

Y1 and Y2 – Milestones 1 Design and Technology

To master practical skills

Food

Milestone	Cut, peel or grate ingredients safely and hygienically.	Measure or weigh using measuring cups or electronic scales.	Assemble or cook ingredients.
Y1	<p>Theme 3 – herbivores. Making a fruit salad.</p> <p><i>Name and locate a range of basic cooking utensils needed in the kitchen.</i></p> <p><i>Use a basic range of equipment with support.</i></p> <p><i>I can get ready to cook safely with some help.</i></p>	<p>Theme 2 – Superheroes. Creating a healthy drink.</p> <p><i>Use measuring cups or spoons to gather ingredients.</i></p>	<p>Theme 3 – Making a fruit salad.</p> <p><i>To assemble pre-cooked or chilled ingredients.</i></p>
Y2	<p>Theme 1 – soup making.</p> <p><i>Select and use a range of basic cooking utensils with increasing independence.</i></p> <p><i>I can get ready to cook safely with greater independence.</i></p>	<p>Theme 3 – Ship biscuits.</p> <p><i>Measure ingredients with more increased accuracy through the use of weighing scales and support from an adult.</i></p>	<p>Theme 1 – Soup making Theme 3 – Ship biscuits.</p> <p><i>To assemble ingredients and cook with support from an adult.</i></p>

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Materials

Milestone	Cut materials safely using tools provided.	Measure and mark out to the nearest centimetre.	Demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling).	Demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen).
Y1	Theme 1- Making shelters. <i>Fold, cut and tear paper and card.</i>	Theme 1 – Making shelters. <i>Use templates and support to measure to the nearest cm.</i>	Theme 1 – Making shelters. Theme3 – Making natural photo frames – create the right shape for their design. <i>Cut using straight and curved lines. Roll materials to create tubes.</i>	Theme 1 – Making shelters. Theme3 – Making natural photo frames by tying string around sticks. <i>Experiment with simple joins such as glues, sellotapes and paper clips.</i>
Y2	Theme 2 – Creating cards. Theme 2 – Cut doweling to create a frame (Fire engine) <i>Fold, cut and tear a range of materials. Cut using straight and curved lines</i>	Theme 2 – Creating cards. Theme 2 – Measuring frames to create a moving vehicle (Fire engine) <i>Independently mark to the nearest cm using a ruler.</i>	Theme 2 – Creating cards. Theme 3 – Creating lighthouses Theme 4 – Constructing bridges. <i>Cut using a range of movements for a purpose. Use scissors for other purposes than cutting, eg: curling, snipping. Use other tools to create shapes eg: hole punchers.</i>	Theme 2 – Axels for a fire engine Theme 4 – Constructing bridges. <i>Use specific joining techniques for a purpose eg: to create a hinge, a loop or flap. Understand the difference between temporary and fixed joins.</i>

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To master practical skills

Textiles

Milestone	Shape textiles using templates.	Join textiles using running stitch.	Colour and decorate textiles using a number of techniques (such as dyeing, adding sequins or printing).
Y1	<p>Theme 2 – Superheroes – designing a logo for their shirt.</p> <p><i>Cut out simple shapes which have been created by using a given template.</i></p>	<p>Theme 2 – Superheroes – designing a logo for their shirt.</p> <p><i>Join textiles by using simple joining techniques such as gluing, stapling, taping and over stitching.</i></p>	<p>Theme 2 – Superheroes – designing a logo for their shirt.</p> <p><i>Colour fabrics using paints, fabric paints or prints.</i></p>
Y2	<p>Theme2 – Georgia O'Keeffe Flowers.</p> <p>Theme 4 – To create own shield design (coat of Arms)</p> <p><i>Cut out shapes which have been created using an individually designed template.</i></p>	<p>Theme2 – Georgia O'Keeffe Flowers.</p> <p><i>Join textiles by using simple running stitch.</i></p>	<p>Theme2 – Georgia O'Keeffe Flowers.</p> <p><i>Colour fabrics by using a range of techniques including the use of additional embellishments.</i></p>

Y1 and Y2 – Milestones 1 Design and Technology

To master practical skills

Electronics, computing, construction, mechanics.

