Stelling Minnis CEP School

DT Progression Document

EYFS: How we provide for a foundation of Art and Design and Design and Technology skills and knowledge

Main link: Expressive Arts and Design

The following are potential learning opportunities where our children may develop skills and knowledge of art and design and design and technology in readiness for the KS 1 curriculum. Other opportunities may arise as we follow the children's interests.

Make imaginative and complex small worlds with blocks and construction kits, such as a city with different buildings and a park	Create closed shapes with continuous lines and begin to use these to represent objects.	Return to and build on their previous learning, refine ideas and develop their ability to represent them.	Explore. Use and refine a variety of artistic effects to express their ideas and feelings.
Draw with complexity and control. E.g features on a face	Use drawings to represent ideas like movement and loud noises.	Show different emotions in their drawings and paintings.	Join different materials and explore different textures.
Explore colour and colour mixing.	Create collaboratively, sharing ideas, resources and skills.	Explore different materials freely, to develop their ideas about how to use them and what to make.	To develop their own ideas and then decide which materials to use to express them.

ELG: **Creating with Materials** • 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. • Make use of props and materials when role playing characters in narratives and stories

Being Imaginative and Expressive • Invent, adapt and recount narratives and stories with peers and their teacher. • Sing a range of well-known nursery rhymes and songs. • Perform songs, rhymes, poems and stories with others, and (when appropriate) try to move in time with music.

EYFS: What this might look like in provision

Main link: Expressive Arts and Design

The following are possible opportunities within all provision areas that children may develop art and design and design and technology skills and knowledge. They may be further developed or adapted to follow the children's interests.

Autumn leaf printing and rubbings (Links to printing)	Hole punches/staplers/split pins/scissors to assemble their own creations – this supports threading, joining and shaping.	Junk modelling – planning and making. Focusing on joining materials together with different joins e.g., joining a loo roll to another box.	Designing their own superhero outfits – exploring a variety of materials, tools and techniques, with colour, design, texture, form and function.
Secondary colour/Darkening and lightening colours – 5 colours in provision: black, white, red, blue and yellow.	Chinese new year- looking at foods from other countries.	Looking at different artists for inspiration.	Den building – focusing on the design for a particular character from a story.
Collage and mixed media using different materials	Paper plate for mask making, handbag making, moving pictures.	Finger, hand and feet paintings.	Sand sculptures – modeling wet sand and using shells etc.
Planning sheets in construction area and art area for planning their creations.	Learning how to link materials together e.g. paper chains, string.	Using cotton buds to support pointillism.	Food and nutrition – healthy eating, fruit kebabs, fruit salads.
Creating a Christmas present for fellow classmates.	Creating simple labels for their designs and work.	Observational drawings of plants using shading with pastels.	Choosing materials to create effect e.g. feathers, buttons, sequins.
Experimenting with glue sticks and PVA glue – deciding which is best for specific art and craft activities.	Folding techniques to create fans, books, stairs etc.	Playdough/Clay - modelling and sculpture	Experimenting with water colours.

DT: Key Stage 1

	Designing	Making	Evaluating	Technical Knowledge	Food Technology
	Design - purposeful, functional, appealing products for themselves and other users based on design criteria *Design - generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology*	*select from and use a range of tools and equipment to perform practical tasks [for example, 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*	*explore and evaluate a range of existing products* *evaluate their ideas and products against design criteria*	*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.*	*use the basic principles of a healthy and varied diet to prepare dishes* *understand where food comes from*
Year 1	• use own ideas to design something and describe how their own idea works • design a product which moves • explain to someone else how they want to make their product and make a simple plan before making	• use own ideas to make something • make a product which moves • choose appropriate resources and tools	• describe how something works • explain what works well and not so well in the model they have made	• make their own model stronger	• cut food safely
Year 2	• think of an idea and plan what to do next • explain why they have chosen specific textiles	• choose tools and materials and explain why they have chosen them • join materials and components in different ways • measure materials to use in a model or structure	• explain what went well with their work	• make a model stronger and more stable • use wheels and axles, when appropriate to do so	• weigh ingredients to use in a recipe • describe the ingredients used when making a dish or cake

