



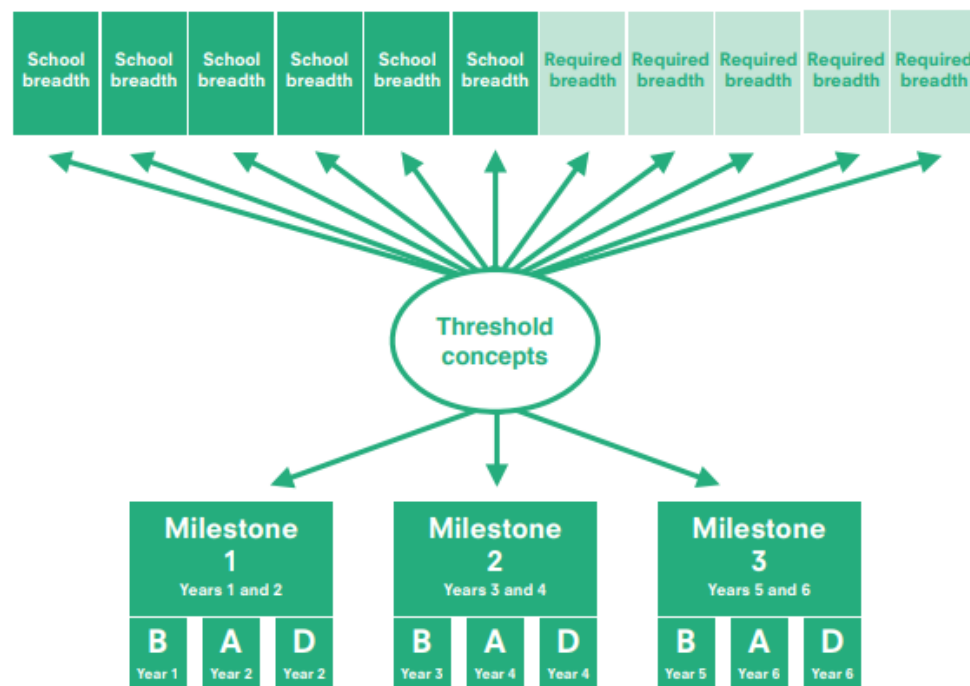
Design and Technology Curriculum Statement



Intent: What do we want for our children in Design Technology?

Basic Principles

Diagram of curriculum intent model



Learning is a change to the long-term memory and our aims are to ensure that our pupils experience a wide breadth of study and have, by the end of each key stage, long-term memory of an ambitious body of procedural and semantic knowledge. We use the essential characteristics ([see appendix 1](#)) to ensure that our pupils are given all the Design and Technology tools and knowledge they need to succeed.

1. **Curriculum drivers** shape our curriculum breadth and are derived from an exploration of the backgrounds of our pupils – see curriculum statement.

2. **Cultural Capital** gives our pupils the vital background knowledge required to be an informed and thoughtful member of our community who understand and believe in British Values – **see cultural capital statement**.
3. **Curriculum breadth** is shaped by our values, cultural capital, subject topics and our ambition for pupils to study the best of what has been thought and said by many generations of academics and scholars. Our breadth of curriculum ensures that we cover all aspects of the Primary National Curriculum - **see appendix 2**
4. **Subject topics** are the specific aspects of subjects that are studied, distinguished from our threshold concepts.
5. **Threshold concepts** tie together the subject topics into a meaningful scheme. Each unit, the same concepts are explored over and over to gradually build an understanding of them – **see appendix 3**
6. **Milestone indicators** are given for each of the threshold concepts, each of which includes the procedural and semantic knowledge pupils need to understand the concepts and this provides a progression model too - **see appendix 4**
7. **Knowledge categories** in each subject give pupils a way of expressing their understanding of the threshold concepts and help to strengthen the schema – **see appendix 5**
8. **Cognitive science** tells us that working memory is limited and that cognitive load is too high if pupils are rushed through content, limiting long-term memory. In order for pupils to become creative thinkers, or have a depth of understanding, they must first take time to master the basics.
9. **Cognitive domains** are worked through for each domain: basic, advancing and deep, throughout a two-year period of study.
10. **Pedagogical style** is used varyingly, based on that of Sweller, Kirschner and Rosenshine, meaning that direct instruction is given in the early stages of learning and then discovery-based approaches are used later.
11. **A selection of Kapow, Proof of Progress (POP) tasks, or Projects on a Page** are used to show our expectations in each cognitive domain.
12. This intent led us to develop our Hilton Spencer Academy Design and Technology Medium Term Plan and Progression by Year Group – **see Appendix 6**
13. Oracy statement for Design and Technology. (**Appendix 7**)

Implementation: How will we carry out our vision?

