

## Progression of skills in design and technology - by the end of Early Years Foundation Stage

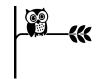
Designing	Making	Evaluating	Technical knowledge	Food technology
Expressive art and design	Physical (fine motor)	Expressive art and design	Understanding the world World and Technology	Personal Social Emotional
Make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park Explore different materials freely, 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. Join different materials and explore different textures. 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.	Choose the right resources to carry out their own plan. For example, choosing a spade to enlarge a small hole they dug with a trowel. Collaborate with others to manage large items, such as moving a long plank safely, carrying large hollow blocks. Explain why safety is an important factor in handling tools and moving equipment and materials. Use one-handed tools and equipment, for example, making snips in paper with scissors. Use a comfortable grip with good control when holding pens and pencils. Show a preference for a dominant hand. Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Suggested tools: pencils for drawing and writing, paintbrushes, scissors, knives, forks and spoons.	Develop their own ideas and then decide which materials to use to express them. 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.	Use all their senses in hands-on exploration of natural materials. Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary Explore how things work Begin to understand the need to respect and care for the natural environment and all living things. Explore and talk about different forces they can feel. Talk about the differences between materials and changes they notice	Make healthy choices about food, drink, activity and toothbrushing. Manage their own needs. Personal hygiene Know and talk about the different factors that support their overall health and wellbeing: regular physical activity, healthy eating



## Progression of skills in design and technology - by the end of KS1

Designing	Making	Evaluating	Technical Knowledge	Food Technology
use own ideas to design something	use own ideas to make something	describe how something works	make a model stronger and more stable	cut food safely
describe how their own idea works	make a product which moves	explain what works well and not so well in the model they have made	use wheels and axles and levers, when appropriate to do so	weigh ingredients to use in a recipe
design a product which moves	choose appropriate resources and tools choose tools and materials and explain why they have chosen them		Safely use tools such as scissors or a hole punch	describe the ingredients used when making a dish or cake
explain to someone else how they want to make their product	join materials and components in different ways		Safely use a kitchen knife and equipment such as a grater	Begin to understand that all food comes from plants or animals. Explore the understanding that food has to be farmed, grown elsewhere (e.g. home) or caught
make a simple plan before making	measure materials to use in a model or structure			
think of an idea and plan what to do next				
explain why they have chosen specific textiles				

 . , ,	Cut, shape and join fabric to make a simple item. Use basic sewing techniques		



## Progression of skills design and technology - by the end of LKS2

Designing	Making	Evaluating	Technical Knowledge	Food Technology
prove that a design meets a set criteria.	follow a step-by-step plan, choosing the right equipment and materials	explain how to improve a finished model, evaluate and suggest improvements for designs (for both purpose and appearance)	know how to strengthen a product by stiffening a given part or reinforce a part of the structure	describe how food ingredients come together
design a product and make sure that it looks attractive	make a product which uses both electrical and mechanical components	know why a model has or has not been successful	use IT where appropriate to add to the quality of the product	weigh out ingredients and follow a given recipe to create a dish
choose a material for both its suitability and its appearance	work accurately to measure, make cuts and make holes	explain how the original design has been improved	links scientific knowledge by using lights, switches or buzzers use electrical systems to enhance the quality of the product	talk about which food is healthy and which food is not
use ideas from other people when designing	know which tools to use for a particular task and show knowledge of handling the tool	present a product in an interesting way		know when food is ready for harvesting
produce a plan and explain it	know which material is likely to give the best outcome measure accurately			know how to be both hygienic and safe when using food
persevere and adapt work when original ideas do not work	Use a range of finishing techniques			bring a creative element to the food product being designed

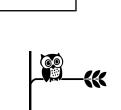
5	Measure, tape or pin, cut and join fabric with some accuracy			
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## Progression of skills in design and technology- by the end of UKS2

Designing	Making	Evaluating	Technical Knowledge	Food Technology
come up with a range of ideas after collecting information from different sources	use a range of tools and equipment competently	suggest alternative plans; outlining the positive features and draw backs	links scientific knowledge to design by using pulleys, levers or gears	be both hygienic and safe in the kitchen
produce a detailed, step-by-step plan and justify planning in a convincing way	make a prototype before making a final version	know how to test and evaluate designed products	use electrical systems correctly and accurately to enhance a given product	know how to prepare a meal by collecting the ingredients in the first place
design a product that requires pulleys or gears	make a product that relies on pulleys or gears	explain how products should be stored and give reasons	use knowledge to improve a made product by strengthening, stiffening or reinforcing	know which season various foods are available for harvesting
use market research to inform plans and ideas and explain how a product will appeal to a specific audience	know how to use any tool correctly and safely know what each tool is used for explain why a specific tool is best for a specific action	evaluate appearance and function against original criteria	uses more complex IT program to help enhance the quality of the product produced know which IT product would further enhance a specific product	explain how food ingredients should be stored and give reasons

follow and refine original plans	Use a range of finishing techniques		work within a budget to create a meal
show that culture and society is considered in plans and designs	Pin, sew and stitch materials together create a quality product		understand the difference between a savoury and sweet dish

