



### D&T Medium Term Plan - Year One

Key Concept(s)	Learning Intention	Activities	Resources	Assessment
<b>Food and Nutrition</b>				
<b>Food and nutrition</b>	To understand the importance of good hygiene	<p>Explain that we have <b>germs</b> on our hands, but they are too small to see. Some germs can make us poorly so it's important to wash our hands before we cook and before we eat.</p> <p>Put children in small groups and choose 1 from each group to have 'germs' put on their hands (glitter and hand lotion mixed together). That child then shakes hands with their friends, touches toys etc. Can children see <b>how quickly germs can spread</b>? Model good handwashing and all children practise.</p>	Glitter, hand cream, soap and water	
<b>Food and nutrition</b>	To know where food comes from	<p>Discuss where food comes from. Watch <a href="#">video</a> and explain that all food comes from either plants or animals. Children say what they have eaten so far today and where it came from. Sort some food pictures (e.g. fruit, bread, sausages, milk etc).</p> <p>Add sorting activity to provision</p>	Pictures of food	
<b>Food and nutrition</b>	To explore different techniques for preparing food	<p>Look at different <b>equipment/utensils</b> for <b>preparing</b> food. What are they for? How do we use them?</p> <p>Children practise cutting, peeling and grating different food (fruits and vegetables) in small groups with an adult. Put any prepared food that can be eaten onto the snack table</p>	<p>Vegetable peelers, graters, child safe knives</p> <p>Fruit and veg that can be prepared</p>	
<b>Food and nutrition</b>	To apply food preparation skills	Use the techniques from previous session to follow a recipe and create either a fruit smoothie or fruit kebab (children's choice)	Vegetable peelers, graters, child safe knives	



			Smoothie recipe and smoothie/kebab ingredients	
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Key Concept(s)	Learning Intention	Activities	Resources	Assessment
<b>D&amp;T Techniques</b>				
Use technical knowledge	To use rulers and scissors to measure and cut accurately	<b>Measure</b> a simple line. Cut a <b>specific measurement</b> with paper and card. Compare properties of paper and card.	Card, paper, scissors, non-slip rulers,	
Use technical knowledge	To measure and cut a specific size	Cut out a rectangle of a <b>specific size</b> . Cut out a <b>strip</b> of card to <b>strengthen</b> a box.	Card, paper, scissors, non-slip rulers, cardboard boxes, masking tape, PVA glue, glue stick.	
Use technical knowledge	To explore and evaluate joining techniques	<b>Joining</b> with staplers, split pins, treasury tags and hole punch – use either pre-cut strips of card or get the children to cut their own. Discuss different joining techniques and the effects they produce.	Card, scissors, PVA, glue sticks, staplers, staples, masking tape, hole punches, treasury tags, split pins, string, non-slip rulers, strips of card.	
Use technical knowledge	To apply techniques to join different materials	Explore joining card with masking tape and glue – PVA and glue stick. Talk about hot glue guns and model how it can be used to join wood, but do not allow the children to use these.	Card, scissors, PVA, glue sticks, masking tape, glue gun, wood.	



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<b>Mechanisms</b>				
<b>Use technical knowledge</b>	To understand how levers and sliders make a mechanism move	The children will towards the end project of a pop up. Teach levers and sliders. Look at pop up books and talk about the two different methods to create a pop up as shown in the book.	Pop up books.	
<b>Use technical knowledge</b>	To explore ways shapes can be made to move	Teach the children how to partially cut out shapes (without cutting from the side) to create a pop up. Children to try out the technique. Children to further use the partial cutting technique to cut a slit in a piece of card and insert a strip of card with a picture attached to the end to create a slider. Teach the children how to make concertina folds. Children to have a go then use the technique to create a mini pop up. Children to attach a concertina fold on to rectangle of card for secure base and attach a picture to the top.	Rulers, card, scissors, paper, glue, masking tape.	
<b>Design and develop</b> <b>Take risks</b> <b>Use technical knowledge</b>	To apply techniques	Children to use the techniques taught in the previous sessions to create a London building as a pop up and either a London bus or taxi on a slider to help the year one children learn about features of London. (Link to Geography learning.) An additional session may be required.	Rulers, card, scissors, paper, glue, masking tape, felt tips pens, crayons.	



<b>Design and develop</b> <b>Evaluate, critique and test</b>	To evaluate and improve a project	The children will explore finishing techniques to create backgrounds to complete their sliding bus or taxi and pop up building. Children will add facts to create an information page surrounding their pop up or slider. Children to critique their work using the critique template. Teacher to model how to use the template.	Rulers, card, scissors, paper, glue, masking tape, felt tips pens, crayons, critique template.	
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Key Concept(s)	Learning Intention	Activities	Resources	Assessment
<b>Structures</b>				
<b>Evaluate, critique and test.</b>	To understand how engineers make structures strong	Look at the work of the architect - Brunel. Learn about him as an engineer and architect. Look at Brunel's bridges – what are they made of, how are they created, look at the shapes (triangles) How did they make it stronger? Teach children vocabulary and the term reinforcements. Can the children use any of the techniques in their models?	Photographs of Brunel's bridges – including close ups of the structures.	
<b>Evaluate, critique and test.</b>	To understand how architects design buildings	Look at the work of the architect - Christopher Wrenn – St Paul's cathedral and the Great Fire of London Monument. What are they made of? How have they been built? How have they made them stable? Make links to the methods used to make bridges strong, stiff and stable. Make links to future topic of London.	Photographs of The Great Fire of London Monument, St Paul's Cathedral and other London buildings.	
<b>Design and develop</b>	To create a design that can be used to build a structure	Revisit the photographs of London buildings. Children to choose one. Thinking about techniques they have developed the children will design their own version of a London building. On their design they will need to include, materials and the processes they intend to use to make their building strong, stiff and stable (ensure children use these words). Children to use squared paper to produce their design. Teacher to scribe children's plan explaining techniques they will use.	Pictures of London buildings.	
<b>Design and develop</b>	To apply techniques to create a structure	Children to create their plans.	Card, scissors, PVA, glue sticks, masking tape, hole punches, treasury tags, split	



<b>Take risks.</b> <b>Use technical knowledge.</b>			pins, string, non-slip rulers, strips of card.	
<b>Design and develop</b> <b>Take risks.</b> <b>Use technical knowledge.</b>	To apply techniques to create a structure	Children to create their plans. Ensure children use taught techniques to make their models strong, stiff and stable.	Card, scissors, PVA, glue sticks, masking tape, hole punches, treasury tags, split pins, string, non-slip rulers, strips of card.	
<b>Design and develop</b> <b>Evaluate, critique and test</b>	To evaluate and improve a project	Explore finishing techniques. Children to use finishing techniques to improve their work. Children to critique their own work. Teacher to scribe children's responses. If possible provide time to make improvements.	Paint, crayons, felt tips, collage materials etc.	

<b>KC1</b>	<b>Design and develop</b>	Children will design and develop products and prototypes that solve problems.
<b>KC2</b>	<b>Take risks</b>	Children will take risks and be resourceful and innovative.
<b>KC3</b>	<b>Evaluate, critique and test</b>	Children will evaluate, critique and test their ideas and those of others.
<b>KC4</b>	<b>Use technical knowledge</b>	Children will develop creative, technical knowledge.
<b>KC5</b>	<b>Food and nutrition</b>	Children will understand and apply the principles of nutrition and learn how to cook.