DT: Key Stage 2

	Designing	Making	Evaluating	Technical Knowledge	Food Technology
	use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups *generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design*	*select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately* *select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities*	*investigate and analyse a range of existing products* *evaluate their ideas and products against their own design criteria and consider the views of others to improve their work* *understand how key events and individuals in design and technology have helped shape the world*	*apply their understanding of how to strengthen, stiffen and reinforce more complex structures* *understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]* *understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]* *apply their understanding of computing to program, monitor and control their products.*	*understand and apply the principles of a healthy and varied diet* *prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques* *understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed*
Year 3	• prove that a design meets a set criteria. • design a product and make sure that it looks attractive • choose a material for both its suitability and its appearance	• follow a step-by-step plan, choosing the right equipment and materials • select the most appropriate tools and techniques for a given task • make a product which uses both electrical and mechanical components • work accurately to measure, make cuts and make holes	• explain how to improve a finished model • know why a model has, or has not, been successful	• know how to strengthen a product by stiffening a given part or reinforce a part of the structure • use a simple IT program within the design	• describe how food ingredients come together • weigh out ingredients and follow a given recipe to create a dish • talk about which food is healthy and which food is not • know when food is ready for harvesting
Year 4	• use ideas from other people when designing • produce a plan and explain it • persevere and adapt work when original ideas do not work • communicate ideas in a range of ways, including by sketches and drawings which are annotated	• know which tools to use for a particular task and show knowledge of handling the tool • know which material is likely to give the best outcome • measure accurately	• evaluate and suggest improvements for design • evaluate products for both their purpose and appearance • explain how the original design has been improved • present a product in an interesting way	• links scientific knowledge by using lights, switches or buzzers • use electrical systems to enhance the quality of the product • use IT, where appropriate, to add to the quality of the product	• know how to be both hygienic and safe when using food • bring a creative element to the food product being designed

DT: Key Stage 2

	Designing	Making	Evaluating	Technical Knowledge	Food Technology
	use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups *generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design*	*select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately* *select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities*	*investigate and analyse a range of existing products* *evaluate their ideas and products against their own design criteria and consider the views of others to improve their work* *understand how key events and individuals in design and technology have helped shape the world*	*apply their understanding of how to strengthen, stiffen and reinforce more complex structures* *understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]* *understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]* *apply their understanding of computing to program, monitor and control their products.*	*understand and apply the principles of a healthy and varied diet* *prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques* *understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed*
Year 5	• come up with a range of ideas after collecting information from different sources • produce a detailed, step-by-step plan • explain how a product will appeal to a specific audience • design a product that requires pulleys or gears	• use a range of tools and equipment competently • make a prototype before making a final version • make a product that relies on pulleys or gears	• suggest alternative plans; outlining the positive features and draw backs • evaluate appearance and function against original criteria	• links scientific knowledge to design by using pulleys or gears • uses more complex IT program to help enhance the quality of the product produced	• be both hygienic and safe in the kitchen • know how to prepare a meal by collecting the ingredients in the first place • know which season various foods are available for harvesting
Year 6	• use market research to inform plans and ideas. • follow and refine original plans • justify planning in a convincing way • show that culture and society is considered in plans and designs	• know which tool to use for a specific practical task • 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	• know how to test and evaluate designed products • explain how products should be stored and give reasons • evaluate product against clear criteria	• use electrical systems correctly and accurately to enhance a given product • know which IT product would further enhance a specific product • use knowledge to improve a made product by strengthening, stiffening or reinforcing	• explain how food ingredients should be stored and give reasons • work within a budget to create a meal • understand the difference between a savoury and sweet dish