


Material World

Year 3 Learning Journey

Start Date:	Sunday 29 October	Unit Length:	7 weeks
	<p>Links to Host Country (Qatar)</p> <ul style="list-style-type: none"> • What materials are produced in Qatar? 	<p>During this unit our students will be:</p> <div style="display: flex; flex-direction: column; align-items: center;"> <div style="background-color: red; color: white; padding: 5px; border-radius: 10px; margin-bottom: 5px;">Collaborators</div> <div style="background-color: brown; color: white; padding: 5px; border-radius: 10px;">Thinkers</div> </div>	
<p>Material World</p> <p>We will be learning about the hundreds of different materials that are used to make everyday objects. We will need to be scientists to test the properties of different materials. Some materials absorb water; some are magnetic, and some allow electricity to pass through them. But with so many different materials to choose from, how do we decide which to use?</p>			
<p>Entry Point</p> <p>For the Entry Point, children will use a variety of materials to create slime. They will think about how the texture of the slime would change by adding different materials.</p>			
<p>Knowledge Harvest</p> <p>During the Knowledge Harvest, children will look at the different materials that come together to make a product. We will look at a bicycle and the different materials that it is made from.</p>			
<p>Science</p> <ul style="list-style-type: none"> • We will carry out an experiment to find out what materials are absorbent. • We will investigate which materials make the strongest carrier bag. • As a class we will find out about magnetism and what objects are magnetic. • Children will work in groups to create electrical circuits. • We will use the circuits to test conductivity. • We will find out what materials can be used as heat conductors. • Children will research the states of matter. • We will find out how materials can change to different states of matter. 			
<p>International</p> <ul style="list-style-type: none"> • Children will research what materials are produced in Qatar. • We will find out which countries are the main producers of different materials. • We will find out about natural and manmade materials. • We will find out which materials can be recycled and how. 			
<p>Design, Technology & Innovation</p> <ul style="list-style-type: none"> • Children will think about different materials to design a bicycle accessory. • Using their designs, children will create a prototype. 			

Exit Point

For our Exit Point, children will set up a ‘Marvellous Materials’ exhibition. We will present our findings from the different experiments we have carried out about the different properties of materials.

Assessment

Science 2.06 Be able to plan an investigation changing only one independent variable.

Mastering	Secure	Developing	Emerging
<p>I can:</p> <ul style="list-style-type: none"> • Think about what I want to find out and plan safe investigations to do this. • Talk about whether an investigation is fair or not and explain why. • Explain the difference between independent and dependent variable. • Talk about how the independent variable is linked to the dependent variable and the importance of this in an investigation. 	<p>I can:</p> <ul style="list-style-type: none"> • Ask a question and suggest how to investigate it. • Plan an investigation choosing the thing that will be changed (independent variables). • Explain the connection between the thing that will change and the information that we are collecting. • Talk about why it is important to only change one thing at a time, the independent variable, when we are investigating a question. • Choose which are the right things to change first because they will help to answer the question that we are investigating. 	<p>I can:</p> <ul style="list-style-type: none"> • Ask questions that we could investigate. • Ask questions about the world around us. • Talk about what information we can collect that will help us to answer a question. • Find answers to questions by testing things and collecting information. • Talk and/or write about the controlled variables, the things to keep the same when we are investigating. 	<p>I can:</p> <ul style="list-style-type: none"> • Choose what information I need so that we can answer the question. • Ask questions about the science we have been learning. • Talk about what can be tested and investigated. • Fill in the blanks on a written plan for how to investigate a question.