


Science Learning Journey		Year R Summer 2	
Theme Overview		Project Outcomes	
<ul style="list-style-type: none"> Critical thinking and reasoning: making predictions, testing their ideas, developing ideas of grouping, sequencing cause and effect. To name materials and talk about what happens to them in the water. Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. 		<p>To use the correct vocabulary when talking about floating and sinking.</p> <p>To know that heavy items sink</p> <p>To know that light items float.</p> <p>To name some types of materials that float or sink</p> <p>To make prediction and test their ideas, talking about what has happened and starting to say why, linking it to their own experiences.</p>	
<p>SCIENCE PROMPT QUESTIONS</p> <p>What can you see?</p> <p>What does it remind you of?</p> <p>What do you think will happen next?</p> <p>How can we change this?</p> <p>What do you already know about...?</p> <p>What is the same/different?</p> <p>I wonder why...</p> <p>I wonder when...</p> <p>I wonder how...</p> <p>I wonder what...</p> <p>What would happen if...?</p>	<p>Longitudinal study: Explore the natural world around them, making observations and drawing pictures of animals and plants;</p> <p>WALT: To talk about changes they have seen in the outdoor environment over the year.</p> <p>In outdoor learning look back at the photos from Autumn, Winter, Spring and Summer in Outdoor learning powerpoint. What has changed? What has happened to the Maple, Cherry and Ash tree?</p> <p>Using sentence stems - In winter I noticed... In Autumn it was.. In spring there was... In summer .. record on post it notes to add to science powerpoint.</p>		
Skills Focus	Sequence of Learning		

<p>Main Skills Focus: To make predictions. To record results in a table To draw conclusions from their testing. To take part in a fair test</p> <p>Linked Skills Focus: Science spring 1 - boats, bridges and materials.</p> <p>Teaching science skills and techniques at Mrs Bland's Infant School.</p> <ul style="list-style-type: none"> • we encourage the children to think that we can all be scientists. • We are curious, we share ideas, explore our environment and ask questions to find out the answers to things we don't not know yet. 	<p>Lesson 1 WALT: To talk about what they notice when putting objects in the water tray.</p> <p>Possible book to read - Reading scheme double yellow sticker - What floats.</p> <p>Through outdoor provision encourage children to explore what happens when they drop different objects in the water tray.</p> <p>Encourage use of correct language - It is sinking, It sank, It has sunk. It is floating. It floated. It is on the top of the water. It is at the bottom.</p> <p>Revise learning from Spring 1 - The gingerbread man when we made junk modelling boats. What did you use? What happened? Can you remember what the best material was to use? Have you seen a real boat? Been in one? What are they made from. Look at pictures. Explore different sized toy boats in water tray.</p> <p>In outdoor learning can they make rafts? Using lolly sticks, sticks attached together with tape, string.</p>	<p>Lesson 2 WALT: To name materials and talk about what happens in the water. To make predictions and the test their ideas.</p> <p>Collect a variety of objects made from different materials. Plastic pen, wooden pencil, stick, cotton wool, rubber band, metal coin.</p> <p>In small groups children use either tick list or cut and stick sheets (in folder) to first predict what they think will happen to the objects then to test. Adult to scribe pupil voice – recording any reasons why they thought it would happen.</p> <p>In outdoor provision / and outdoor learning. Can the children try and make objects that float sink? How many people or things can you put in a boat to make it sink? Can you make the coins sink? Or can they make something heavy float? What happens when a ball of plasticine is put in? Can you change the shape t make it float? Take photos and record pupil reasoning on seesaw.</p>	<p>Lesson 3 WALT: To talk about their findings</p> <p>Review what they have learnt about objects, materials and floating and sinking. What happened when... Which objects sank? Which objects floated?</p> <p>Using sentence stems can the children say what happens to different materials when they are put in water.</p> <p>I know that plastic objects because ... I know that metal I know that paper I know that wooden</p> <p>Can they link it to how heavy or light the object is.</p>
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<p>Additional science opportunities through provision - linked to the rainbow fish</p> <p>Learn: to describe the properties of materials (shiny/dull) You need: big boxes or a table and blanket, torches, reflective and dull fabrics, shiny card, foil, black paper</p> <p>Play, observe & ask: • Can you build a cave like the octopus' home? • Why is it dark inside? • Shine torches on a variety of materials. Which materials look shiny? • Why are some materials shiny? (Some surfaces are so smooth they 'bounce' the light back to us.)</p>	<p>Additional science opportunities through provision - linked to floating and sinking.</p> <p>Learn: sinking and floating; sorting according to simple properties You need: a selection of balls (e.g. golf ball, football, ping pong ball, cricket ball, rugby ball), water tray Put balls into the water tray. Play, observe & ask: • Which balls do you think will float and which will sink? • Why do you think some balls sink/float? • What do you think these balls are made of?</p>	<p>Possible objects to generate scientific discussions. (see q's on first page)</p> <p>Materials and their properties - linked to history buckets and spades, hats, glasses, swimming costumes.</p> <p>Natural objects - seaweed, rocks, pebbles, shells, crab shells, found objects from the beach.</p> <p>Summer - flowers, plants, roots, ant farm? Worm farm? Bug hunting, leaves from Ash, Cherry and Maple Ice (how quickly will it melt?) (can you stop it melting)</p>
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