

Progression in Design & Technology Knowledge & Skills

Design

	Expectations	Key words
EYFS	<ul style="list-style-type: none"> Understands that they can use lines to enclose a space, and then begin to use these shapes to represent objects. 	Line Shape Plan
Y1	<ul style="list-style-type: none"> Use pictures and words to convey what they want to design/make. Select pictures to help develop ideas. Use drawings to record ideas as they are developed. Model ideas with kits, reclaimed materials. 	Design Make
Y2	<ul style="list-style-type: none"> Propose more than one idea for their product. Add notes to drawings to help explanations. Describe their models and drawings of ideas and intentions. Use kits/reclaimed materials to develop more than one idea. Select appropriate technique explaining: First... Next... Last... 	Idea Explain Product
Y3	<ul style="list-style-type: none"> Develop more than one design or adaptation of an initial design. Plan a sequence of actions to make a product. Record the plan by drawing using annotated sketches. 	Develop Adapt
Y4	<ul style="list-style-type: none"> Begin to use cross-sectional and exploded diagrams. Use prototypes to develop and share ideas. Think ahead about the order of their work and decide upon tools and materials. 	Diagram Prototype



Y5	<ul style="list-style-type: none"> • List tools needed before starting the activity. • Plan the sequence of work e.g. using a storyboard. • Record ideas using annotated diagrams. • Use models, kits and drawings to help formulate design ideas. • Combine modelling and drawing to refine ideas. 	Plan Design Model Refine
Y6	<ul style="list-style-type: none"> • Devise step by step plans which can be read / followed by someone else. • Use exploded diagrams and cross-sectional diagrams to communicate ideas. • Sketch and model alternative ideas. • Decide which design idea to develop. 	Communicate



Food

	Expectations	Key Words
EYFS	<ul style="list-style-type: none"> Eats a healthy range of foods and understands need for variety in food. 	Line Shape Plan Taste Touch Smell Feel
Y1	<ul style="list-style-type: none"> Develop a food vocabulary using taste, smell, texture and feel. Group familiar food products e.g. fruit and vegetables. Explain where food comes from. Cut, peel, grate, chop a range of ingredients 	Texture Cut Peel Grate
Y2	<ul style="list-style-type: none"> Work safely and hygienically. Understand the need for a variety of foods in a diet. Measure and weigh food items, non-statutory measures e.g. spoons, cups. 	Measure Hygiene Safety
Y3	<ul style="list-style-type: none"> Develop sensory vocabulary/knowledge using, smell, taste, texture and feel. Analyse the taste, texture, smell and appearance of a range of foods (predominantly savoury). Follow instructions/recipes. Make healthy eating choices – use the <i>Eatwell plate</i>. 	Healthy Savoury Choice
Y4	<ul style="list-style-type: none"> Join and combine a range of ingredients. Explore seasonality of vegetables and fruit. Find out which fruit and vegetables are grown in countries/continents studied in Geography. Develop understanding of how meat/fish are reared/caught. 	Combine Ingredients



Y5	<ul style="list-style-type: none"> • Prepare food products taking into account the properties of ingredients and sensory characteristics. • Weigh and measure using scales. • Select and prepare foods for a particular purpose. • Work safely and hygienically. • Show awareness of a healthy diet (using the eatwell plate). 	Combine Ingredients Purpose Diet Weigh
Y6	<ul style="list-style-type: none"> • Use a range of cooking techniques. • Know where and how ingredients are grown and processed. • Consider influence of chefs e.g. Jamie Oliver and school meals, Hugh Fearnley-Whittingstall and sustainable fishing etc. 	Healthy Savoury Choice Diet Weigh Sustainable



Textiles

	Expectations	Key Words
EYFS	<ul style="list-style-type: none"> • Understands that different media can be combined to create new effects. • Manipulates Textiles materials to achieve a planned effect 	Material Texture
Y1	<ul style="list-style-type: none"> • Decorate fabrics with attached items e.g. buttons, beads, sequins, braids, ribbons. • Colour fabrics using a range of techniques e.g. fabric paints, printing, painting. 	Colour Fabric Paint Print Decorate
Y2	<ul style="list-style-type: none"> • Cut out shapes which have been created by drawing round a template onto the fabric. • Join fabrics by using e.g. running stitch, glue, staples, over sewing, tape. 	Stitch Template
Y3	<ul style="list-style-type: none"> • Develop vocabulary for tools materials and their properties. • Understand seam allowance. • Join fabrics using running stitch, over sewing, blanket stitch. • Prototype a product using J cloths. 	Join Prototype
Y4	<ul style="list-style-type: none"> • Use prototype to make pattern. • Explore strengthening and stiffening of fabrics. • Explore fastenings (inventors?) and recreate some. • Sew on buttons and make loops. • Use appropriate decoration techniques. 	Strengthen Stiffen Technique
Y5	<ul style="list-style-type: none"> • Use the correct vocabulary appropriate to the project. • Create 3D products using patterns pieces and seam allowance. • Understand pattern layout. • Decorate textiles appropriately (often before joining components). 	Seam



Y6	<ul style="list-style-type: none">• Pin and tack fabric pieces together.• Join fabrics using over sewing, back stitch, blanket stitch or machine stitching (closer supervision).• Combine fabrics to create more useful properties.• Make quality products.	Properties Products
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Structures

