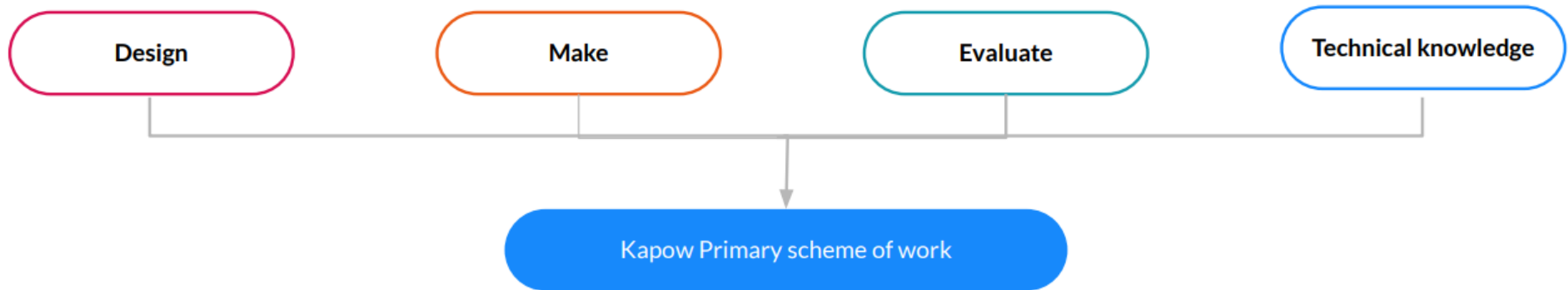


## How is the Design and technology scheme of work organised?





Design and Technology – Progression Document 2024 – 2025

	<b>Knowledge</b>	<b>Evaluate</b> – Children can verbally discuss whether their bug hotel is suitable for the bugs and whether the bugs would like to live there. <b>Technical</b> - Use one handed tools and equipment Explore how things work Explore different materials freely, in order to develop their ideas about how to use them and what to make Develop their own ideas and then decide which materials to use to express them.
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Design and Technology – Progression Document 2024 – 2025

	<p><b>Knowledge</b></p>	<p><b>Make</b> - Creating a pneumatic system to create a desired motion.</p> <ul style="list-style-type: none"> <li>- Building secure housing for a pneumatic system.</li> <li>- Using syringes and balloons to create different types of pneumatic systems to make a functional and appealing pneumatic toy. - - Selecting materials due to their functional and aesthetic characteristics.</li> <li>- Manipulating materials to create different effects by cutting, creasing, folding and weaving.</li> </ul> <p><b>Evaluate</b> - Using the views of others to improve designs.</p> <ul style="list-style-type: none"> <li>- Testing and modifying the outcome, suggesting improvements.</li> <li>- Understanding the purpose of exploded-diagrams through the eyes of a designer and their client.</li> </ul> <p><b>Technical</b> - To understand how pneumatic systems work.</p> <ul style="list-style-type: none"> <li>- To understand that pneumatic systems can be used as part of a mechanism.</li> <li>- To know that pneumatic systems operate by drawing in, releasing and compressing air.</li> </ul>
<p><b>Summer 2 – Cross Stitch and Textiles</b></p>	<p><b>Skills</b></p>	<p><b>Design</b> - Designing and making a template from an existing cushion and applying individual design criteria.</p> <p><b>Make</b> - Following design criteria to create a cushion or Egyptian collar.</p>

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	<p><b>Knowledge</b></p>	<p>Selecting and cutting fabrics with ease using fabric scissors. Threading needles with greater independence. Tying knots with greater independence. Sewing cross stitch to join fabric. Decorating fabric using appliqué. Completing design ideas with stuffing and sewing the edges (Cushions) <b>Evaluate</b> - Evaluating an end product and thinking of other ways in which to create similar items.</p> <p><b>Technical</b> - To know that applique is a way of mending or decorating a textile by applying smaller pieces of fabric to larger pieces.</p> <ul style="list-style-type: none"><li>- To know that when two edges of fabric have been joined together it is called a seam.</li><li>- To know that it is important to leave space on the fabric for the seam.</li><li>- To understand that some products are turned inside out after sewing so the stitching is hidden.</li></ul>
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	<p><b>Knowledge</b></p>	<p><b>Make</b> - Making a range of different shaped beam bridges.</p> <ul style="list-style-type: none"> <li>- Using triangles to create truss bridges that span a given distance and support a load.</li> <li>- Building a wooden bridge structure.</li> <li>- Independently measuring and marking wood accurately.</li> <li>- Selecting appropriate tools and equipment for particular tasks.</li> <li>- Using the correct techniques to saws safely.</li> <li>- Identifying where a structure needs reinforcement and using card corners for support.</li> <li>- Explaining why selecting appropriating materials is an important part of the design process.</li> <li>- Understanding basic wood functional properties</li> </ul> <p><b>Evaluate</b> - Adapting and improving own bridge structure by identifying points of weakness and reinforcing them as necessary.</p> <ul style="list-style-type: none"> <li>- Suggest points for improvements for own bridges and those designed by others.</li> </ul> <p><b>Technical</b> - To understand some different ways to reinforce structures.</p> <ul style="list-style-type: none"> <li>- To understand how triangles can be used to reinforce bridges.</li> </ul>
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		<ul style="list-style-type: none"><li>- To know that properties are words that describe the form and function of materials.</li><li>- To understand why material selection is important based on properties.</li><li>- To understand the material (functional and aesthetic) properties of wood.</li></ul>
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