

## DT MEDIUM TERM PLAN (MTP) YEAR 2 2021: Taught 2<sup>nd</sup> Half of each term

DT MTP Y2	Autumn 2: 7 WEEKS	Spring 2: 6 WEEKS	Summer 2: 6 WEEKS
<p><i>Taken from the Year group curriculum map</i></p>	<p><b>Topic Title: Explorers</b></p> <p><b>Key knowledge:</b> DT1/1.2b: To select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</p> <p>DT1/1.2b: To select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</p> <p>DT1/1.3b: To evaluate their ideas and products against design criteria</p> <p><b>Key Skills:</b></p> <ul style="list-style-type: none"> <li>To explore and evaluate a range of existing products</li> <li>To choose from a variety of materials according to their characteristics</li> <li>Children to review previous learning and create a design for a boat choosing appropriate materials to meet its function</li> <li>Children to use design from previous lesson to start constructing their boat</li> <li>Children to test their boats and evaluate their effectiveness by answering questions</li> </ul> <p><b>Key vocabulary:</b></p>	<p><b>Topic Title: Animals</b></p> <p><b>Key knowledge:</b> DT1/1.3a: To explore and evaluate a range of existing products</p> <p>DT1/1.3b: To evaluate their ideas and products against design criteria</p> <p>DT1/1.2a: To select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</p> <p>DT1/1.2b: To select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</p> <p>DT1/1.1a: To design purposeful, functional, appealing products for themselves and other users based on design criteria</p> <p>DT1/1.1b: To generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</p> <p><b>Key Skills:</b></p> <ul style="list-style-type: none"> <li>Explore a range of products</li> <li>Design</li> <li>To generate, develop, model and communicate their ideas through talking, drawing</li> <li>Test effectiveness of design</li> </ul> <p><b>Key vocabulary:</b></p>	<p><b>Topic Title: London</b></p> <p><b>Key knowledge:</b> DT1/1.4a: To build structures, exploring how they can be made stronger, stiffer and more stable</p> <p>DT1/1.4b: To explore and use mechanisms</p> <p><b>Key Skills:</b></p> <ul style="list-style-type: none"> <li>Discuss and explore photos of London</li> <li>Discuss how buildings stay up</li> <li>Explain thinking</li> <li>Plan</li> <li>Design</li> <li>Create</li> <li>Test effectiveness</li> </ul> <p><b>Key vocabulary:</b> London, city, buildings, architecture, research, plan, design, make, create, construct, test, evaluate...</p>

	Boats, ship, explore, range, materials, products, choose, variety, review, plan, design, create, test, evaluate...		Plan, design, research, explore, pet food, packaging, generate, test, discuss...		
Lesson 1	<p><b>Lesson objective (s):</b> To explore and evaluate a range of ships.</p> <p><b>Brief outline of main tasks:</b>            Relate to the ships used by Robert Scott and Ibn Battuta.            (Use stem videos of boat making)            Look at photos of different ships.            What are they made out of and why? Sort materials on table for suitable and not suitable.            Children come to the conclusion they need to be waterproof.</p>		<p><b>Lesson objective (s):</b> To explore and evaluate a range of existing pet food packaging.</p> <p><b>Brief outline of main tasks:</b>            Display a range of pet food packaging on tables for children to explore and evaluate. Children to work in pairs and answer questions about why it is effective. They then present these to the class.</p>		<p><b>Lesson objective (s):</b> To explore and evaluate a range of existing buildings.</p> <p><b>Brief outline of main tasks:</b>            Looking at photographs of London.            Discuss how buildings are being able to stand. Children to stick photo in book and explain their thinking.</p>
Lesson 2	<p><b>Lesson objective (s):</b> To test and evaluate different materials.</p> <p><b>Brief outline of main tasks:</b>            Look at photos of ships again.            Look at the shape and materials different ships are made out of.            What helps them float?            Experiment with different shapes/materials of objects to find what helps them float.</p>		<p><b>Lesson objective (s):</b> To design purposeful and appealing pet food packaging.</p> <p><b>Brief outline of main tasks:</b>            Explain that you have received a letter from a business asking for us to make a new pet food for an animal. Ensure that design criteria are given within the letter. Children to create design for their new product. Children to design purposeful, functional, appealing products for pets based on design criteria.</p>		<p><b>Lesson objective (s):</b>            To build structures, exploring how they can be made stronger, stiffer and more stable.</p> <p><b>Brief outline of main tasks:</b>            Create paper buildings of London.            Discuss about doubling up paper and other strategies to make them stronger.</p>