At Hilton Spencer Academy, our curriculum design is based on evidence from cognitive science:

- spaced repetition
- interleaving
- retrieval.

We implement our vision by using threshold concepts that are big ideas that underpin the subject of DT, helping pupils to form a DT schema within their long-term memories. The **Kapow** scheme compliments our vision for children at HSA perfectly as it is a cyclical/spiral curriculum where children regularly return to key areas again and again, and each time a key area is revisited it is covered with greater complexity. Upon returning to each key area, prior knowledge is utilised so pupils can build upon their previous foundations. – (see [appendix 7](#))

Impact: How will we assess what the children know, remember and understand?

We assess the impact of our curriculum design in the long-term because learning is a change to long-term memory.

We do, however, use probabilistic assessment based on deliberate practice. This means that we determine that our practices are appropriate, related to our goals and likely to produce the results as the children progress through Hilton Spencer Academy.

We also use comparative judgment in two ways: the tasks we set and in comparing pupils' work over time.

Lesson observations are also used to ensure that the pedagogical style matches our depth of expectations.

Appendices

Appendix 1: Essential Characteristics

- ✓ Significant levels of originality and the willingness to take creative risks to produce innovative ideas and prototypes.
- ✓ An excellent attitude to learning and independent working.
- ✓ The ability to use time efficiently and work constructively and productively with others.
- ✓ The ability to carry out thorough research, show initiative and ask questions to develop an exceptionally detailed knowledge of users' needs.
- ✓ The ability to act as responsible designers and makers, working ethically, using finite materials carefully and working safely.
- ✓ A thorough knowledge of which tools, equipment and materials to use to make their products.
- ✓ The ability to apply mathematical knowledge.
- ✓ The ability to manage risks exceptionally well to manufacture products safely and hygienically.
- ✓ A passion for the subject and knowledge of, up-to-date technological innovations in materials, products and systems.

Appendix 2: National Curriculum

Our HPA Curriculum covers all National Curriculum requirements in full, as detailed in the documents below.

ELG	Physical Development	Fine Motor Skills	• Use a range of small tools, including scissors, paintbrushes and cutlery.
	Expressive Arts and Design	Creating with Materials	• 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.
Reception	Physical Development	• Progress towards a more fluent style of moving, with developing control and grace. • Develop their small motor skills so that they can use a range of tools competently, safely and confidently. • Use their core muscle strength to achieve a good posture when sitting at a table or sitting on the floor.	
	Expressive Arts and Design	• Explore, use and refine a variety of artistic effects to express their ideas and feelings. • Return to and build on their previous learning, refining ideas and developing their ability to represent them. • Create collaboratively, sharing ideas, resources and skills.	

Key Stage 1		Key Stage 2	
Design - design purposeful, functional, appealing products for themselves and other users based on design criteria - generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology		Design - use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups - generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design	
Make - select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] - select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics		Make - select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately - select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities	
Evaluate - explore and evaluate a range of existing products - evaluate their ideas and products against design criteria - build structures, exploring how they can be made stronger, stiffer and more stable - explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.		Evaluate - investigate and analyse a range of existing products - evaluate their ideas and products against their own design criteria and consider the views of others to improve their work - understand how key events and individuals in design and technology have helped shape the world	
Cooking and nutrition - use the basic principles of a healthy and varied diet to prepare dishes - understand where food comes from.		Technical knowledge - apply their understanding of how to strengthen, stiffen and reinforce more complex structures - understand and use mechanical systems in their products [for example,	

	gears, pulleys, cams, levers and linkages] • understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] • apply their understanding of computing to program, monitor and control their products. Cooking and nutrition • understand and apply the principles of a healthy and varied diet • prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques • understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.
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Appendix 3: Threshold Concepts