	Expectations	Key Words
EYFS	<ul style="list-style-type: none"> • Uses various construction materials. • Beginning to construct, stacking blocks vertically and horizontally, making enclosures and creating spaces. • Joins construction pieces together to build and balance. • Realises tools can be used for a purpose. • Constructs with a purpose in mind, using a variety of resources. • Uses simple tools and techniques competently and appropriately. • Selects tools and techniques needed to shape, assemble and join materials they are using. 	Block Stack Join
Y1	<ul style="list-style-type: none"> • Explore how to make structures stronger. • Investigate different techniques for stiffening a variety of materials. • Join appropriately for different materials and situations e.g. glue, tape. • Cut along lines, straight and curved. 	Structure Stronger Material
Y2	<ul style="list-style-type: none"> • Mark out materials to be cut using a template. • Health and safety how to use tools E.g. glue guns • Use a glue gun with close supervision. • Test different methods of enabling structures to remain stable. 	Template Stable
Y3	<ul style="list-style-type: none"> • Develop vocabulary related to the project. • Create shell or frame structures. • Make structures more stable by giving them a wide base. 	Shell Frame Base
Y4	<ul style="list-style-type: none"> • Strengthen frames with diagonal struts. • Measure and mark square section, strip and dowel accurately to 1cm. 	Strengthen Strut



Y5	<ul style="list-style-type: none"> • Use the correct terminology for tools materials and processes. • Use bradawl to mark hole positions. • Use hand drill to drill tight and loose fit holes. 	Bradawl Drill
Y6	<ul style="list-style-type: none"> • Cut strip wood, dowel, square section wood accurately to 1mm. • Join materials using appropriate methods. • Build frameworks to support mechanisms. • Stiffen and reinforce complex structures. 	All of the above



Mechanisms

	Expectations	Key Words
EYFS	<ul style="list-style-type: none"> Operates mechanical toys, e.g. turns the knob on a wind-up toy or pulls back on a friction car. Shows an interest in technological toys with knobs or pulleys. Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images 	Turn Wind Pull Push Lift Press Flap Move Sound
Y1	<ul style="list-style-type: none"> Join appropriately for different materials and situations e.g. glue, tape. Try out different axle fixings and their strengths and weaknesses. Make vehicles with construction kits which contain free running wheels. Roll paper to create tubes. Fold, tear and cut paper and card. Experiment with levers and sliders to find different ways of making things move in a 2D plane. Use a hole punch. Insert paper fasteners for card. 	Join Fix Tear Lever Slider fasten
Y2	<ul style="list-style-type: none"> Use a range of materials to create models with wheels and axles e.g. tubes, dowel, cotton reels. Health and safety how to use tools appropriately E.g. hacksaw Cut dowel using hacksaw and bench hook. Attach wheels to a chassis using an axle. Mark out materials to be cut using a template. 	Fix Tear Lever Slider Fasten Axle Chassis Dowel
Y3	<ul style="list-style-type: none"> Develop vocabulary related to the project. 	Linkages



	<ul style="list-style-type: none"> • Use mechanical systems such as gears, pulleys, levers and linkages. • Use lolly sticks/card to make levers and linkages. • Use linkages to make movement larger or more varied. 	Mechanical
Y4	<ul style="list-style-type: none"> • Incorporate a circuit into a model. • Use electrical systems such as switches bulbs and buzzers. • Use ICT to control products. 	Circuit Electrical Control Switch
Y5	<ul style="list-style-type: none"> • Develop a technical vocabulary appropriate to the project. • Use mechanical systems such as cams, pulleys and gears. 	Pulley Cam Gear
Y6	<ul style="list-style-type: none"> • Use electrical systems such as motors. • Program, monitor and control using ICT. 	Monitor System Program



Evaluate

	Expectations	Key Words
EYFS	<ul style="list-style-type: none"> • Selects appropriate resources and adapts work where necessary. 	Change
Y1	<ul style="list-style-type: none"> • Talk about their design as they develop and identify good and bad points. • Say what they like and do not like about items they have made and attempt to say why. • Explore existing products and investigate how they have been made. 	Explore Investigate
Y2	<ul style="list-style-type: none"> • Note changes made during the making process as annotation to plans/drawings. • Discuss how closely their finished product meets their design criteria and how well it meets the needs of the user. • Decide how existing products do/do not achieve their purpose. 	Discuss Achieve
Y3	<ul style="list-style-type: none"> • Investigate similar products to the one to be made to give starting points for a design. • Draw/sketch products to help analyse and understand how products are made. • Research needs of user. • Identify the strengths and weaknesses of their design ideas in relation to purpose/user. 	Analyse purpose



Y4	<ul style="list-style-type: none"> • Decide which design idea to develop. • Consider and explain how the finished product could be improved. • Discuss how well the finished product meets the design criteria of the user. • Investigate key events and individuals in Design and Technology. 	Purpose Explain Decide Consider
Y5	<ul style="list-style-type: none"> • Research and evaluate existing products (including book and web based research). • Consider user and purpose. • Identify the strengths and weaknesses of their design ideas. • Give a report using correct technical vocabulary. 	Research
Y6	<ul style="list-style-type: none"> • Consider and explain how the finished product could be improved related to design criteria. • Discuss how well the finished product meets the design criteria of the user. Test on the user! • Understand how key people have influenced design. 	Influenced Product

