



Design and Technology Knowledge and Skills Progression

Nursery All statements from <i>Development Matters</i>	
Personal, Social and Emotional Development	Select and use activities and resources, with help when needed. This helps them to achieve a goal they have chosen, or one which is suggested to them.
Physical Development	Choose the right resources to carry out their own plan. Use one-handed tools and equipment, for example, making in snips in paper with scissors. Show a preference for a dominant hand.
Mathematics	Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal mathematical language: 'sides', 'corners', 'straight', 'flat', 'round'. Select shapes appropriately: flat surfaces for building, a triangular prism for a roof. Combine shapes to make new ones – an arch, a bigger triangle etc. Talk about and identify the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs', etc. Extend and create ABAB patterns – stick, leaf, stick, leaf. Notice and correct an error in a repeating pattern.
Understanding The World	Talk about what they see, using a wide vocabulary.

	<p>Explore how things work.</p> <p>Explore and talk about different forces they can feel.</p> <p>Talk about the difference between materials and changes they notice.</p>
Expressive Arts and Design	<p>Make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park.</p> <p>Explore different materials freely, to develop their ideas about how to use them and what to make.</p> <p>Develop their own ideas and then decide which materials to use to express them.</p> <p>Join different materials and explore different textures.</p> <p>Create closed shapes with continuous lines and begin to use these shapes to represent objects.</p> <p>Draw with increasing complexity and detail such as representing a face with a circle and including details.</p> <p>Use drawing to represent ideas like movement or loud noises.</p> <p>Show different emotions in their drawings and paintings, like happiness, sadness, fear etc.</p> <p>Explore colour and colour mixing.</p>

<p>Reception</p> <p>All statements from the Early Learning Goals</p>	
Communication and Language	<p>Listening, Attention and Understanding:</p> <ul style="list-style-type: none"> • Listen attentively and respond to what they hear with relevant questions, comments and actions when being read to and during whole class discussions and small group interactions.

	<ul style="list-style-type: none"> • Make comments about what they have heard and ask questions to clarify their understanding. • Hold conversation when engaged in back-and-forth exchanges with their teachers and peers. <p>Speaking:</p> <ul style="list-style-type: none"> • Participate in small group, class and one-to-one discussion, offering their own ideas, using recently introduced vocabulary. • Offer explanations for why things might happen. Making use of recently introduced vocabulary from stories, non-fiction, rhymes and poems when appropriate. • Express their ideas and feelings about their experiences using full sentences, including use of past, present and future tenses and making use of conjunctions, with modelling and support from their teacher.
Personal, Social and Emotional Development	<p>Self-Regulation:</p> <ul style="list-style-type: none"> • Set and work towards simple goals, being able to wait for what they want and control their immediate impulses when appropriate. • Give focussed attention to what the teacher says, responding appropriate even when engaged in activity, and show an ability to follow instructions involving several ideas or actions. <p>Managing Self:</p> <ul style="list-style-type: none"> • Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. • Explain the reasons for rules, know right from wrong and try to behave accordingly.
Physical Development	<p>Fine Motor Skills:</p> <ul style="list-style-type: none"> • Use a range of small tools, including scissors, paint brushes and cutlery.
Expressive Arts and Design	<p>Creating with Materials:</p> <ul style="list-style-type: none"> • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. • Share their creations, explaining the process they have used.

	By the end of Year 2, pupils should:	By the end of Year 4, pupils should:	By the end of Year 6, pupils should:
Designing			
Understanding contexts, users and purposes	Use simple design criteria; state what their products are, who and what they are for and how they will work.	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.	Carry out research; develop a simple design specification; describe the user, purpose and design features of their products and explain how they will work.
Generating, developing, modelling and communicating ideas	Generate ideas using their own experiences and existing products; use talk, drawing, templates, mock-ups and, where appropriate, computers.	Generate realistic ideas based on user needs; use a range of drawing skills, discussion, prototypes, pattern pieces and computer-aided design.	Generate innovative ideas drawing on research; use a range of drawing skills, discussion, prototypes, pattern pieces and computer-aided design.
Making			
Planning	Plan by suggesting what to do next; select from a range of tools, equipment, materials and components.	Order the main stages of making; select suitable tools, equipment, materials and components and explain their choices.	Formulate lists of resources and step-by-step plans; select suitable tools, equipment, materials and components and explain their choices.
Practical skills and techniques	Follow procedures for safety and hygiene; measure, mark out, cut, shape, assemble, join, combine and finish a range of materials and components.	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.	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.
Evaluating			
Own ideas and products	Make simple judgements about their products and ideas against design criteria.	Evaluate their ideas and products against their design criteria.	Identify strengths and areas to develop in their ideas and products against their design specification;

			consider the views of others to make improvements.
Existing products	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.	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.	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.
Key events and individuals	N/A	Know about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products.	Know about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products.
Technical Knowledge			
Making products work	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.	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.	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.
Cooking and Nutrition			
Where food comes from	Know that food comes from plants or animals and that it is farmed or caught.	Know that food is grown, reared and caught in the UK, Europe and the wider world.	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.
Food preparation, cooking and nutrition	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 fruit and vegetables a day.	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 needed to provide energy for the body.	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 fibre that are needed for health.