**Orrets Meadows- Understanding the World (Pre Key Stage 1 Science)** **Step 4**

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| **Living Things**  Respond consistently to familiar people.  Show an emerging interest in living things.  Recognise familiar people, events and objects. | **Energy and Forces**  Responds to light.  Turns to or away from sound.  Respond to a change in temperature (e.g. withdrawing hands from ice)  Anticipates a repeated action (e.g. push and pull toy)  Make sounds with their voice. |
| **Environmental Awareness and Care**  To listen to songs about the seasons.  With support handle mini beasts carefully.  Explore and respond to different natural phenomena in their setting and on trips. | **Materials**  Pupils begin to show consistent preferences and affective responses. (e.g. dislike of a flavours or enjoying a song)  Explore materials with different sounds.  Explore materials with different smells.  Explore different tastes.  Use fingers, hands, feet and whole body to explore materials. |
| **Thinking Scientifically**  Engage in co-active investigations.  Pupils encounter activities and experiences.  They may be passive or resistant.  Participation is fully prompted.  Perform actions by trial and error. | **Planning**  Repeat actions that have an effect. |

**Orrets Meadows- Understanding the World (Pre Key Stage 1 Science)** **Step 5**

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| **Living Things**  Greet familiar people.  Imitate actions such as clapping and stamping in songs.  Sing songs about different body parts.  Reach out to touch an animal with caution and sensitivity.  Notice difference between different people. (Diversity, differently abled people, race, gender, culture and ethnicity)  Make connections between their family and other people’s families. | **Energy and Forces**  Show awareness of the changes in light, sound and movement.  Anticipate forces in action.   * Ball bouncing back up * Bouncing on a trampoline * Ball rolling off a table * Tipping a container of water to pour * Object sliding down a ramp   Initiate interactions and activities switching on a favourite piece of equipment or a toy.  Copy push and pull actions.  Make sounds with their own bodies such as tapping, singing or vocalising. Imitate and copy sounds. |
| **Environmental Awareness and Care**  Explore and respond to different natural phenomena in their setting and on trips.  Explore different textures in the environment such as different parts of a plant.  Explore natural materials outside in the local environment. | **Materials**  Explore a collection of materials in increasing intentional ways.  Observe the results of their physical actions on materials. (Pressing hard, squeezing rolling, mixing flour and water etc.) with interest. |
| **Thinking Scientifically**  Engage in Attention Autism activities to develop language for anticipation and enquiry.  Respond to simple questions e.g. show me a flower or is this wet or dry?  Match objects and sort by a single criterion.  Make choices between objects and materials when touching and playing. | **Planning**  Observe the results of their actions. (Pressing hard, gently etc.)  Indicate before and after when a material has changed.  Begin mark making to represent their experiment.  Respond to option and make choices during their exploration.  Respond to ‘I wonder if?’ questions. |

**Orrets Meadows- Understanding the World (Pre Key Stage 1 Science)** **Step 6**

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| **Living Things**  Begin to make sense of their own life story.  Identify photographs of themselves people they know.  Recall memories about the people they know.  Continue developing positive attitudes about the differences between people across the world.  Identify features that belong to living things. (e.g. feathers from birds or leaves from trees)  Plant seeds and care for growing plants.  Know the key features of the life cycle of a plant and animal. | **Energy and Forces**  Show interest in how things work.  Identify appliances that use electricity.  Identify appliances that make heat.  Identify simple sources of sound.  Identify simple sources of light.  Explore forces they can feel. |
| **Environmental Awareness and Care**  Begin to understand the need to respect and care for the environment.  Know that there are different countries on our planet.  Explore and respond to different natural phenomena in their setting and on trips.  Explore the changing seasons in the natural world around them.  Include weather into their play.  Begin to show care for mini beasts and the environment.  Explore materials in nature. | **Materials**  Use all their senses in hands-on exploration of natural materials.  Explore collections of materials with similar and/or different properties.   * contrasting pieces of bark * different types of leaves and seeds * different types of rocks * different shells and pebbles from the beach   Talk about the changes they can make to simple materials. |
| **Thinking Scientifically**  Develop a bank of stage appropriate vocabulary to describe what they see, hear and feel.  Ask ‘I wonder if?’ questions  Show interest in different occupations that use science.  Respond to prompts to pick an interesting… | **Planning**  Begin to make comments about scientific investigations they have had hands-on experience of.  Draw simple pictures to represent their experiment.  Recognise before and after in their investigations.  Recognising things that happened before they were born. |

**Orrets Meadows- Understanding the World (Pre Key Stage 1 Science)** **Step 7**

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| **Living Things**  Name and describe people in their immediate family and who are familiar to them.  Recognise differences between different people (gender, ethnicity, culture, differently abled)  Observe changes in the natural world around them and living things.  Name everyday flowers and plants.  Name common animals. | **Energy and Forces**  Interact with natural processes such as:   * Ice melting * Sounds making a vibration * Light travelling through a variety of materials * Objects casting a shadow * Boats floating on water * Magnets attracting objects   Observe changes in light, sound and movement that result from their own actions. (Using the volume control, dimming the lights etc) |
| **Environmental Awareness and Care**  Recognise some environments are different from the one in which they live.  Understand the effects of changing seasons on the natural world around them.  Include weather into their play.  Show care for mini beasts and the environment.  Discuss how we care for the natural world. | **Materials**  Identify a range of everyday materials.  Describe what they can see, hear and feel whilst outside.  Find similarities and differences between a variety of natural and man-made materials |
| **Thinking Scientifically**  Develop a rich bank of stage appropriate vocabulary to describe what they see, hear and feel.  Begin to sort collections of items into two groups using simple criteria.  Sing songs about the environment, plants and animals.  Use hand held magnifying glasses or iPad apps to make close observations. | **Planning**  Make comments about scientific investigations they have had hands-on experience of.  Sequence events using basic chronology, recognising things that happened before they were born.  Draw and label simple pictures to represent their observations about the outside world, changing seasons, plants and animals.  Predict what will happen in simple natural processes listed above. |