Milestone	<p>Diagnose faults in battery operated devices (such as low battery, water damage or battery terminal damage).</p>	<p>Model designs using software.</p>	<p>Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products.</p>	<p>Create products using levers, wheels and winding mechanisms.</p>
Y1	<p>Theme 4 – To take photos of their work using I pads.</p> <p><i>Test batteries and say if they work or not.</i></p>	<p>Theme 4 – design outside pattern for the flying machine.</p> <p><i>Use simple software to find pictures of products.</i></p>	<p>Theme 4 - Build frame for a flying machine, focusing on gluing and combining materials for strength.</p> <p><i>Practise joining materials with simple adhesives eg: glue, tape, clip, staples...</i></p>	<p>Theme 3 – Opening of a dinosaur egg.</p> <p><i>Use simple opening devices such as flaps or pop ups.</i></p>
Y2	<p>Theme 3 – To test batteries for a lighthouse</p> <p><i>Give reasons as to why a battery may not be working.</i></p>	<p>Theme 3 – To design our own flags for a ship</p> <p><i>Use simple software to design a product.</i></p>	<p>Theme 2 – To build a frame for a moving vehicle</p> <p><i>To join materials with support from an adult, using specific techniques such as screwing, gluing, nailing, stapling...</i></p>	<p>Theme 2 – using axles for moving wheels on a fire engine.</p> <p>Theme 4 – Opening draw bridge</p> <p><i>Use simple levers and winding mechanisms to make a product move.</i></p>

Y1 and Y2 – Milestones 1 Design and Technology

To design, evaluate, make and improve

Milestone	Design products that have a clear purpose and an intended user.	Make products, refining the design as work progresses.	Use software to design.
Y1	<p>Theme 1 – design a shelter which can keep the rain out and withstand other weathers. Theme 2 – design a drink for superhero to help them stay fit and healthy. Design a logo for a superhero’s t-shirt. Theme 3 – Design a fruit salad and a photo frame. Theme 4 – Design a flying machine.</p>	<p>Theme 1 – design a shelter which can keep the rain out and withstand other weathers. Theme 2 – design a drink for superhero to help them stay fit and healthy. Design a logo for a superhero’s t-shirt. Theme 3 – Design a fruit salad and photo frame. Theme 4 – Design a flying machine.</p>	<p>Theme 4 – use computing to design a flying machine</p>
Y2	<p>Theme 1 – Design and make soup with packaging to sell. Theme 2 – Design a Christmas card someone. Theme 4 – Design and shield/ coat of arms. Construct a stable bridge.</p>	<p>Theme 1 – Design and make soup with packaging to sell. Theme 2 – Design a Christmas card someone. Theme 4 – Design and shield/ coat of arms. Construct a stable bridge.</p>	<p>Theme 1 – Use computer programme to help design packaging for a product. Theme 4 – use a computer programme to design a shield/ coat of arms.</p>

Y1 and Y2 – Milestones 1 Design and Technology

To take inspiration and design throughout history

Milestone	Explore objects and designs to identify likes and dislikes of the designs.	Suggest improvements to existing designs.	Explore how products have been created.
Y1	Theme 4 – flying machines Look at a range of simple flying objects. How do they work? Would we be able to recreate this?	Theme 4 – flying machines – How could we make them better i.e. fly higher, further	Theme 4 – watch videos and clips of flying machines and make paper gyros to test outside.
Y2	Theme 1 – packaging for soup Theme 2 – Christmas card Theme 3 – Clay plaques to show sea creatures and under the sea Theme 4 – bridges and shields/ coat of arms.	Theme 1 – How could we improve packaging? Theme 2 – Christmas cards Theme 3 – How could we improve our designs Theme 4 – bridges and shields/ coat of arms.	Theme 1 – How have clay animals been created- Linked to trip Theme 4 – Explore how different bridges have been created for purpose.

