



St Barnabas
CoFE Primary School

Skills Progression

Subject area:
Design and Technology

Subject Intent:

At St Barnabas, children receive a Design and Technology curriculum which allows them to exercise their creativity and imagination. Scenarios provided to the children are realistic and relevant taking into account the way we live today. The aim is to ensure this work links across the curriculum with other areas especially Maths and Science. This area of study also affords children vital skills and knowledge allowing them to become innovators and thinkers for a future unknown.

EYFS Development Matters

Characteristics of effective teaching and learning

Playing and exploring – children investigate and experience things, and ‘have a go’

Active learning – children concentrate and keep on trying if they encounter difficulties, and enjoy achievements

Creating and thinking critically – children have and develop their own ideas, make links between ideas, and develop strategies for doing things

Early Learning Goals:

Children at the expected level of development will:

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.

Skill	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Developing, planning and communicating ideas - Design	3 and 4 year olds will be learning to: <ul style="list-style-type: none"> Explore how things work. 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 Children in reception will be learning to: <ul style="list-style-type: none"> Talk about what they are making and the materials being used Choose and describe the materials to be used for an intended simple design Be able to name the tools being 	<ul style="list-style-type: none"> Use own experiences to develop ideas Explain ideas they have Identify who or what they wish to make Create the make from materials Use ideas to further designs 	<ul style="list-style-type: none"> Use own experience for ideas Discuss their ideas with others to try to improve Develop ideas through practical methods What is the purpose of their idea? Create designs in simple form, drawing and labelling 	<ul style="list-style-type: none"> Create ideas for the piece taking into account who will use it and for what When product is chosen, ability to decide what will make it a success Plan the process before commencing build Develop plan and communicate intended product During design process draw product and label using appropriate vocabulary 	<ul style="list-style-type: none"> Generate ideas taking into consideration the purpose of the design Demonstrate labelled drawings from different views showing detailed features Develop a clear idea of what needs to be done, planning how to use materials, equipment and processes. Suggest different methods to make product, if initial attempt fails Evaluation of products and identify criteria that can be used for designs 	<ul style="list-style-type: none"> Think of ideas through brainstorming and identify a purpose for the product Draw a design specification Develop clear ideas of what needs to be done, planning how to use materials, equipment and processes Suggest different methods to make product, if initial attempt fails Use the results from investigations, sources of information, including ICT when developing the design idea 	<ul style="list-style-type: none"> Create a detailed labelled drawing that can communicate ideas Be able to develop a design specification Be able to explore, develop and communicate different parts of the design proposal by creating ideas in different ways Be able to plan the order the work is to take place according to design and choose appropriate tools, materials and techniques

	<p>used or intended to be used such as paper and scissors</p> <ul style="list-style-type: none"> Begin to draw intended design or discuss and describe this 						
Skill	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Working with tools, equipment, materials and components to make quality products - <i>Make</i>	<ul style="list-style-type: none"> During the activity be able to describe what they are making Use basic techniques to make their design Start to use some technical vocabulary Use scissors to cut straight and curved edges Use hole punches Begin to use Sellotape and glue to join different materials together Build structures and discuss what they are making, join some of the pieces together Observe and explore simple hinges, wheels and axles <p>Children in reception will be learning to:</p> <p>Return to and build on their previous learning, refining ideas and developing their ability to represent them.</p>	<ul style="list-style-type: none"> Make initial design cutting and shaping (with support where necessary) using a range of materials Practice scissor and hole punch skills safely Put together and assemble materials selected, applying different methods, tape, glue 	<ul style="list-style-type: none"> Start to self-select materials and tools Use of appropriate vocabulary Increasing accuracy in measuring (support where needed) Follow instructions for using hand tools Bring together selected materials to create chosen product Use basic sewing techniques to create a simple item 	<ul style="list-style-type: none"> Self-select materials and tools Increasing use of appropriate vocabulary Increasing accuracy in measuring depending on tools e.g. cutting, scoring, cut and assemble Using tools with more accuracy and awareness of safety to self and others Be flexible to change and improve ideas during the making process Build on sewing technique including measuring, pinning, cutting and a simple running stitch (if chosen for project) Use finishing techniques including skills learnt in other areas, art, ICT Use a pneumatic system lever to create a monster (if chosen for project) 	<ul style="list-style-type: none"> Choose appropriate tools and techniques for making a product Be able to measure, mark out and cut a variety of materials with some accuracy using appropriate tools, equipment and techniques Use the combination of materials and components correctly with appropriate finishing techniques Sew using different stitches, weave or knit (if chosen for project) Use an electrical system within product such as a buzzer or alarm (if chosen for project) 	<ul style="list-style-type: none"> Select suitable tools, materials and techniques Measure, mark, cut and join with increasing accuracy Strengthen, stiffen or reinforce structures and products Assemble components with some accuracy Use wattle and daube method (if chosen for project) Apply and use finishing techniques with increasing accuracy 	<ul style="list-style-type: none"> Select suitable tools, materials, components and techniques and explain why you use them Measure, mark, cut and join materials and components with accuracy Make a working model Use tools safely and accurately Make improvements and modifications during process Use permanent joining techniques in the construction process Sew using cross stitch Apply and use finishing techniques with accuracy including skills learnt in other areas
Skill	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Evaluating processes and products - <i>Evaluate</i>	<ul style="list-style-type: none"> Discuss what they like and do not like about the product they have made, begin to describe why Talk about the 	<ul style="list-style-type: none"> Discuss with other children and adult's the product design and if criteria for success has been fulfilled 	<ul style="list-style-type: none"> Review design and evaluation to be carried out Evaluation during the development stages and think about where 	<ul style="list-style-type: none"> Evaluate product against original design criteria e.g. how well it meets its intended purpose. Start to 	<ul style="list-style-type: none"> Evaluate work and products by carrying out appropriate tests Start to evaluate work during and also at end of the task Take apart and 	<ul style="list-style-type: none"> Start to evaluate product against original design specification during and at the end of the work Personally evaluate 	<ul style="list-style-type: none"> Evaluate product made, recognising strengths and development areas and carrying out appropriate tests Evaluate product

	<p>product made and think and discuss good and bad points and what they would like to change about it</p> <ul style="list-style-type: none"> • Begin to talk about any changes they made during the make and possibly why • Be able to say how close their finished product is to the original design made 	<ul style="list-style-type: none"> • Evaluation of product and process at different points in the construction process • Identify strengths and weaknesses and improvements they could make • Ask questions of the children to ensure they understand evaluation process • Children to begin to understand it is possible to go back and change design at any time 	<p>changes could be made to improve</p> <ul style="list-style-type: none"> • Discuss the creation and become more able to express what has gone well and not so well. Do they like it? 	<p>disassemble and evaluate familiar products</p> <ul style="list-style-type: none"> • Consider and discuss views of peers to improve product • Evaluate key designs in design and technology and reflect how these impact and shape the world around us 	<p>evaluate familiar products and discuss with others how to improve them</p> <ul style="list-style-type: none"> • Continue to evaluate key designs in design and technology and reflect how these impact and shape the world around us 	<p>the product and gain feedback from others</p> <ul style="list-style-type: none"> • Continue to evaluate key designs in design and technology and reflect how these impact and shape the world around us 	<p>during and at the end of the process against original criteria</p> <ul style="list-style-type: none"> • Make suggestions of how to improve product • Record the evaluations made using drawings/diagrams and label • Recognise and evaluate key designs in design and technology and reflect how these impact and shape the world around us
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