



# Progression of Skills in Design and Technology

These are the minimum end of year expectations for our EYFS learners in relation to Understanding the World

This document shows how Design and Technology objectives are designed in a progressive way to ensure learners become more proficient as they move through the school, securing and applying the objectives. Each teacher should be aware of their own Design and Technology objectives, and of those which have come before.

	Key Vocabulary	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Design		<p>Initiates conversations, attends to and takes account of what others say e.g. agreeing what materials to use. Can select and use resources with help. Begins to accept the needs of others and can take turns and share resources, sometimes with support from others e.g. sharing a construction kit. Constructs with a purpose in mind, using a variety of resources.</p> <ul style="list-style-type: none"> <li>Manipulates materials to achieve a planned effect.</li> </ul>	<p><b>Understanding contexts, users and purposes</b> Begin to use simple design criteria; state what their products are, who and what they are for and how they will work.</p>	<p><b>Understanding contexts, users and purposes</b> use simple design criteria; state what their products are, who and what they are for and how they will work.</p>	<p><b>Understanding contexts, users and purposes</b> Begin to gather information about user needs; develop their own design criteria; describe the user, purpose and design features of their products and explain how they will work.</p>	<p><b>Understanding contexts, users and purposes</b> gather information about user needs; develop their own design criteria; describe the user, purpose and design features of their products and explain how they will work.</p>	<p><b>Understanding contexts, users and purposes</b> Begin to carry out research; develop a simple design specification; describe the user, purpose and design features of their products and explain how they will work.</p>	<p><b>Understanding contexts, users and purposes</b> carry out research; develop a simple design specification; describe the user, purpose and design features of their products and explain how they will work.</p>
		<p><b>Generating, developing, modelling and communicating ideas</b> Begin to generate ideas using their own experiences and existing products; use talk and drawing</p>	<p><b>Generating, developing, modelling and communicating ideas</b> generate ideas using their own experiences and existing products; use talk, drawing, templates, mock-ups and, where appropriate, computers.</p>	<p><b>Generating, developing, modelling and communicating ideas</b> Begin to generate realistic ideas based on user needs; use a range of drawing skills, discussion, prototypes, pattern pieces and computer-aided design.</p>	<p><b>Generating, developing, modelling and communicating ideas</b> generate realistic ideas based on user needs; use a range of drawing skills, discussion, prototypes, pattern pieces and computer-aided design.</p>	<p><b>Generating, developing, modelling and communicating ideas</b> Begin to generate innovative ideas drawing on research; use a range of drawing skills, discussion, prototypes, pattern pieces and computer-aided design.</p>	<p><b>Generating, developing, modelling and communicating ideas</b> generate innovative ideas drawing on research; use a range of drawing skills, discussion, prototypes, pattern pieces and computer-aided design.</p>	

Making

<p><b>Exploring and Using Media and Materials</b> Shows an interest in technological toys with knobs or pulleys</p> <ul style="list-style-type: none"> <li>• Uses various construction materials.</li> <li>• Beginning to construct, stacking blocks vertically and horizontally, making enclosures and creating spaces.</li> </ul>	<p><b>Planning</b> plan by suggesting what to do next select from a range of tools and equipment, explaining their choices select from a range of materials and components according to their characteristics</p>	<p><b>Planning</b> plan by suggesting what to do next; select from a range of tools, equipment, materials and components.</p>	<p><b>Planning</b> Begin to order the main stages of making; select suitable tools, equipment, materials and components and explain their choices</p>	<p><b>Planning</b> order the main stages of making; select suitable tools, equipment, materials and components and explain their choices.</p>	<p><b>Planning</b> Begin to formulate lists of resources and step-by-step plans; select suitable tools, equipment, materials and components and explain their choices.</p>	<p><b>Planning</b> formulate lists of resources and step-by-step plans; select suitable tools, equipment, materials and components and explain their choices.</p>
<ul style="list-style-type: none"> <li>• Joins construction pieces together to build and balance.</li> <li>• Realises tools can be used for a purpose.</li> <li>• Uses simple tools and techniques competently and appropriately.</li> <li>• Selects appropriate resources and adapts work where necessary.</li> <li>• Selects tools and techniques needed to shape, assemble and join materials they are using.</li> </ul>	<p><b>Practical skills and techniques</b> Begin to follow procedures for safety and hygiene; measure, mark out, cut, shape, assemble, join, combine and finish a range of materials and components.</p>	<p><b>Practical skills and techniques</b> follow procedures for safety and hygiene; measure, mark out, cut, shape, assemble, join, combine and finish a range of materials and components.</p>	<p><b>Practical skills and techniques</b> Begin to follow procedures for safety and hygiene; use a wider range of materials and components; measure, mark out, cut, shape, assemble, join, combine and finish with some accuracy</p>	<p><b>Practical skills and techniques</b> follow procedures for safety and hygiene; use a wider range of materials and components; measure, mark out, cut, shape, assemble, join, combine and finish with some accuracy.</p>	<p><b>Practical skills and techniques</b> Begin to follow procedures for safety and hygiene; use a wider range of materials and components; measure, mark out, cut, shape, assemble, join, combine and finish with accuracy</p>	<p><b>Practical skills and techniques</b> follow procedures for safety and hygiene; use a wider range of materials and components; measure, mark out, cut, shape, assemble, join, combine and finish with accuracy.</p>

	Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images						
Evaluate	Confident to speak to others about own needs, wants, interests and opinions e.g. what they like or dislike about an everyday product.	<b>Own ideas and products</b> With support, make simple judgements about their products and ideas against design criteria	<b>Own ideas and products</b> make simple judgements about their products and ideas against design criteria.	<b>Own ideas and products</b> Begin to evaluate their ideas and products against their design criteria.	<b>Own ideas and products</b> evaluate their ideas and products against their design criteria.	<b>Own ideas and products</b> Begin to identify strengths and areas to develop in their ideas and products against their design specification; consider the views of others to make improvements.	<b>Own ideas and products</b> identify strengths and areas to develop in their ideas and products against their design specification; consider the views of others to make improvements.
		<b>Existing products</b> Begin to explore who and what products are for, how they work and are used, what materials they are made from and what they like and dislike about them.	<b>Existing products</b> explore who and what products are for, how they work and are used, what materials they are made from and what they like and dislike about them.	<b>Existing products</b> Begin to investigate how well products have been designed and made, whether they are fit for purpose and meet user needs; why materials have been chosen, the methods of construction used and how well they work.	<b>Existing products</b> investigate how well products have been designed and made, whether they are fit for purpose and meet user needs; why materials have been chosen, the methods of construction used and how well they work.	<b>Existing products</b> Begin to investigate how well products have been designed and made, whether they are fit for purpose and meet user needs; why materials have been chosen, the methods of construction used, how well they work, and how innovative and sustainable they are	<b>Existing products</b> investigate how well products have been designed and made, whether they are fit for purpose and meet user needs; why materials have been chosen, the methods of construction used, how well they work, and how innovative and sustainable they are.
		<b>Key events and individuals</b>	<b>Key events and individuals</b>	<b>Key events and individuals</b> Begin to know about inventors, designers, engineers, chefs and	<b>Key events and individuals</b> know about inventors, designers, engineers, chefs and	<b>Key events and individuals</b> know about inventors, designers, engineers, chefs and	<b>Key events and individuals</b> know about inventors, designers, engineers, chefs and

Technical Knowledge

				manu facturers who have developed ground-breaking products.	manu facturers who have developed ground-breaking products.	manu facturers who have developed ground-breaking products.	manu facturers who have developed ground-breaking products.
	<p><b>Making products work</b> Explains own knowledge and understanding, and asks appropriate questions of others e.g. sharing what they know about how a product works.</p> <p><b>Textiles</b> use a basic running stich; Describe how different textiles feel Make a product from textiles by gluing</p> <p><b>Mechanisms</b> Cut materials using scissors Describe the materials using different words</p>	<p><b>Making products work Textiles</b> have discussed their ideas as they developed and be able to say what their design has to do; have created a puppet that works (ie is the right size and reflects the character) using a given technique; have stitched two pieces of fabric together and added features using appropriate materials and techniques Colour fabrics using fabric paints, printing, painting etc. Cut out shapes using a template Join fabrics using running stitch, glue, staples, over sewing and tape. Decorate fabrics with buttons, beads, sequins, braids and ribbons.</p> <p><b>Mechanisms</b> have gained an understanding of how</p>	<p><b>Making products work</b> know about the simple working characteristics of materials and components, the movement of simple mechanisms, how freestanding structures can be made stronger, stiffer and more stable; use the correct technical vocabulary.</p> <p><b>Textiles</b> have worked with minimal guidance and with increasing care using safely and with some accuracy the tools and techniques shown to them make and/or use a simple paper pattern/template to cut out accurate pieces Colour fabrics using fabric paints, printing, painting etc. Cut out shapes using a template. Join fabrics using running stitch, glue,</p>	<p><b>Making products work Textiles</b> have sufficient understanding and skills in working with textiles to design and make a Roman money pouch that meets their design criteria; have evaluated existing products, testing fabrics to choose an appropriate one; have applied decorative techniques appropriately Understand seam allowance. Join fabrics using running stitch, over sewing and back stitch. Produce a prototype using J cloths. Use appropriate decoration techniques (for example appliqué). Create a simple pattern.</p> <p><b>Mechanisms</b></p>	<p><b>Making products work</b> know that materials have functional and aesthetic qualities; that systems have an input, process and output; how to program a computer to control their products; how to make strong, stiff shell structures; use the correct technical vocabulary.</p> <p><b>Textiles</b> Have written design criteria and designed a sleeve that matches this criteria, including a fastening of some kind.  Have made a template for their book sleeve.  Have assembled their book sleeve using any stitch they are comfortable with.  Understand seam allowance.</p>	<p><b>Making products work Textiles</b> have used information from investigating Greek Sandals to inform their own designing and making; have developed their skills in working with textiles and will have designed and made a Greek Sandal using appropriate materials and techniques; have been able to evaluate critically both the appearance and function of the Greek Sandal against the original specifications  Create 3D products using pattern pieces and seam allowance. Understand pattern layout. Decorate textiles appropriately, often before joining components. Pin and tack fabric pieces together.</p>	<p><b>Making products work</b> know that materials have functional and aesthetic qualities; that systems have an input, process and output; how to program a computer to control and monitor their products; how to reinforce and strengthen a framework; use the correct technical vocabulary.</p> <p><b>Textiles</b> have used information from investigating bags to inform their own designing and making; have developed their skills in working with textiles and will have designed and made a bag using appropriate materials and techniques; have been able to evaluate critically both the appearance and function of the bag</p>