Progression Per Area



Drawing Skill and Technic	lues
End of Early Years Foundation Stage	
End of Key Stage 1	Can hold and use drawing tools such as pencils and crayons using them with some dexterity and control Enjoys making marks, signs and symbols on a variety of types of paper. Will work spontaneously and expressively using marks, lines and curves to represent their observation, memories and ideas with purpose/intention Explores tone using different grades of pencil, pastel and chalk. Will experiment and investigate. Uses line and tone to represent things seen, remembered or observed Can draw carefully in line from observation, recording shapes and positioning all marks/features with some care. Can show how people feel in their drawings. Uses a journal or sketchbook to record what they see, recording new processes and technique. Can record ideas, observations and designs to support the development of ideas and skills
End of Lower Key Stage 2	
End of Upper Key Stage 2	

Can develop quick studies from observation, recording action and movement with fluency.
Can express their ideas and observations responding to advice from others to rework and improve design ideas
Plans and completes extended sets of drawings in sketchbooks to plan a painting, print or 3D piece

Painting Skills	
End of Early Years Foundation Stage	
End of Key Stage 1	Can select and use different brushes to explore and make marks of different thicknesses Can spread and apply paint to make a background using wide brushes Can investigate mark-making using different kinds of brushes (e.g sponges) Can investigate, experiment, and mix colour. Can name and mix primary and secondary colours. Can use colour and painting skills to create or suggest a place, time or season or to represent real life, ideas and convey mood.
End of Lower Key Stage 2	
End of Upper Key Stage 2	Can create different effects by using a variety of tools and techniques such as dots, scratches and splashes, and applying paint in layers Can select from different methods to apply colour using a variety of tools and techniques to express mood or emotion Can show the effect of light and colour, texture and tone on natural and manmade objects Can use studies gathered from observation to help plan and realise paintings

<b>3D and Sculpture Skills</b>	
End of Early Years Foundation Stage	
End of Key Stage 1	Can handle and manipulate rigid and malleable materials such as clay, card and found objects to represent something known and suggest familiar objects or things Can model in malleable/plastic materials and control form to assemble basic shapes or forms e.g. bodies/heads and add surface features Experiments with basic tools on rigid / pliable materials to create surface texture Can use clay to construct a simple functional form such as a pinch pot or coil pot, smoothing and joining clay with care

End of Lower Key Stage 2	Can create textured surfaces using rigid and plastic materials and a variety of tools
	Can build in clay a functional form using two/three building techniques and some surface decoration
End of Upper Key Stage 2	Can use study of 3D work from a variety of genres and cultures to develop their own response through models, experimentation and design
	stages
	Can make imaginative use of the knowledge they have acquired of tools, techniques and materials to express own ideas and feelings

Collage and Textile Skills		
End of Early Years Foundation Stage		
End of Key Stage 1	Can select materials from a range offered considering shape, surface and texture Can sort and modify by cutting, tearing with care before adding other marks and colour to represent an idea Can use paste and adhesives to select and place cut and torn shapes onto a surface to convey an idea Can cut threads and fibres, stitch, sew together and surface decorate using adhesive and beads or buttons Can create a simple woven piece	
End of Lower Key Stage 2	Can cut multiple shapes with a scissors and arrange or stick these on a surface for a purpose Can interpret stories, music, poems and other stimuli and represent these using mixed media elements Can use found textures to create a representational image. Can weave paper and found materials Can attach different elements using stitching	
End of Upper Key Stage 2		

Printing Skills		
End of Early Years Foundation Stage		
End of Key Stage 1	Can apply ink or paint to a shape or surface to experiment with printing using hands, feet, shapes, objects and found materials such as sponges or leaves Can take rubbings from texture Can create a repeated pattern in print	
End of Lower Key Stage 2	Can explore lines, marks and tones through monoprinting on a variety of papers to create an image.	
	Can make connections between own work and patterns in their local environment (e.g. curtains, wallpaper) Can explore colour mixing through printing, using two coloured inks, a roller and pressprint/ Easiprint poly blocks Can design prints for e.g. fabrics, book covers, wallpaper or wrapping paper to meet a given set of criteria.	

ICT Skills	
End of Early Years Foundation Stage	
End of Key Stage 1	Can open and use an art program, selecting simple tools to make lines, shapes and colours Can use an ipad to take a photo
End of Lower Key Stage 2	Can plan the use of a camera to take a specific photo or set of photos Can use a painting program to make an image corresponding to their work in other art media Can use the zoom function to best frame an image Can show an awareness of mood, emotions and feelings when evaluating the photography of others
End of Upper Key Stage 2	Can use a digital camera to capture objects to be cut and pasted into another image to create a digital collage. Can collaborate and use a video camera or ipad and simple editing software to pre-produce, film and edit a short sequence of narrative. * Can animate a simple sequence of drawings, photos or models to make a time based presentation with sound* * these are targets to develop over the next year with our new ipads

Study of Artists. Critical Thinking.		
End of Early Years Foundation Stage		
End of Key Stage 1	Can look at and describe what they see, think and feel when looking at artwork. They can ask questions to improve their understanding of a piece of work. Can create a piece of work in response to the work of another artist.	
End of Lower Key Stage 2	Can describe and discuss and compare the work of artists, craftspeople and designers Can use work of other cultures and periods in history as a stimulus to develop ideas. Can learn about how artists developed their specific techniques Can experiment with the styles of other artists	
End of Upper Key Stage 2	Can describe the work of artists, craftspeople and designers to build understanding and discuss this with others. Can use work of other cultures and times as a stimulus to develop their own work. Can talk about how their own work has been influenced by other artists	