Lesson 3	<p><b>Lesson objective (s):</b> To design a ship using different materials.</p> <p><b>Brief outline of main tasks:</b> Children need to design a boat and choose from a variety of materials according to their characteristics. They should be appropriate and suit the function of a boat.</p>	<p><b>Lesson objective (s):</b> To present packaging design and explain how it is effective.</p> <p><b>Brief outline of main tasks:</b> Explain to children that they are going to pitch their idea in a presentation to the business. Encourage children to explain their choices.</p>	<p><b>Lesson objective (s):</b> To design a room with a simple lever.</p> <p><b>Brief outline of main tasks:</b> Show children how to make simple lever. Explain that they are going to be creating a room with junk modelling. How could you put a lever into your design? Children create design.</p>	
Lesson 4	<p><b>Lesson objective (s):</b> To construct a boat using a range of equipment.</p> <p><b>Brief outline of main tasks:</b> Children to use design from previous lesson to start constructing their boat. They need to select from and use a range of tools and equipment to build their boat.</p>	<p><b>Lesson objective (s):</b> To create pet food packaging using design criteria.</p> <p><b>Brief outline of main tasks:</b> Children to select from and use a range of tools and equipment to create packaging.</p>	<p><b>Lesson objective (s):</b> To construct a room using junk modelling.</p> <p><b>Brief outline of main tasks:</b> Children to begin constructing their rooms using a variety of tools, materials and equipment. They will also be creating their lever.</p>	
Lesson 5	<p><b>Lesson objective (s):</b> To construct a boat using a range of equipment.</p> <p><b>Brief outline of main tasks:</b> Children to continue constructing their boats.</p>	<p><b>Lesson objective (s):</b> To create pet food packaging using design criteria.</p> <p><b>Brief outline of main tasks:</b> Children to continue making packaging.</p>	<p><b>Lesson objective (s):</b> To construct a room using junk modelling.</p> <p><b>Brief outline of main tasks:</b> Children to continue constructing room.</p>	

Lesson 6	<p><b>Lesson objective (s):</b> To evaluate ideas and products against design criteria.</p> <p><b>Brief outline of main tasks:</b> Children to test their boats and evaluate their effectiveness by answering questions based on design criteria e.g. does it float, why do you think it floats, why were the materials you used effective etc.</p>		<p><b>Lesson objective (s):</b> To evaluate ideas and products against design criteria.</p> <p><b>To complete end of unit assessment and evaluation.</b></p> <p><b>Brief outline of main tasks:</b> Children to evaluate their pet food packaging.</p> <p><i>FINAL PRODUCT / ASSESSMENT AND EVALUATIONS</i></p>		<p><b>Lesson objective (s):</b> To evaluate ideas and products against design criteria.</p> <p><b>To complete end of unit assessment and evaluation.</b></p> <p><b>Brief outline of main tasks:</b> Children to evaluate their junk modelled rooms.</p> <p><i>FINAL PRODUCT / ASSESSMENT AND EVALUATIONS</i></p>	
Lesson 7	<p><b>Lesson objective (s):</b> <b>To complete end of unit assessment and evaluation.</b></p> <p><b>Brief outline of main tasks:</b></p> <p><i>FINAL PRODUCT / ASSESSMENT AND EVALUATIONS</i></p>		TERM END		TERM END	
Lesson 8	TERM END					