		<p>simple mechanisms related to moving vehicles work, after clarifying their ideas through discussion; have made a wheeled vehicle which moves and which generally matches their design intention</p>	<p>staples, over sewing and tape. Decorate fabrics with buttons, beads, sequins, braids and ribbons</p> <p><b>Mechanisms</b> have gained an understanding of simple winding mechanisms and made realistic suggestions as to how their ideas can be achieved; have constructed mechanisms using construction kits and reclaimed materials; have made the parts have been able to say what works well in their model</p>	<p>have developed an understanding of simple pneumatic systems; have worked as part of a team to design and make a train with at least one moving part controlled by a pneumatic system</p>	<p>Join fabrics using running stitch, over sewing and back stitch. Explore fastenings and recreate some (for example sew on buttons and make loops). Produce a prototype using J cloths. Use appropriate decoration techniques (for example appliqué). Create a simple pattern.</p> <p><b>Mechanisms</b> have reinforced their understanding of how a simple battery-operated circuit works and how this can be controlled by employing different kinds of switches, including those operated by a control box or program; have made something which lights up, identifying the specific needs of a chosen user and evaluating it against design criteria Incorporate a circuit with a bulb or buzzer into a model.</p>	<p>Join fabrics using over sewing, back stitch and blanket stitch. Combine fabrics to create more useful properties</p> <p><b>Mechanisms</b> have used their knowledge of the movement made by the cam in the design of their toy; have produced sketches and step-by-step plans and identified tools and materials; have measured, marked out and cut accurately, evaluating their work as it develops and at the end</p>	<p>against the original specifications; understand that a pattern/template must be used to make a bag; use a variety of sewing and decorating techniques and choose appropriate; join the fabric parts and use decorative techniques to achieve a well-constructed and finished bag;</p> <p>Create 3D products using pattern pieces and seam allowance Understand pattern layout Decorate textiles appropriately, often before joining components Pin and tack fabric pieces together Join fabrics using over sewing, back stitch and blanket stitch Combine fabrics to create more useful properties</p> <p><b>Mechanisms</b> have become familiar with how an electric motor behaves when</p>
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					<p>Create shell or frame structures, strengthen frames with diagonal struts.</p> <p>Make structures more stable by giving them a wider base.</p> <p>Prototype frame and shell structures</p> <p>Measure and mark square selection, strip and dowel.</p> <p>Use glue gun under supervision.</p>		<p>connected in an electrical circuit; have generated several ideas to choose from; have harnessed the rotation produced by the motor to drive a moving part on a model they have made, employing belts and pulleys; have designed, made, evaluated and modified their ride and linked it to computer control</p>
Cooking and Nutrition	<p><b>Food preparation, cooking and nutrition</b></p> <p>Describe the texture of foods</p> <p>Wash their hands</p> <p>Think of interesting ways of decorating food they have made, e.g. cakes</p> <p>Eats a healthy range of foodstuffs and understands need for variety in food.</p> <p>Peel - by hand, e.g. satsuma, banana</p>	<p><b>Where food comes from</b></p> <p>Begin to understand that food comes from plants and animals.</p>	<p><b>Where food comes from</b></p> <p>know that food comes from plants or animals and that it is farmed or caught.</p>	<p><b>Where food comes from</b></p> <p>Begin to understand that food is grown, reared and caught in the UK, Europe and the wider world.</p>	<p><b>Where food comes from</b></p> <p>know that food is grown, reared and caught in the UK, Europe and the wider world.</p>	<p><b>Where food comes from</b></p> <p>Begin to understand that food is grown, reared and caught in the UK, Europe and the wider world; that seasons may affect the food available; how food is processed into ingredients.</p>	<p><b>Where food comes from</b></p> <p>know that food is grown, reared and caught in the UK, Europe and the wider world; that seasons may affect the food available; how food is processed into ingredients.</p>
		<p><b>Food preparation, cooking and nutrition</b></p> <p>Start to understand how to name and sort foods into the five groups in 'The Eat well plate'</p> <p>They should know that a healthy diet</p>	<p><b>Food preparation, cooking and nutrition</b></p> <p>know how to prepare simple dishes safely and hygienically without a heat source, name and sort foods into groups; know that everyone should eat at least five portions of</p>	<p><b>Food preparation, cooking and nutrition</b></p> <p>Begin to understand how to prepare a variety of dishes safely and hygienically; that a healthy diet is made from a variety and balance of different food and drink; that</p>	<p><b>Food preparation, cooking and nutrition</b></p> <p>know how to prepare a variety of dishes safely and hygienically; that a healthy diet is made from a variety and balance of different food and drink; that food and drink are</p>	<p><b>Food preparation, cooking and nutrition</b></p> <p>Begin to understand how to prepare and cook a variety of dishes safely and hygienically using, where appropriate, a heat source; that different food and drink contain</p>	<p><b>Food preparation, cooking and nutrition</b></p> <p>know how to prepare and cook a variety of dishes safely and hygienically using, where appropriate, a heat source; that different food and drink contain nutrients, water and</p>

