



Design and Technology: Progression from Nursery to Year 2

Development Matters 2020	Nursery (Class 1)	<u>PSED</u> • Select & use activities/resources, with help when needed. <u>Physical development</u> • Use large-muscle movements to wave flags and streamers, paint and make marks. • Choose the right resources to carry out their own plan. • Use one-handed tools and equipment, for example, making snips in paper with scissors. <u>Understanding the World</u> • Explore how things work. <u>Expressive Arts & Design</u> • Make imaginative and complex 'small worlds' with blocks and construction kits, city with different buildings and a park. • 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. • Create closed shapes with continuous lines, and begin to use these shapes to represent objects.
	Reception (Classes 2-4)	<u>Physical Development</u> • Progress towards a more fluent style of moving, with developing control and grace. • Develop their small motor skills so that they can use a range of tools competently, safely and confidently. • Use their core muscle strength to achieve a good posture when sitting at a table or sitting on the floor. <u>Expressive Arts & Design</u> • Explore, use and refine a variety of artistic effects to express their ideas and feelings. • Return to and build on their previous learning, refining ideas and developing their ability to represent them. • Create collaboratively, sharing ideas, resources and skills.

National Curriculum	Key Stage 1 (Classes 5-10)	Pupils should be taught to: <u>Design</u> - design purposeful, functional, appealing products for themselves and other users based on design criteria. - generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. <u>Make</u> - select from/use a range of tools & equipment to perform practical tasks eg. cutting, shaping, joining and finishing. - select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics <u>Evaluate</u> - explore and evaluate a range of existing products - evaluate their ideas and products against design criteria <u>Technical knowledge</u> - build structures, exploring how they can be made stronger, stiffer and more stable - explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. <u>Cooking and nutrition</u> - use the basic principles of a healthy and varied diet to prepare dishes - understand where food comes from.

Area	Year Group	Knowledge and Skills Key vocabulary is in bold
Design	Nursery	- Explore DT areas in Nursery. - Talk about the purpose of some different tools such as scissors and how to use them safely. - Talk to adults and peers about their observations. - Begin to express ideas about what they are going to make. - Begin to think about how to make a product. - Begin to think about the user (other children). - Begin to gather the materials for own use eg card, paper, tubes
	Reception	- Begin to think about and talk about own design. - Begin to think about the materials they will use. - Begin to talk about ideas to others (adults and peers). - Begin to talk about the purpose of the chosen product. - Begin to think about how to make the product more appealing or suitable to the user. - Begin to explain the purpose of own product and how it is going to be made.

	Year 1	• Think of own ideas. • Use words and pictures to plan a product. • Design a product for self or others following design criteria. • Explain what they want to achieve. • Describe what they like and dislike.
	Year 2	• Think of ideas and plan what to do next. • Choose appropriate tools and materials for the task. • Explain and justify own reasoning for choice of tools and materials. • Describe own design using pictures, models, diagrams, words and technology. • Design a product with a user in mind. • Describe what they like and dislike.
Make	Nursery	• Begin to use senses to talk about materials and experiment with different materials eg. paper, card, boxes. • Experiment to create different textures. • Name and use some materials such as cardboard, fabric, paper. • Begin to use tools safely. • Understand that different media can be combined to create new effects. • Begin to use some of the materials available to create a basic model. • Cut, fold, stick, tear and snip different materials. • Use sticky tape or masking tape and glue to achieve the desired effect. • Make attempts to join materials using a range of materials such as glue and tape.
	Reception	• Begin to choose appropriate resources. • Name and use materials such as cardboard, fabric, paper, bubble wrap, plastic. • Begin to think about users and purpose eg. making something useful • Begin to differentiate between the different properties of materials. • Describe some of the properties of chosen materials such as hard and soft and explain why they are suitable. • Develop cutting skills by working with different materials such as card and fabric. • Select a variety of tools (scissors, hammers, split pins, paint brushes, sculpting tools) to manipulate materials to create a desired effect (tear, snip, join, glue, fold, measure)
	Year 1	• Explain what they are making and why, describing the purpose. • Select tools and materials to cut, shape, join and finish. • Describe which tools and materials they are using and why they are using them.
	Year 2	• Explain what they are making and why it is suitable for the user. • Join things together in different ways. • Choose materials and explain why they are being used based on their characteristics.

