never been alive.  To begin to understand the mnemonic MRS GREN.  DECIDING:  Sorting objects according to alive, once alive, never alive. | | **Key knowledge**  To begin to know the meaning of MRS GREN and perform the related actions.  To know what plants need to survive.  To know what animals need to survive. | | **Key knowledge**  To observe plants and animals- in the local environment and in photos.  Use MRS GREN to decide if something is alive.  To know what a woodland is and animals that make their habitat there.  To know what a microhabitat is and animals that make their habitat there.  To talk like a scientist to explain their thoughts about how plants and animals need each other. | | **Key knowledge**  Recall MRS GREN and demonstrate what each letter represents.  To explore a microhabitat and record the plants and animals found there.  Compare 2 plants from the local environment.  Use MRS GREN to decide if the plant is alive. | | **Key knowledge**  To know what a food chain is.  To know that a food chain is the transferring of energy.  To know how to use arrows to show the direction of the flow of energy within a food chain.  To explain why something that has never been alive cannot be part of a food chain.  EXPLAIN:  Using a completed food chain- What is in the wrong place?  Use food chain knowledge to correct. | | **Key knowledge**  To know what a habitat is.  To know and give egs of a predator, prey, consumer, producer.  To construct and explain the links of a food chain using, predator, prey, consumer, producer.  To know what a pond habitat needs to be healthy.  INTERPRETING:  Changes to the number of fish in a fish pond- using knowledge of food chains to discuss why.  To know and describe familiar habitats.  To use knowledge to answer a question about the effect of changes to one part of the food chain. | |
| **Scaffolding** | | Simple sorting cards | | Pre learning of words.  Pictures and action prompts with examples. | | Support to identify, name and give egs of the macro and micro habitats. | | Support to name animals and plants- picture/name cards. | | Simple food chain with prompts. | | Multiple choice answers. | |
| **Challenge** | | More complex sorting cards. | | Explain each mnemonic. | | To list animals and plants in a woodland independently. | | To use MRS GREN to explain why something found is alive or not. | | More links in the food chain and make more food chains through substitution. | | To know and describe different habitats.  To ask if the number of plants in a fish pond decreased, what do you think would happen to the number of fish? and explain using scientific knowledge. | |
| **Tier 2 vocabulary** | | thrive  depend  producer  consume  prey  predator | | thrive  consume | | depend | |  | | thrive  depend  prey  predator  producer  consumer | | thrive  depend  prey  predator  producer  consumer | |
| **Tier 3 vocabulary** | | oxygen  nutrition  respiration  reproduction  excretion  sensitivity | | oxygen  nutrition | | oxygen  nutrition  respiration  reproduction  excretion  sensitivity | | oxygen  nutrition  respiration  reproduction  excretion  sensitivity | | nutrition | | nutrition | |