Y3 and Y4 – Milestones 2 Design and Technology

To master practical skills

Food

Milestone	Prepare ingredients hygienically using appropriate utensils.	Measure ingredients to the nearest gram accurately.	Follow a recipe.	Assemble or cook ingredients (controlling the temperature of the oven or hob, if cooking).
Y3	Theme 1 – To create fruit smoothies. <i>Use an increasing range of cooking utensils.</i>	To create fruit smoothies. <i>Use electronic scales independently to measure to the nearest gram. Or use weighing scales with support to measure to the nearest gram.</i>	To create fruit smoothies. <i>I can follow a recipe with supervision.</i>	To create fruit smoothies – Assembling food. <i>I can assemble pre-cooked or chilled food to make a product with independence.</i>
Y4	Bottoms, Burps and Bile - Theme 1 – Savoury healthy dishes – pumpkin muffins (linked to science) <i>Use an increasing range of cooking utensils and give reasons for selecting a specified utensil.</i>	Bottoms, Burps and Bile - Theme 1 Savoury healthy dishes – pumpkin muffins (linked to science) <i>Or use weighing scales with increased independence to measure to the nearest gram.</i>	Bottoms, Burps and Bile - Theme 1 Savoury healthy dishes – pumpkin muffins (linked to science) <i>I can follow a recipe with increased independence.</i>	Bottoms, Burps and Bile - Theme 1 To create savoury dishes – assembling and cooking ingredients. <i>I can assemble and cook food with support and understand the effects that temperature will have on a dish.</i>

Y3 and Y4 – Milestones 2 Design and Technology

To master practical skills

Materials

Milestone	Cut materials accurately and safely by selecting appropriate tools.	Measure and mark out to the nearest millimetre.	Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs).	Select appropriate joining techniques.
Y3	Theme 3 – To cut hessian using scissors. <i>Working with one type of material.</i>	To measure hessian for making prehistoric pumps <i>Measuring to the nearest mm –using templates to help.</i>	Creating patterns for prehistoric pumps. <i>To use given templates with accuracy and use these to modify accordingly. To cut internal shapes with templates.</i>	To attach hessian together to create a prehistoric pump. <i>To use simple joining techniques using simple running stitch or glues.</i>
Y4	Traders and Raiders Theme 4 – Linked to Vikings. Designing an item of clothing to keep a Viking warm using traditional materials such as hessian, cotton and fur. <i>Working with a range of materials.</i>	Traders and Raiders Theme 4 Measuring a range of materials chosen for a Viking item of clothing, <i>To independently measure and mark a range of materials to the nearest mm.</i>	Traders and Raiders Theme 4 To create individual pattern templates for design of Viking clothing. <i>To measure, cut and create individual templates for a specific purpose. To cut internal shapes with some support.</i>	Traders and Raiders Theme 4 Joining a range of materials together for deigned Viking clothing. <i>To use specified joining techniques dependant on the materials being joined. Understand and allow for a seam/border allowance.</i>

Y3 and Y4 – Milestones 2 Design and Technology

To master practical skills

Textiles

Milestone	Understand the need for a seam allowance.	Join textiles with appropriate stitching.	Select the most appropriate techniques to decorate textiles.
Y3	<p>Theme 3 – making prehistoric pumps – creating a seam between the sole and top of the shoe. (linking with DT materials)</p> <p><i>Join materials together to create a basic seam – a join.</i></p>	<p>To join one type of material (hessian) for prehistoric pumps using a simple running stitch.</p> <p><i>Use running stitch using smaller eyed needles to increase accuracy.</i></p>	<p>To use simple dyes to create a natural effect for prehistoric pumps.</p> <p><i>Use simple embellishments such as buttons for and necessary decorative details.</i></p>
Y4	<p>Traders and Raiders Theme 4 – making a Viking item of clothing- creating a folded seam to create neat edges on material. (linking with DT materials)</p> <p><i>Join materials together with a folded seam.</i></p>	<p>Traders and Raiders Theme 4 To join a range of fabrics using simple stitching techniques.</p> <p><i>Use running stitch, back stitch and cross stitch to join fabrics accurately.</i></p>	<p>Traders and Raiders Theme 4 To use appropriate embellishments to a Viking item of clothing using the necessary joining techniques.</p> <p><i>To explore and select a range of embellishments necessary to a design eg: buttons, fastening, clasps, loops...</i></p>

