

KSI Design and Technology Objective Progression

Objective 1: design purposeful, functional, appealing products for themselves and other users based on design criteria.	
<p>Year 1</p> <p>Children should have their own ideas.</p> <p>Children should explain what they want to do.</p> <p>Children should explain what their product is for and how it will be used.</p>	<p>Year 2</p> <p>Children should have their own ideas or be able to work effectively in a group.</p> <p>Children should have some idea of what materials and equipment they will need to use before they begin to make.</p> <p>Children should be able to verbalise their plan and thought process to making.</p> <p>Children should explain the purpose of the product, how it will be used and why it is suitable for the brief and user.</p>
Objective 2: generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and where appropriate information and communication technology.	
<p>Year 1</p> <p>Children should use pictures and words to plan their ideas.</p> <p>Children should be able to highlight where on their plan they have thought about specific parts of the success criteria.</p>	<p>Year 2</p> <p>Children should describe the design using pictures, words, models and diagrams.</p> <p>Children should begin to use ICT to draw their plans.</p> <p>Children should use their knowledge of existing products and things from their environment to develop their ideas.</p>
Objective 3: select from and use a range of tools and equipment to perform practical tasks.	
<p>Year 1</p> <p>Children should consider some of the equipment they might need to make their product.</p> <p>Children should begin to write or verbalise a list of equipment and materials they will need to make their product.</p>	<p>Year 2</p> <p>Children should make suggestions of what equipment they think will be best to complete the task (i.e. will glue work to stick two boxes or is cellotape best?)</p> <p>Children should show a thoughtfulness approach to the materials that they select.</p> <p>Children should use different materials to join materials in different ways.</p>
Objective 4: select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.	
<p>Year 1</p> <p>Children should select appropriate tools from a wide range of equipment that is appropriate for their product.</p> <p>Children should choose suitable materials and explain their choices.</p>	<p>Year 2</p> <p>Children should choose the best tools and materials and explain their choices linking to what they know about the materials and their properties (link to Science)</p> <p>Use appropriate materials to ensure that the product is finished to a high standard.</p>

<i>Objective 5: explore and evaluate existing products.</i>	
<p style="text-align: center;"><i>Year 1</i></p> <p>Children should talk about what they can see if featured within an existing product. Children should discuss who the product is made for.</p> <p>Children should comment on the work of their peers and what they have made. Begin to talk about what they would want from a new product.</p> <p>Children should understand that their imagination is limitless and their ideas can be as creative as they wish.</p>	<p style="text-align: center;"><i>Year 2</i></p> <p>Children should talk about existing products considering the use of materials, how they work, the user, where it might be used. Children should express personal opinion on whether they like the product and what might make the product better.</p> <p>Children should consider discussions had to guide their ideas to make a product similar/better.</p> <p>Children should discuss constructively the work of their peers and offer feedback on what they might be able to do next.</p>
<i>Objective 6: evaluate their ideas and products against design criteria.</i>	
<p style="text-align: center;"><i>Year 1</i></p> <p>Children should begin to highlight what elements of the success criteria they have used and have worked well.</p> <p>Children should begin to discuss what would make the product better.</p>	<p style="text-align: center;"><i>Year 2</i></p> <p>Children should describe what went well, linking back to the success criteria provided. Children should discuss what they would do differently to their product if they were to recreate.</p>
<i>Objective 7: build structures, exploring how they can be made stronger, stiffer and more stable.</i>	
<p style="text-align: center;"><i>Year 1</i></p> <p>Children should begin to describe and acknowledge that materials have different properties and begin to select the material that is most appropriate for the job. Children should explain their selections using key vocabulary.</p> <p>Children should offer suggestions on what might make a structure stiffer/stronger.</p>	<p style="text-align: center;"><i>Year 2</i></p> <p>Children should link their knowledge of materials and their characteristics to make informed choices before starting the project. Children should be open to experimenting with different ideas in order to test and find the best material for the intended task.</p>
<i>Objective 8: explore and use mechanisms.</i>	
<p style="text-align: center;"><i>Year 1</i></p> <p>Child should draw upon mechanism knowledge in EYFS to create products that are appealing and are built with mechanism function.</p> <p>Nursery: Folding a piece of paper to make a card.</p> <p>Knowing that if its landscape it will open up and down. If it's portrait it will open left to right.</p>	<p style="text-align: center;"><i>Year 2</i></p> <p>Children should make appealing products that include a variety of mechanisms drawing upon the knowledge that they have previously learnt.</p> <p>They should be able to identify where they have used mechanisms in their products and be able name the mechanism and describe it's function and why it has been used.</p>

Using this knowledge to support where they place their drawings so it is the correct configurations.

Reception: 2 pieces of paper to make a spring for a card or picture

Year 1: Sliders and Levers within pictures.

Winding mechanisms

Year 2: Pulley mechanisms

Pivot mechanisms within a picture/card or object

Begin to understand how to use wheels and axels.