



Working creatively and being evaluative

Disciplinary Knowledge Progression in Design & Technology

This document outlines the disciplinary knowledge which children will develop through DT lessons.

Learning disciplinary knowledge gives children the tools to unlock the significance of the carefully mapped substantive knowledge, outlined in Knowledge Organisers.

	<i>Designing</i>	<i>Making</i>	<i>Evaluating</i>	<i>Technical Knowledge</i>	<i>Cooking and Nutrition</i>
<i>EYFS</i>	<p>I can explain what I am making and what materials I am using.</p> <p>I can select my own materials. I can select and name the tools I need to make my model. I can discuss my work as it progresses.</p>	<p>I can make my design using basic techniques.</p> <p>I can build structures and join components together.</p> <p>I can use scissors to cut straight and curved edged.</p> <p>I can join materials and explore what is the best adhesive to use e.g. glue, Sellotape, masking tape etc.</p>	<p>I can say what I like/don't like about my model and think about why.</p> <p>I can identify good and bad points in my design.</p> <p>I can talk about what changes I made while developing my models.</p> <p>I can discuss what I would do differently next time.</p>	<p>I can build using junk modelling and describe its 3D properties.</p>	<p>I can develop my vocabulary around food by talking about: taste, smell, texture, appearance and feel.</p> <p>I can explore familiar and unfamiliar foods in my play. I can work safely and hygienically.</p> <p>I can measure and weigh food using non-standard measures e.g. spoons, cups.</p>

<p>I can generate ideas by drawing on my own experiences. I can suggest ideas and explain what I am going to do.</p> <p>I can identify a target group to design for.</p> <p>I can model my ideas in card and paper.</p> <p>I can develop my design ideas applying findings from my research.</p>	<p>I can make my design using appropriate techniques. I can use tools safely. (e.g. scissors, hole punch) I can assemble, join and combine materials and components together using a variety of temporary methods. (e.g. glues, masking tape) I can use simple finishing techniques to improve the appearance of my product.</p>	<p>I can evaluate my product by discussing how well it works in relation to the purpose. I can evaluate my product as it develops, identifying strengths and possible changes.</p> <p>I can evaluate my product by asking questions about what I have made and how.</p>	<p>I can build 3D structures. I can explore basic mechanisms in other products (hinges, folding).</p>	<p>I can use basic food handling, hygienic practices and personal hygiene.</p> <p>I can identify healthy and unhealthy food choices.</p> <p>I can identify where food comes from.</p>
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2

I can generate ideas by drawing on my own and other people's experiences.

I can develop my design ideas through discussion, observation, drawing and modelling.

I can identify a purpose for what I intend to design and make.

I can identify simple design criteria.

I can make simple drawings and label parts.

I can select basic tools and materials, naming and describing them.

I can measure, cut and score with some accuracy.

I can use hand tools safely and appropriately.

I can assemble, join and combine materials in order to make a product.

I can cut, shape and join fabric. I can choose and use appropriate finishing techniques.

I can evaluate my product against my design criteria. I can evaluate my product as it develops, identifying strengths and possible changes.

I can talk about my ideas, saying what I like and dislike about them.

I can build structures, exploring how they can be stiffer, stronger and more stable. I can explore and use mechanisms in my product (axles).

I can follow safe procedures for food safety and hygiene. I can identify a healthy and varied diet to prepare dishes. I can identify and explain where food comes from.

3

I can generate ideas for an item considering its purpose and the user/s.
I can identify a purpose and establish criteria for a successful product.
I can plan the order of work before I start.
I can explore, develop and communicate design proposals by modelling ideas.
I can make drawings with labels when designing.

I can select tools and techniques for making my product.
I can measure, mark out, cut, score and assemble components with more accuracy.
I can use a range of tools safely and accurately.
I can think about my ideas as they progress and change things if this helps improve my product.
I can measure, tape/pin, cut and join fabric with some accuracy.
I can use finishing techniques to strengthen and improve the appearance of my product using a range of equipment including ICT.

I can evaluate my product against my original design criteria, discussing how well it meets its intended purpose. I can disassemble and evaluate familiar products.

I can explore and use mechanisms in my product (levers and linkages).

I can demonstrate hygienic food preparation and storage.

4

I can generate ideas, considering the purposes for which they are designing. I can make labelled drawings from different views showing specific features. I can develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods, if the first attempts fail.

I can evaluate products and identify criteria that can be used for my design.

I can select appropriate tools and techniques for making my product.

I can measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques. I can join and combine materials and components accurately in both temporary and permanent ways.

I can sew using a range of different stitches, weave and knit.

I can measure, tape/pin, cut and join fabric with some accuracy.

I can use simple graphical communication techniques.

I can evaluate my work both during and at the end. I can evaluate my products carrying out appropriate tests.

I can explore and use mechanisms in my product (pulleys).

I can prepare and cook a variety of savoury dishes using a range of cooking techniques.

5	<p>I can generate ideas through brainstorming and identify a purpose for my product.</p> <p>I can draw up a specification for their design.</p> <p>I can develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail.</p> <p>I can use results of investigations, information sources, including ICT when developing design ideas.</p>	<p>I can select appropriate materials, tools and techniques.</p> <p>I can measure and mark out accurately.</p> <p>I can use skills in using different tools and equipment safely and accurately.</p> <p>I can weigh and measure accurately. (time, dry ingredients, liquids)</p> <p>I can cut and join with accuracy to ensure a good-quality finish to my product.</p>	<p>I can evaluate my product against my original design specification.</p> <p>I can evaluate my product personally and seek evaluation from others.</p>	<p>I can explore and use mechanisms in my product (cams).</p>	<p>I can apply the rules for basic food hygiene and other safe practices. (e.g. hazards relating to the use of ovens)</p>
6	<p>I can communicate my ideas through detailed labelled drawings.</p> <p>I can develop a design specification.</p>	<p>I can select appropriate tools, materials, components and techniques.</p> <p>I can assemble components to make working models.</p>	<p>I can evaluate my products identifying strengths and areas for development, and carrying out appropriate tests. I can record my evaluations using drawings with labels.</p>	<p>I can apply my understanding of how to strengthen, stiffer, and reinforce more complex structures.</p>	<p>I can understand and apply the principles of a healthy and varied diet.</p> <p>I can understand seasonality and know where and how a variety</p>

<p>I can explore, develop and communicate aspects of my design proposals by modelling my ideas in a variety of ways. I can plan the order of my work, choosing appropriate materials, tools and techniques.</p>	<p>I can use tools safely and accurately.</p> <p>I can construct products using permanent joining techniques. I can make modifications as I go.</p> <p>I can pin, sew and stitch materials together to create my product.</p> <p>I can achieve a quality product.</p>	<p>I can evaluate against my original criteria and suggest ways my product could be improved.</p>	<p>I can understand and use mechanical systems in my product.</p> <p>I can understand and use electrical systems in their products.</p> <p>I can apply my understanding of computing to program, monitor and control my products. I can explore and use frame and shell structures.</p>	<p>of ingredients are grown, reared, caught and processed.</p>
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