Y3 and Y4 – Milestones 2 Design and Technology

To master practical skills

Electronics, computing, construction, mechanics.

Milestone	Create series and parallel circuits	Control and monitor models using software designed for this purpose.	Choose suitable techniques to construct products or to repair items.	Strengthen materials using suitable techniques.	Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and gears).
Y3	<p>Theme2 – Series circuits</p> <p><i>Create series circuits and explain how they work.</i></p>	<p>Coding- computing</p> <p><i>Use simple input and output codes to control sound, movement...</i></p>	<p>Theme 2 – finding ways to improve a water wheel using given provided options.</p> <p><i>Modify whilst working and discuss improvements with others.</i></p>	<p>To use a range of one type of product eg: cups to strengthen a water wheel.</p> <p><i>Strengthen products using learnt techniques.</i></p>	<p>To use a winding mechanism/ forces to create a working water wheel.</p> <p><i>To use a given mechanism to create a product.</i></p>
Y4	<p>I am warrior - Theme 2 – Parallel circuits – light buzzer, switch. To be used within a moving story book.</p> <p><i>Create series and parallel circuits incorporating buzzers and lights.</i></p>	<p>Traders and Raiders Theme 4 Coding- computing</p> <p><i>Use simple input and output codes to operate controls and be able to de bug problems.</i></p>	<p>I am warrior - Theme 2 – To individually chose or create a technique to improve a moving story book.</p> <p><i>Create prototypes to help with modifications.</i></p>	<p>I am warrior - Theme 2 – To use a range of materials to strengthen a moving page of a story book.</p> <p><i>Understand how shape can affect the strength and stability of a product.</i></p>	<p>I am warrior - Theme 2 – To use sliders, pulleys and electrical mechanisms to create a page for a ‘Did you know?’ information book.</p> <p><i>Select and use a range of moving mechanisms for a specific design. Use linkages to make movement larger and more varied.</i></p>

Y3 and Y4 – Milestones 2 Design and Technology

To design, evaluate, make and improve

Milestone	Design with purpose by identifying opportunities to design.	Make products by working efficiently (such as by carefully selecting materials).	Refine work and techniques as work progresses, continually evaluating the product design.	Use software to design and represent product designs.
Y3	Theme 1 – making fruit smoothies. Theme 2 – creating water wheels. Theme 3 – Prehistoric pumps. Theme 4 – Urban pioneers (TBC)	Theme 1 – making fruit smoothies. Theme 2 – creating water wheels. Theme 3 – Prehistoric pumps. Theme 4 – Urban pioneers (TBC)	Theme 1 – making fruit smoothies. Theme 2 – creating water wheels. Theme 3 – Prehistoric pumps. Theme 4 – Urban pioneers (TBC)	Theme 1 – designing smoothie packaging using computing software.
Y4	Theme 1 – Savoury dishes Theme 2 – Creating a moving story book page. Theme 3 – create and improve weaving on landscape volcano scene Theme 4 – Designing a Viking item of clothing.	Theme 1 – Savoury dishes Theme 2 – Creating a moving story book page. Theme 3 – create and improve weaving on landscape volcano scene Theme 4 – Designing a Viking item of clothing.	Theme 1 – Savoury dishes Theme 2 – Creating a moving story book page. Theme 3 – create and improve weaving on landscape volcano scene Theme 4 – Designing a Viking item of clothing.	Theme 2 – using computing software to create images needed for story pages.