<p>Shape - foods by hand and with a rolling pin</p> <p>Cut - soft foods with butter knife, e.g. banana, canned peach slices</p> <p>Cut out - ingredients with a cutter,</p> <p>Spoon - ingredients between containers</p> <p>Mix/stir - to loosely combine ingredients - mash ingredients together using a fork</p>	<p>comprises food and drinks from each of the food groups</p> <p>Thread - thread soft foods onto cocktail sticks, e.g. fruit kebab - strawberries, Satsuma segments</p> <p>Cut - low resistance foods with a table knife in to equal size pieces/slices, e.g. canned pineapple slices, sticks of pepper, mushrooms - use a fork to secure foods</p>	<p>fruit and vegetables a day.</p> <p>Peel - with a swivel peeler with adult support</p> <p>Spread - soft ingredients, e.g. hummus</p> <p>Grate - soft foods, e.g. cheese, cucumber</p> <p>Cut - low resistance foods with a table knife in to equal size pieces/slices, e.g. canned pineapple slices, sticks of pepper, mushrooms - use a fork to secure foods</p>	<p>food and drink are needed to provide energy for the body.</p> <p>Peel - with a swivel peeler with Supervision</p> <p>Cut - medium resistance foods with a vegetable knife, e.g. cucumber. - use a fork or the claw grip to secure foods</p>	<p>needed to provide energy for the body.</p> <p>Shape and mould - to create visually appealing products e.g. Egyptian Flat Bread</p> <p>Mix/stir - any ingredients thoroughly</p> <p>Grate - firmer foods, e.g. carrots, apples</p> <p>Cut - medium resistance foods with a vegetable knife, e.g. cucumber. - use a fork or the claw grip to secure foods</p> <p>Carryout - instructions independently</p>	<p>nutrients, water and fibre that are needed for health.</p> <p>Mix/stir - fold ingredients together carefully</p> <p>Peel - with a swivel peel to create food ribbons to be used in a dish, e.g. courgette/carrot ribbons with supervision</p>	<p>fibre that are needed for health.</p> <p>Mix/stir - fold ingredients together carefully</p> <p>Grate - using the zesting part of a grater, e.g. lemon, orange - use a nutmeg grater</p> <p>Cut - higher resistance food with a vegetable knife, using the claw grip, e.g. celery, carrots - higher resistant foods from whole using the bridge hold, e.g. halve an apple, raw potato</p> <p>Peel - with a swivel peel to create food ribbons to be used in a dish, e.g. courgette/carrot ribbons with supervision</p>	
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