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|  | **Understanding the World (Science) Nursery** | | | | | | | | |
|  | **Development Matters** | | | | | | | | |
|  | 1. Enjoys playing with small-world models such as a farm, a garage, or a train track. 2. Notices detailed features of objects in their environment. 3. Comments and asks questions about aspects of their familiar world such as the place where they live or the natural world. 4. Can talk about some of the things they have observed such as plants, animals, natural and found objects. 5. Talks about why things happen and how things work. 6. Developing an understanding of growth, decay and changes over time. 7. Shows care and concern for living things and the environment.   8. Looks closely at similarities, differences, patterns and change.  **9. Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur, and talk about changes.** | | | | | | | | |
| FS | Knowledge | | | | | | | Skills | |
|  | * Know that changes can be reversed – melting ice * Know that some changes eg. bread making cannot be reversed * Know that plants grow and change over time * Know that brushing teeth helps to keep them clean and that eating less sweets and sugar can help * Know what living things need to grow and stay alive – water, food, light, warmth | | | | | | | * Observe changes over time – growing plants * Use scientific vocabulary eg. Chrysalis * Know how to care for living things eg plants, chicks, butterflies * Brush teeth effectively * Sort foods into healthy and unhealthy * Sort insects using different criteria | |
|  | End Point:  Comments and asks questions about aspects of their familiar world such as the place where they live or the natural world.  Can talk about some of the things they have observed such as plants, animals, natural and found objects.  Talks about why things happen and how things work.  Developing an understanding of growth, decay and changes over time.  Shows care and concern for living things and the environment. | | | | | | | | |
|  | **Autumn 1 D3,D4, D5, D6** | | | | | | | | Vocab |
|  | **Knowledge** | | **Skills** | | | | | | Teeth, toothbrush, toothpaste, brush, bacteria, cavity.  Mix, change, cook, different.  Wood, straw, bricks. Soft, weak, hard, heavy |
| **Where do I belong?** | To understand why we need to brush our teeth.  To know that materials change in different circumstances. | | To brush teeth effectively.  To sort healthy and unhealthy food.  To describe materials.  To observe how materials have changed. Porridge  To use some scientific vocabulary | | | | | |
|  | 1. Introduce daily tooth-brushing. 2. Sort foods by healthy and unhealthy. 3. Make porridge (Link Goldilocks). How does it change when it is cooked? 4. Explore materials linked to the Three Little Pigs story. Which move more easily when in front of a fan? Why? | | | | | | | | |
|  | **Autumn 2 D4 D5** | | | | | | | | Vocab |
| **How do we celebrate?** | **Knowledge** | | | **Skills** | | | | | Change, fizz, bubble, explode  Melt, set, runny, hard |
| To know that materials can be changed. | | | To observe and describe changes that they see.  To use some scientific vocabulary. | | | | |
|  | 1- Linked to fireworks. Bicarb and vinegar. Show the children what happens when we mix bicarb and vinegar. What happened? What could you see/hear?  2- Linked to Georges Birthday party. Chocolate apple/banana treats. Make treats together. Children to note and comment on how the chocolate changes. | | | | | | | | |
|  | **Spring 1 D2 D4 D6 D7** | | | | | | | | Vocab |
| **Who can help us?** | **Knowledge** | | | | | | **Skills** | | Melt, freeze, cold, smooth, hard, slippery, weather, change, same, different, |
| To know ice is frozen water.  To understand that ice changes back to water. | | | | | | To observe changes over time.  To use scientific vocabulary e.g. freeze, change. | |
|  | What is ice?  1. Observe frost/ice outside. What is frost/ice? When do we get frost/ice? Outside, observe and feel frost. Draw in the frost/ice with sticks. When cleared. Where did the frost/ice go? Why do we think it went?  2. Explain that we are going to make some ice lollies. Show children a jug of juice. Is this an ice? How do you know? How do we think we could make the lollies turn into ice? Discuss suggestions and ideas.  3. Show children the lollies taken from the freezer. What do you think will happen when I pull the stick? Give each child as lolly to eat. What does it feel like? Why is it dripping? When finished children to put their lolly into a bowl. What do we think will happen to the bits we didn’t eat?  4. Re-visit the discarded lolly bowl. What has happened to the ice lollies? Where have they gone? What have they changed in to? | | | | | | | | |
|  | **Spring 2 D5** | | | | | | | | Vocab |
| **Where can we go?** | **Knowledge** | | | | **Skills** | | | | Float, sink, floated, sank, |
| To know that things float to the top or sink to the bottom | | | | To observe what happens and talk about what they have seen.  To use scientific vocabulary, float, sink. | | | |
|  | 1. What does float/sink mean? Sort items by whether they by floated or sank. 2. Predict. Will it float or sink?   Link to boats as a method of transport.   1. Link to DT. Can you make a boat that will float? | | | | | | | | |
|  | **Summer 1 D2 D4 D6 D7 D8** | | | | | | | | Vocab |
| **What can grow?** | **Knowledge** | | | | | **Skills** | | | Grow, change, seed, root, plant, insect. Wing, leg, body, same, different, sort |
| To know that plants grow from seeds.  To know what our seed needs to grow. | | | | | To observe how our sunflower seed changes over time.  To use scientific vocabulary.  To sort insects using different criteria. | | |
|  | 1. Link text Titch. What happened to his tiny seed? What are seeds? Where do they come from? 2. Linked to Jasper’s Beanstalk. Plant a bean. What do we think will happen to the tiny seed? Explain how to help our flowers to grow. What do they need? Observe changes over time. 3. Link text The Very Hungry Caterpillar. Understand how a caterpillar changes and grows. Life cycle. 4. To name and describe common insects. 5. Search for and observe living things in the outdoor space. 6. Sort insects by different criteria e.g. number of legs, wings etc. 7. Observe caterpillar/frogspawn changes over time. | | | | | | | | |
|  | **Summer 2 D2 D3 D4** | | | | | | | | Vocab |
| **Who wants to be beside the sea?** | **Knowledge** | **Skills** | | | | | | | See hear smell taste feel senses  Range of adjectives linked to senses |
| To know that they use their senses to explore the world around them.  To know what our senses are. | To describe what they can see, hear, feel, smell and taste  To use some scientific vocabulary eg sense | | | | | | |
|  | 1. What can I see? What can I see? Outdoors, talk about what we can see around us. What can we hear? What is it like when we can’t see? 2. Link to a day at the seaside. Who likes ice-cream? Which is your favorite flavor? How do we know what something tastes like? Ask a child to taste some ice cream, without seeing the colour. Can you tell what flavour it is? Follow up in small groups guessing the flavor of a sweet without seeing the colour. Is it easy to tell? 3. Read Who’s making that smell. Which were good/bad smells. How do we smell? Have a selection of different smelling pots (soap, lemon, vinegar). Ask children to smell. Which smell do you like the best? Can you tell what the smells are?   Repeat in small groups.   1. Feely box activity. Can we identify common objects by what they feel like? Linked Creative collage with different textured materials. | | | | | | | | |
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