Y3 and Y4 – Milestones 2 Design and Technology

To take inspiration and design throughout history

Milestone	<p>Identify some of the great designers in all of the areas of study (including pioneers in horticultural techniques) to generate ideas for designs.</p>	<p>Improve upon existing designs, giving reasons for choices.</p>	<p>Disassemble products to understand how they work.</p>
Y3	<p>Theme 4 – Urban pioneers</p> <p>Designers of a range of landmark buildings including local buildings (market hall etc) through to national and international eg St Paul’s cathedral, Iron Bridge, etc</p>	<p>Improving designs of water wheels, shoes, smoothies and baskets.</p>	<p>Disassemble water wheels, shoes and baskets. Taste a variety of smoothies and food contents.</p>
Y4	<p>Traders and Raiders Theme 4 – Famous fashion designers (KTZ)</p> <p><i>Use existing examples of vests, jackets and cardigans by various designers using cotton, hessian and fur.</i></p>	<p>Extreme Earth – theme 3 - Improve moving picture books, Bottoms, burps and bile – Theme 1 -savoury dishes Traders and Raiders – Theme 4 items of clothing.</p>	<p>Extreme Earth – theme 3 - Disassemble picture books Traders and Raiders – Theme 4 items of clothing. Bottoms, burps and bile – Theme 1 Taste a variety of savoury dishes.</p>

Y5 and Y6 – Milestones 3 Design and Technology

To master practical skills

Food

Milestone	Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms).	Measure accurately and calculate ratios of ingredients to scale up or down from a recipe.	Demonstrate a range of baking and cooking techniques.	Create and refine recipes, including ingredients, methods, cooking times and temperatures.
Y5	<p>Theme 1 – Ration baking (WW2) Discuss and taste different cakes and make our own using rationed measures from WW2 recipes. Discuss food hygiene and storage methods use in WW2 compared to now. <i>Knowing that there are storage instructions on most food packaging and being able to identify and use these.</i> <i>Recognising that food needs to be stored in certain places dependent on its structure.</i></p>	<p>Theme 1 – Ration baking (WW2) Discuss and taste different cakes and make our own using rationed measures from WW2 recipes. Discuss food hygiene and storage methods use in WW2 compared to now. <i>Measuring accurately, using the correct equipment to ensure accuracy.</i></p>	<p>Theme 1 – Ration baking (WW2) Discuss and taste different cakes and make our own using rationed measures from WW2 recipes. Discuss food hygiene and storage methods use in WW2 compared to now. <i>Name and use a range of cooking skills with confidence and accuracy to prepare increasingly challenging ingredients.</i></p>	<p>Cross curricular maths – imperial measures. Discuss and taste different cakes and make our own using rationed measures from WW2 recipes. Discuss food hygiene and storage methods use in WW2 compared to now. Recipe modified to include ingredients that would have been available during WW2. <i>Be able to modify a recipe for a specific purpose.</i></p>
Y6	<p>Theme 3 – Recipes using offal! Food health and hygiene <i>Knowing that food can become contaminated if not stored correctly.</i></p>	<p>Theme 3 – adapting historical recipes. Scaling up and down <i>Measuring with a greater degree of accuracy and using ratio and proportion to alter recipes accordingly.</i></p>	<p>Theme 3 – using offal. Cooking techniques to maximise flavour. Link this to historical period. Why use offal? Theme 4 – Cross curricular maths with potatoes. <i>Select and explain reasons for a chosen technique which is suitable for the products being used.</i></p>	<p>Theme 3 – using offal. Cooking techniques to maximise flavour. Link this to historical period. Why use offal? <i>Be able to modify a recipe taking into consideration more than one factor i.e.: audience, purpose, health, culture...</i></p>

