

# CURRICULUM MAP



SUBJECT: Design and Technology

YEAR: 2020

	SKILL/KNOWLEDGE	NURSERY	YR	Y1	Y2	Y3
DESIGN- links to science	Design purposeful, functional, appealing products for themselves and other users based on design criteria	Begin to construct using a variety of equipment- including construction and junk modelling. (30-50 expressive art and design)	Begin to design for themselves using a given criteria.	Design for themselves and others using a given criteria.  Link to science- materials topic, making umbrellas.	Design purposeful and appealing products for themselves and others using a given criteria.  Link to cars	To begin to research and develop design criteria to inform the design of products.
	Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and where appropriate, information and communication technology.	Join construction pieces together to build with a purpose. (30-50 expressive art and design)	With support use templates and talk to communicate ideas.	Use templates, talk, drawings and ICT to communicate ideas.  Purple mash to support ICT	Use templates, talk, drawings, mock ups and ICT to communicate ideas.  Purple mash to support ICT	To begin to generate, develop, model and communicate ideas through discussion, sketches, diagrams or prototypes.
MAKE	Select form and use a range of tools and equipment to perform practical tasks such as cutting, shaping, joining and finishing.	Realise tools can be used for a purpose. (30-50 expressive art and design)	Uses simple tools to effect the change s to materials.  (40-60+ Physical development)	Select from and use tools and equipment to join, cut and shape.	Independently Select from and use tools and equipment to join, cut, shape and finish.	Select from and use a wider range of tools and equipment to perform practical tasks such as cutting, shaping, joining and finishing accurately.
	Select from and use a wide range of materials and components, including construction materials, textile and ingredients, according to their characteristics.	Selects appropriate resources (40-60 expressive art and design)	To explore a variety of materials and tools and techniques.  (ELG Expressive arts and design)  With support begin to use - treasury tags, split pins, scissors, glue, masking tape, stapler. Hammers and screwdrivers.	Select and make using construction materials and ingredients.  Independently using- treasury tags, split pins, scissors, glue, masking tape, stapler and hole punch.  Making puppets for sea topic using PVA and felt	Select and make using construction materials, and textiles and ingredients.  Independently using treasury tags, split pins, scissors, glue, masking tape, stapler and cool glue gun,	Select from a use a wider range of materials and components including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.  Selecting the appropriate joining technique from- treasury tags, split pins, scissors, glue, masking tape, stapler and cool glue gun, junior hacksaw, sandpaper.

EVALUATE	Explore and evaluate a range of existing products	Begin to explore familiar products such as toys.	Begin to explore a variety of products.	Explore products and begin to evaluate them.	Explore products and evaluate.	Begin to investigate and analyse a range of existing products.
	Evaluate their ideas and products against design criteria	Begin to evaluate ideas with help.	Begin to evaluate and discuss against criteria.	Evaluate and discuss against criteria.	Confidently evaluate and discuss against criteria giving opinions.	Begin to evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
Technical knowledge	Build structures, exploring how they can be made stronger, stiffer and more stable	Joins construction pieces together to build and balance. (30-50 expressive art and design)	Selects appropriate resources and adapts work where needed. (40-60+ expressive art and design)	Build structures making them stronger, stiffer and more stable with guidance.	Build structures making them stronger, stiffer and more stable.	Begin to apply their understanding of how strength, stiffen and reinforce more complex structures.
	Explore and use mechanisms, such as levers, sliders, wheels and axis in their products.	Begin to explore toys with wheels and how they move.	Begin to explore wheels and axis using construction equipment.	Explore wheel and axis and lever with construction equipment such as lego or knex. Using scooters, toy cars ect.	Explore levers, sliders and wheels and axis.	Begin to understand and use mechanical systems in their products such as gears, pulleys, cams, levers and linkages. Begin to understand and use electrical systems in their products. Such as series circuit, switches, bulbs, buzzers and motors. Begin to apply their understanding of computing to programme, monitor and control their products.
COOKING AND NUTRITION	To use the basic principles of a healthy and varied diet to prepare dishes.	Understand we have a variety of food to keep us healthy. (40-60+ Physical development)	To understand how food provides a healthy diet. (ELG Physical development)  Skills- chopping, stirring peeling and crushing.	To understand the principles of a healthy varied diet.- also food groups  Skills- chopping, skewering, spreading and kneading.	To understand and discuss the principles of a varied diet.  Skills- chopping, grating, whisking and measuring.	To begin to understand and apply the principles of a healthy and varied diet.  To experiment with deigning and making healthy sandwiches.