<table>
<tr><th colspan="7"><u>Developing, Planning and Communicating Ideas</u></th></tr>
<tr><th>FS</th><th colspan="2">Year 1</th><th colspan="2">Year 3</th><th colspan="2">Year 5</th></tr>
<tr><td>• Talk about the materials they use.
• Name scissors, tape and glue.
• Select appropriate material by size.
• Use construction toys.
• Discuss work.</td><td colspan="2">Follow verbal instructions
• Explain what they are making and which materials they are using
• Name the tools they are using
• Describe what they need to do next
• Select materials from a limited range that will meet the design criteria
• Select and name the tools needed to work the materials
• Select appropriate technique explaining First……Next……Last….
• Explore ideas by rearranging materials
• Model ideas with kits, reclaimed materials
• Select pictures to help develop ideas
• Use pictures and words to convey what they want to design and make
• Describe their models and drawings of ideas and intentions
• Use kits/reclaimed materials to develop an idea
• Use drawings to record ideas as they are developed
• Discuss their work as it progresses
• Add notes to drawings to help explanations</td><td colspan="2">• 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
• Think ahead about the order of their work and decide upon tools and materials
• Plan a sequence of actions to make a product
• Record the plan by drawing (labelled sketches) or writing
• Develop more than one design or adaptation of an initial design
• Propose realistic suggestions as to how they can achieve their design ideas
• Add notes to drawings to help explanations</td><td colspan="2">• Investigate products/images to collect ideas
• Sketch and model alternative ideas
• Develop one idea in depth
• Combine modelling and drawing to refine ideas
• Plan the sequence of work using a storyboard
• Record ideas using annotated diagrams
• Use models, kits and drawings to help formulate design ideas
• Make prototypes
• Use found information to inform decisions
• Use a computer to model ideas
• Draw plans which can be read/followed by someone else
• Give a report using correct technical vocabulary</td></tr>
<tr><th colspan="2">Year 2</th><th colspan="2">Year 4</th><th colspan="2">Year 6</th></tr>
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Sheet Materials

FS	Year 1	Year 2	Year 3 Year 4	Year 5 Year 6
Using glue, tape and masking tape. Using card, paper and cardboard. Cutting skills using paper. Using scissors.	• Fold, tear and cut paper and card. • Cut along lines straight and curved. • Curl paper. • Use simple pop ups. • Use a hole punch. • Insert paper fasteners for card. • Create hinges.	Roll paper to create tubes. • Investigate strengthening sheet materials. • Investigate joinings temporary, fixed and moving.	• Use lolly sticks and card to make levers and linkages. • Use linkages to make movement larger or more varied. • Plan a sequence of actions to make a product. • Record the plan by drawing using annotated sketches. • Use tools with accuracy. • Select from techniques for different parts of the process. • Begin to use cross-sectional and exploded diagrams. • Investigate similar products to the one to be made to give starting points for a design. • Research needs of user. • Cut slots. • Cut internal shapes. • Use and explore complex pop ups. • Create nets.	• Cut slots • Cut accurately and safely to a marked line. • Use a craft knife, cutting mat and safety ruler under 1:1 supervision if appropriate. • Choose an appropriate sheet material for the purpose.

Construction

FS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Use PVA, glue stick and tape to join materials. Join 3D boxes. Draw around a template.	• Join appropriately for different materials and situations e.g. glue and tape. • Mark out materials to be cut using a template.	• Make vehicles using construction kits which contain free running wheels. • Use a range of materials to create models with wheels and axles (tubes, dowel, cotton reel) • Attach wheel to chassis. • Cut dowel using a hacksaw and bench hook • See glue gun used by an adult.	• Use linkages to make movement larger or more varied. • Use tools with accuracy. • Select from techniques for different parts of the process.. • Research needs of user. • Create shell or frame structures, strengthen frames with diagonal struts. • Prototype frame and shell structures. • Measure and mark square selection, strip and dowel accordingly to 1cm. • Use glue gun with close supervision.	• Use tools with accuracy. • Select from techniques for different parts of the process. • Use lolly sticks and card to make levers and linkages. • Use electrical systems such as switches, buzzers and bulbs • Incorporate a circuit with a bulb or buzzer into a model.		• Devise step-by-step plans which can be followed by someone else. • Cut safely and accurately to a marked line. • Research and evaluating existing products(including book and web based research). • Consider and explain how the finished product could be improved. • Use appropriate finishing techniques for the project. • Refine their product-review and rework. • Discuss how well the finished product meets the design criteria of the user. Test on the user! • Make quality products. • Cut strip wood, dowel, square section wood accurately to 1mm. • Join materials using appropriate methods. • Use brawdawl to mark positions. • Use hand drill to drill tight and loose fitting holes. • Use exploded diagrams to communicate ideas. • Use mechanical systems such as cams, pulleys and gears. • Use electrical systems such as motors. • Program, monitor and control using ICT • Incorporate motor and switch into a model. • Build frameworks using arrange of materials. • Use glue gun with supervision.