Y5 and Y6 – Milestones 3 Design and Technology

To master practical skills

Materials

Milestone	<p>Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape).</p>	<p>Show an understanding of the qualities of materials to choose appropriate tools to cut and shape (such as the nature of fabric may require sharper scissors than would be used to cut paper).</p>
<p>Y5</p>	<p>Theme 2 – creating an Egyptian Pyramid. Theme 4 – designing a suitcase for a trip. Children to design their own suitcase for a trip to America, testing different materials for strength and suitability.</p> <p><i>Cut accurately and safely to a marked line with guidance. Explore ways to develop the finish of a product.</i></p>	<p>Theme 2 – creating an Egyptian Pyramid. Theme 4 – designing a suitcase for a trip. Children to design their own suitcase for a trip to America, testing different materials for strength and suitability.</p> <p><i>Explore and discuss the use of materials and tools before completing a task of</i></p>
<p>Y6</p>	<p>Theme 2 – cut materials precisely to make a bird box. Theme 3 – Design and create a cushion with feelings associated with the heart. Fabric cutting. Theme 4 – working in groups to design, refine and make props for Macbeth</p> <p><i>Cut accurately and safely to a marked line. Use craft knife, cutting mat and safety ruler under one to one supervision if appropriate. Select techniques to ensure the finish of a product dependent on its purpose.</i></p>	<p>Theme 2 – creating a bird box. Theme 3 – Design and create a cushion with feelings associated with the heart Theme 4 – working in groups to design, refine and make props for Macbeth</p> <p><i>Carefully consider the materials and tools needs for a task. Think about which joins will be best used.</i></p>

Y5 and Y6 – Milestones 3 Design and Technology

To master practical skills

Textiles

Milestone	Create objects (such as a cushion) that employ a seam allowance.	Join textiles with a combination of stitching techniques (such as back stitch for seams and running stitch to attach decoration).	Use the qualities of materials to create suitable visual and tactile effects in the decoration of textiles (such as a soft decoration for comfort on a cushion).
Y5	<p>Theme 4 – designing a suitcase for a trip. Children to design their own suitcase for a trip to America, testing different materials for strength and suitability.</p> <p><i>Create products which incorporate the need for a seam.</i></p>	<p>Theme 1 – make do and mend poppies. Combine stitching skills to make a poppy that features layers and embellishments to create a 3d effect.</p> <p><i>Accurately use running stitch, cross stitch and back stitch and use these stitches for specific purposes.</i></p>	<p>Theme 1 – make do and mend poppies. Combine stitching skills to make a poppy that features layers and embellishments to create a 3d effect. Design and evaluate poppy to show understanding of patterns in textiles.</p> <p><i>Understand the importance of pattern layout.</i></p>
Y6	<p>Theme 3 – Abstract art – inspiration from Da Vinci. Design and create a cushion with feelings associated with the heart. Sewing pieces together.</p> <p><i>Create 3D products using individual pattern pieces and seam allowances.</i></p>	<p>Theme 3 – Abstract art – inspiration from Da Vinci. Design and create a cushion with feelings associated with the heart</p> <p><i>Accurately use and chose running stitch, cross stitch, back stitch, rope stitch, chain stitch and French knot.</i></p>	<p>Theme 3 – Abstract art – inspiration from Da Vinci. Design and create a cushion with feelings associated with the heart</p> <p><i>Make high quality products with striking and precise effects for detail.</i></p>

Y5 and Y6 – Milestones 3 Design and Technology

To master practical skills

Electronics, computing, construction, mechanics.