<u>Threshold Concepts</u>	
Big ideas in design technology that pupils will explore through every topic	
Master practical skills	This concept involves developing the skills needed to make high quality products (we have highlighted a range of skills but they may be added to or changed as appropriate for your school).
Design, make, evaluate and improve	This concept involves developing the process of design thinking and seeing design as a process.
Take inspiration from design throughout history	This concept involves appreciating the design process that has influenced the products we use in everyday life.

Appendix 4 Milestones.

Threshold Concept		Milestone 1	Milestone 2	Milestone 3
Master practical skills This concept involves developing the skills needed to make high quality products (we have highlighted a range of skills but they may be added to or changed)	Food	• Cut, peel or grate ingredients safely and hygienically. • Measure or weigh using measuring cups or electronic scales. • Assemble or cook ingredients.	• 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).	• 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.
	Materials	• 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).	• 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.	• 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). • 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).
	Textiles	• 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).	• Understand the need for a seam allowance. • Join textiles with appropriate stitching. • Select the most appropriate techniques to decorate textiles.	• 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).
	Electricals and electronics	• Diagnose faults in battery operated devices (such as low battery, water damage or battery terminal damage).	• Create series and parallel circuits	• Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips).
	Computing	• Model designs using software.	• Control and monitor models using software designed for this purpose.	• Write code to control and monitor models or products.
	Construction	• Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products.	• Choose suitable techniques to construct products or to repair items. • Strengthen materials using suitable techniques.	• Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filing and sanding).

	Mechanics	• Create products using levers, wheels and winding mechanisms.	• Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and gears).	• Convert rotary motion to linear using cams. • Use innovative combinations of electronics (or computing) and mechanics in product designs.
Design, make, evaluate and improve This concept involves developing the process of design thinking and seeing design as a process.		• Design products that have a clear purpose and an intended user. • Make products, refining the design as work progresses. • Use software to design.	• 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.	• 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.

Appendix 5: Knowledge Categories

(Each concept has its own facts of knowledge which help to strengthen the schema)

Threshold Concept	Knowledge	Descriptor	Symbol
Master practical skills		Technical knowledge Technical knowledge involves knowing about the technical theories that underpin design. This helps designers to imagine products that, in the real world, will do what they intended them to do. For example, knowing about the theory of triangulation allows designers to create structures that are strong and stable; knowing about the theory of electrical systems allows them to produce workable products. Technical knowledge also includes learning about design challenges, such as how best to join materials. Without knowing, for example, that scoring card before folding makes for a cleaner fold, one cannot fully realise one's designs. Technical knowledge is distinct from practical knowledge in that it is focused on theory; practical knowledge is based on one's ability to apply theory successfully.	
Design, make, evaluate and improve		Practical Knowledge Practical knowledge involves applying technical knowledge to projects. It requires practice and a degree of what this book calls 'finger fluency': in much the same way as a fluent reader requires automatic recall of phonic knowledge, designers need automatic recall of technical and practical knowledge to successfully realise their designs. Without practical competence, pupils will struggle to understand the limitations of their designs and, therefore, be more likely to produce unrealistic design proposals. For example, if pupils know, and are fluent in applying, how to cut and join square-section wood when forming a truss then their bridge designs will reflect this practical knowledge.	
		Design process Design is an iterative process. The word 'iterate' means to repeat ('re-iterate' means to repeat what has been repeated). This is an important part of the discipline of design. This Curriculum Companion for DT aims to model to pupils the design process through guided designs which use the following iterative process: think, make, break, repeat.	