Evaluate	Nursery	• Begin to reflect and talk about what they are making. • Talk about what they like and dislike about what they have made. • Begin to think about how they can make their product better.
	Reception	• Begin to represent their own ideas through models. • Express what they like and dislike about their model. • Begin to explain why they like or dislike parts of their model. • Begin to think about how they could adapt their model to make is more useful or attractive. • Begin to evaluate their product, by saying what works and does not work or what they do and do not like. • Begin to think about how and why they might need to change their model to improve it. • Compare their product to other products.
	Year 1	• Describe how existing products work. • Begin to assess their work against a given success criteria.
	Year 2	• Describe what went well with their product and why it works. • Evaluate what they would do differently next time and why. • Assess their work against design criteria.
Technical Knowledge	Nursery	• Begin to name the different tools available. • Begin to understand how to use certain tools. • Begin to cut, fold and join. • Name some tools and materials. • Join in different ways, glue, tape, paper clips.
	Reception	• Use some simple tools safely, eg. scissors • Use basic techniques such as cutting and folding. • Begin to select materials; select tools and resources independently and explain their choices. • Begin to assemble and join. • Use a wider variety of tools (scissors, cutters, hole punches and staplers).
	Year 1	• Explore joining techniques to create a strong cross structure. • Make a simple mechanism ie. a slider. • Cut and join textiles together to make a product ie a Christmas decoration. • Make a purposeful and appealing product for self or another user.
	Year 2	• Explore joining techniques to create a strong frame structure. • Build structures exploring how they can be made stiffer and stronger and more stable. • Research a product and understand the purpose of a product. • Design purposeful, functional and appealing products for self and other users based on a design criteria.

		• Explore and use a mechanism ie. a lever, in product.
Cooking and Nutrition	Nursery	• Eat a healthy range of foodstuffs and understand the need for variety. • Talk about some of the benefits of eating healthy food. (different nutrients) • Show some understanding of good practices regarding eating and hygiene. (hand washing, rolling sleeves up, wearing an apron) • Begin to understand the importance of cleaning own teeth. • Compare food and describe the taste (salty, sweet, sour). • Express own preferences about the food.
	Reception	• Talk about the importance of washing hands before preparing food for hygiene reasons. • Talk about favourite food. • Talk about healthy food and begin to understand the importance of healthy food on our bodies. • Manage own basic hygiene and explain why it is important (it kills germs) • Describe some different tastes, differentiating between sweet, salty etc. • Prepare simple food with guidance. • Explain the importance of brushing teeth. • Talk about where food comes from (e.g. milk from cows, bread from flour from wheat). • Explain the importance of healthy food e.g. why milk is good for us and too many sweets are bad for us. • Explain some nutritional information such as milk contains calcium and fruit and vegetables contain vitamins.
	Year 1	• Understand that food comes from plants or animals. • Explain that food has to be farmed or caught. • Show understanding that everyone should eat at least five portions of fruit and vegetables every day. • Prepare simple dishes with adult help safely and hygienically without using a heat source. • Use techniques such as cutting, peeling and grating with some adult support. • Demonstrate knife skills (claw knife technique) on soft foods e.g. cucumber. • Snip herbs using scissors.
	Year 2	• Explain that food has to be farmed, grown elsewhere or caught. • Name and sort foods into five groups in the Eatwell plate. • Show understanding that everyone should eat at least five portions of fruit and vegetables every day. • Prepare simple dishes safely and hygienically without using a heat source, with growing independence • Demonstrate techniques such as cutting, peeling and grating with growing independence. • Demonstrate knife skills (bridge technique on harder foods e.g. apple). • Grate soft foods (e.g. courgette, cheese). • Demonstrate weighing and measuring skills by using a jug to measure liquid.