Milestone	<p>Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips).</p>	<p>Write code to control and monitor models or products.</p>	<p>Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filling and sanding).</p>	<p>Convert rotary motion to linear using cams.</p>	<p>Use innovative combinations of electronics (or computing) and mechanics in product designs.</p>
Y5	<p>Theme 2 – Design and create a space craft that uses lights and or sounds when a switch is triggered. <i>Experiment with circuits and electronic kits.</i></p>	<p>Theme 1-4 Espresso Coding</p>	<p>Theme 3 – Create a pyramid using different joining techniques. <i>Use a range of joining techniques with guidance.</i></p>	<p>Theme 2 – Design and create a space craft that has an opening/closing door. <i>Use a cam to make an up and down movement.</i></p>	<p>Theme 2 – Design and create a space craft that uses lights and or sounds when a switch is triggered. <i>Use electronics to make a product move with guidance.</i></p>
Y6	<p>Theme 1- Design and create electrical circuits triggered by switches - burglar alarms. <i>Incorporate and a select an appropriate circuit and use of electrical equipment for a given purpose.</i></p>	<p>Theme 1-4 - Espresso coding <i>Use input and output codes to control a model with increased independence.</i></p>	<p>Theme 2 – Design and make bird boxes as part of Classified topic. Observe bird feeding stations etc with different shaped beak <i>Chose a specific joining techniques with increased independence, explaining the reason for that choice.</i></p>	<p>Theme 3 – Build a model heart (simple) with valves opening and closing. <i>Experiment with different shaped cams and investigate the impacts they have on movement.</i></p>	<p>Theme 1 – Design and create electrical circuits triggered by switches - burglar alarms. <i>Use electronics to make a product move with increased independence.</i></p>

Y5 and Y6 – Milestones 3 Design and Technology

To design, make and evaluate

Milestone	Design with the user in mind, motivated by the service a product will offer (rather than simply for profit).	Make products through stages of prototypes, making continual refinements.	Ensure products have a high quality finish, using art skills where appropriate.	Use prototypes, cross-sectional diagrams and computer aided designs to represent designs.
Y5	Theme 1 – WW2 ration cakes Theme 2 – space craft Theme 4 – Designing a suitcase for a trip.	Theme 1 – WW2 ration cakes Theme 2 – space craft Theme 4 – Designing a suitcase for a trip.	Theme 1 – WW2 ration cakes Theme 2 – space craft Theme 4 – Designing a suitcase for a trip.	Theme 1 – WW2 ration cakes Theme 2 – space craft Theme 4 – Designing a suitcase for a trip.
Y6	Theme 1- burglar alarms Theme 2 – recipes using offal and design and make bird boxes as part of Classified topic. Observe bird feeding stations etc with different shaped beak Theme 3 – Cushions Theme 4 - props	Theme 1- burglar alarms Theme 2 – recipes using offal and design and make bird boxes as part of Classified topic. Observe bird feeding stations etc with different shaped beak Theme 3 – Cushions Theme 4 - props	Theme 1- burglar alarms Theme 2 – recipes using offal and design and make bird boxes as part of Classified topic. Observe bird feeding stations etc with different shaped beak Theme 3 – Cushions Theme 4 - props	Theme 1- burglar alarms Theme 2 – recipes using offal and design and make bird boxes as part of Classified topic. Observe bird feeding stations etc with different shaped beak Theme 3 – Cushions Theme 4 - props

Y5 and Y6 – Milestones 3 Design and Technology

To take inspiration from design throughout history

Milestone	Combine elements of design from a range of inspirational designers throughout history, giving reasons for choices.	Create innovative designs that improve upon existing products.	Evaluate the design of products so as to suggest improvements to the user experience.
Y5	Theme 1 – inspiration form WW2 Theme 2 – inspiration from spacecraft - NASA etc.. Theme 4 – Inspiration for suitcases – who in particular?	Theme 1 – improving cakes Theme 2 – improving a space craft Theme 4 – improving luggage design	Theme 1 – ration cakes – improve cakes and make amends using ration measurements. Theme 2 – Space craft Theme 4 – Luggage/ suitcases
Y6	Theme 3 – Recipes from the middle ages – using offal. Recipes high-end restaurants and compare this – including costings (cross curricular maths)	Theme 2 - Design and make bird boxes as part of Classified topic. Observe bird feeding stations etc with different shaped beak. Consider how traditional bird boxes could be improved https://www.theguardian.com/breakthrough-science/2017/may/15/schoolboys-win-the-gsk-uk-young-scientist-award-with-ingenious-bird-experiment	Theme 1 – Burglar alarms Aesthetics – hidden wires and switch