Food

FS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Introducing new tastes, smells and flavours in food tasting. Daily snack times. Simple baking and food preparation under supervision. Basic food hygiene. Experimenting with weighing and measuring via maths.	• Develop a food vocabulary using taste, smell, texture and feel. • Group familiar products e.g. fruit and vegetables. • Explain where food comes from. • Cut, peel, grate, chop and range of ingredients. • Work safely and hygienically. • Understand the need for variety of foods in a diet. • Measure and weigh food items, non-statutory measures e.g. spoons, cups.		• Make healthy eating choices using the eatwell plate. • Develop sensory vocab/knowledge using smell, taste, texture and appearance. • Analyse taste, texture, smell and appearance of a range of foods. • Use tools with accuracy. • Select from techniques for different parts of the process. • Join and combine a range of ingredients. • Work safely and hygienically. • Explore seasonality of veg and fruit. • **Begin to use cross-sectional and exploded diagrams.** • Investigate similar products to the one to be made to give starting points for a design. • Research needs of use	• Make healthy eating choices using the eatwell plate. • Develop sensory vocab/knowledge using smell, taste, texture and appearance. • Analyse taste, texture, smell and appearance of a range of foods. • Use tools with accuracy. • Select from techniques for different parts of the process. • Join and combine a range of ingredients. • Work safely and hygienically. • Explore seasonality of veg and fruit. • Begin to use cross-sectional and exploded diagrams. • Investigate similar products to the one to be made to give starting points for a design. Research needs of user.	• Prepare food products taking into account the properties of ingredients and sensory characteristics. • Taste a range of ingredients, food items to develop a sensory food vocabulary for use when designing. • Weigh and measure using scales. • Cut and shape ingredients using appropriate tools. • Join and combine foods ingredients appropriately e.g. beating, rubbing in. • Select and prepare foods for a purpose. • Work safely and hygienically. • Show awareness of a healthy diet using *eatwell.* • Use a range of cooking techniques. • Know where and how ingredients are grown and processed. • Consider influence of chefs such as Hugh F.W. and sustainable fishing. • Devise step by step plans which can be followed by someone else. • Decide which idea to develop. • Use researched information to inform decisions.	• Prepare food products taking into account the properties of ingredients and sensory characteristics. • Weigh and measure using scales. • Select and prepare foods for a purpose. • Taste a range of ingredients, food items to develop a sensory food vocabulary for use when designing. • Cut and shape ingredients using appropriate tools. • Join and combine foods ingredients appropriately e.g. beating, rubbing in. • Decorate appropriately. • • Work safely and hygienically. • Show awareness of a healthy diet using *eatwell.* • Use a range of cooking techniques. • Know where and how ingredients are grown and processed. • (Consider influence of chefs such as Hugh F.W. and sustainable fishing.)

Textiles

FS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Cutting materials with scissors. Using staplers and glue. Decoration with stickers and beads.	• Cut out shapes which have been created by drawing around a template onto fabric. • Join fabrics by using running stitch, glue, staples, over sewing, tape. • Decorate fabrics with attached items such as buttons, beads, sequins, braids, ribbons.	IN ART: • Colour fabrics using a range of techniques fabric paints, printing, painting. • Decorate fabrics with attached items such as buttons, beads, sequins, braids, ribbons.	IN ART: • Understand seam allowance. • Join fabrics using running stitch, over sewing, blanket stitch. • Prototype a product using J cloths. • Use appropriate decoration techniques. • Understand the need for patterns. • Create a simple pattern.	• Develop vocabulary for tools materials and properties. • Understand seam allowance. • Join fabrics using running stitch, over sewing, blanket stitch. • Prototype a product using J cloths. • Use prototype to make a pattern. • Explore strengthening and stiffening of fabrics. • Explore fastenings and recreate some. • Sew on buttons and make loops. • Use appropriate decoration techniques.	• Use the correct vocab appropriate to the project. • Create 3D products using pattern pieces and seam allowance. • Pin and tack fabric pieces together. • Join fabrics using oversewing, back stitch, blanket stitch or machine stitching. • Combine fabrics to create more useful properties. • Decorate textiles appropriately before joining. • Combine fabrics to create more useful properties. • Develop one idea in depth. • Cut safely and accurately to a marked line. • Sketch and model alternative ideas. • Research and evaluating existing products(including book and web based research). • Consider user and purpose. • Use appropriate finishing techniques for the project. • Refine their product- review and rework. • Make quality products.	

Evaluating

FS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Communicate about what they have made. Express feelings about own and others' work.	• Say what they like and do not like about items they have made and attempt to say why • Talk about their designs as they develop and identify good and bad points • Talk about changes made during the making process • Discuss how closely their finished products meet their design criteria		• Identify the strengths and weaknesses of their design ideas • 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 and how well it meets the needs the needs of the user.		Use the design criteria to inform their decisions about ways to proceed • Justify their decisions about materials and methods of construction • Reflect on their work using design criteria stating how well the design fits the needs of the user • Identify what does and does not work in the product. • Make suggestions as how their design could be improved	