		The 'break' part of the process involves looking at the weaknesses of the design as it develops and making adjustments accordingly – a stage that is also called evaluation. The term 'evaluation' is used in this book throughout the design process rather than something that is done at the end.	
Take inspiration from design throughout history		Design inspiration Design and technology is primarily concerned with making useful inventions that have a purpose and intended users (as opposed to art which is primarily a form of expression through media). The ideas for most inventions come from things that are already in existence and, over time, inventors gradually improve them. Designers take inspiration from products already in existence, whether natural or manufactured, and use them as starting points for their designs. For example, some of the earliest bridges are likely to have been fallen trees, which probably inspired beam bridges and so on. By focusing on the knowledge of existing products, one of the aims of this, is to help pupils to appreciate that inspiration comes from what is already around us. As DT is a STEM (Science, Technology, Engineering and Mathematics) subject, many of the inspirations explored are taken from these disciplines.	

Appendix 6 – HPA Progression by Year Group/ Medium term plan

Hilton Spencer Academy DT Curriculum Map

At Hilton Spencer Academy, DT should be taught as a stand-alone subject and there is a requirement to teach 4 to 6 hours of DT over a half term. All 'Kapow' projects have 4 lessons, but some lessons may need a longer session (e.g., an afternoon to complete, equating up to 2 hours)

Key Concepts of Learning

These are the core skills that children will build upon throughout the year groups.

Master practical skills

This concept involves developing the skills needed to make high quality products (we have highlighted a range of skills but they may be added to or changed as appropriate for your school).

Design, make, evaluate and improve

This concept involves developing the process of design thinking and seeing design as a process.

Take inspiration from design throughout history

This concept involves appreciating the design process that has influenced the products we use in everyday life.

		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	 	In EYFS, DT is taught in the prime area of physical development and the specific areas of understanding the world and expressive arts and design, where the focus should be on design rather than technical language, although there is certainly no harm in introducing new vocabulary! Activities include, but are not limited to, junk modelling (houses, rockets, space tools etc.), folding to make cards (kindness cards, Diwali cards), daily construction using a range of building materials e.g. Lego, wooden blocks etc., large outdoor construction including foam bricks and blocks, wooden blocks and polygon shapes for children to build larger models, the use of creative areas, fully stocked for children to self-select from which allow children to combine materials to make pictures (collage, cut and stick etc.) Cutting skills are also taught throughout the year, along with baking (spreading, mixing), food tasting (Diwali food) and collage (self-portraits, faces).					
Year 1	 	Project – Food - Making Smoothies (4 lessons)	Project – Mechanisms - Making a Moving Story Book (4 lessons)	Project – Structures - Constructing a Windmill.	Project – Textiles – Designing a Hand Puppet.	Project – Mechanisms - Wheels and Axles	Project – Overflow time to complete or consolidate projects and celebrate achievements

	 Cut, peel or grate ingredients safely and hygienically. FOOD Assemble or cook ingredients. FOOD Measure or weigh using measuring cups or electronic scales. FOOD	Create products using levers, wheels and winding mechanisms. MECHANISMS	Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products. CONSTRUCTION	Shape textiles using templates. TEXTILES	Create products using levers, wheels and winding mechanisms. MECHANISMS	within DT with a gallery of products
Year 2	   Project – Mechanisms – Make a Ferris wheel Create products using levers, wheels and winding mechanisms. MECHANISMS	Project – Food – A Balanced Diet. (May not need full 4 lessons if coverage in Science/PSHCE) Assemble or cook ingredients. FOOD	Project – Mechanisms – Making a Moving Monster. Create products using levers, wheels and winding mechanisms. MECHANISMS	Project – Structures/Construction – Baby Bear’s Chair. Looking at stability and strengthening materials. Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products. CONSTRUCTION	Project – Textiles – Pouches. Join textiles using running stitch. TEXTILES Measure and mark out to the nearest centimetre.	Project – Overflow time to complete or consolidate projects and celebrate achievements within DT with a gallery of products

				Cut materials safely using tools provided. MATERIALS Demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling). MATERIALS		MATERIALS Colour and decorate textiles using a number of techniques (such as dyeing, adding sequins or printing). TEXTILES	
Year 3	  	Project – Textiles (cross stitch)– Design and Make a Cushion. Join textiles with appropriate stitching. TEXTILES Prepare ingredients hygienically using	Project – Electricals and Electronics – Designing and Making an Electric Poster. Create series and parallel circuits. ELECTRICALS AND ELECTRONICS	Project – Mechanical Systems – Pneumatic Toys, e.g., monster opening and closing mouth. Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and gears).	Project – Food – Eating Seasonally. Making a seasonal tart Measure ingredients to the nearest gram accurately. Assemble or cook ingredients (controlling temperature of oven or hob) FOOD	Project – Structures – Constructing a Castle Measure and mark out to the nearest millimetre. Apply appropriate cutting techniques that include cuts within the perimeter of the material (such as slots or cut outs) MATERIALS	Project – Overflow time to complete or consolidate projects and celebrate achievements within DT with a gallery of products

		appropriate utensils. Follow a recipe. FOOD		MECHANICS Cut materials accurately and safely by selecting appropriate tools. Select appropriate joining techniques. MATERIALS		Choose suitable techniques to construct products or to repair items. CONSTRUCTION	
Year 4	  	Project – Electrical Systems – Torches; circuits, torch design and assembly (this can be covered in Science, making reference to these core skills) Create series and parallel circuits.	Project – Mechanical Systems – Making and designing a Slingshot Car. Design with purpose by identifying	Project – Food – Adapting a recipe. Designing and Making a biscuit; ‘Biscuit Bake-Off’ (Possible links to the local bakery; see DT leaders for more info) Measure ingredients to the nearest gram accurately. Assemble or cook ingredients	Projects – Structures – Pavilions (Previous learning; ‘Castles’) Add cladding to a frame structure; supporting weight. (Previous learning; reinforcing and strengthening a structure) Cut materials accurately and safely by selecting appropriate tools.	Projects – Textiles – Fastenings; Designing a book sleeve (Previous learning; cushions) Sewing, modifications. Join textiles with appropriate stitching. TEXTILES	Project – Overflow time to complete or consolidate projects and celebrate achievements within DT with a gallery of products

		ELECTRICALS AND ELECTRONICS	opportunities to design. Make products by working efficiently (such as carefully selecting materials) DMEI Strengthen materials using suitable techniques. CONSTRUCTION	(controlling temperature of oven or hob) FOOD	Select appropriate joining techniques. Measure and mark out to the nearest millimetre. Apply appropriate cutting techniques that include cuts within the perimeter of the material (such as slots or cut outs) MATERIALS Choose suitable techniques to construct products or to repair items. CONSTRUCTION	Measure and mark out to the nearest millimetre MATERIALS Understand the need for a seam allowance. Select the most appropriate techniques to decorate textiles. TEXTILES	
Year 5	  	Project – Mechanical Systems – Pop up Book Show an understanding	Project - Food – What could be Healthier? Making a healthy Spaghetti Bolognese or humous and dips (if need a no-cook option) Demonstrate a range of baking	Project – Structures – Bridges Truss, arch and beam bridges. Combine elements of design from a range of	Project – Textiles – Stuffed Toys; Design, Make and Evaluate Create objects (such as a cushion) that employ a seam allowance. Join textiles with a combination of stitching techniques (such as back	Project – Electrical Systems – Doodlers. Exploring circuits and looking at motors Convert rotary motion to linear using cams. Use innovative combinations of	Project – Overflow time to complete or consolidate projects and celebrate achievements within DT with a gallery of products



		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). 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). MATERIALS Make products through stages of prototypes, making continual refinements.	and cooking techniques. Create and refine recipes, including ingredients, methods, cooking times and temperatures. Measure accurately and calculate ratios of ingredients to scale up or down from a recipe. FOOD	inspirational designers throughout history, giving reasons for choices (Isambard Kingdom-Brunel) INSPIRATION 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. DMEI Cut materials with precision and refine the finish with appropriate tools, such as sanding wood after cutting. MATERIALS	stitch for seams and running stitch to attach decoration). TEXTILES 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). MATERIALS	electronics (or computing) and mechanics in product designs. MECHANICS Create innovative designs that improve upon existing products. Evaluate the design of products so as to suggest improvements to the user experience. INSPIRATION Design with the user in mind, motivated by the service a product will offer (rather than simply for profit). DMEI	
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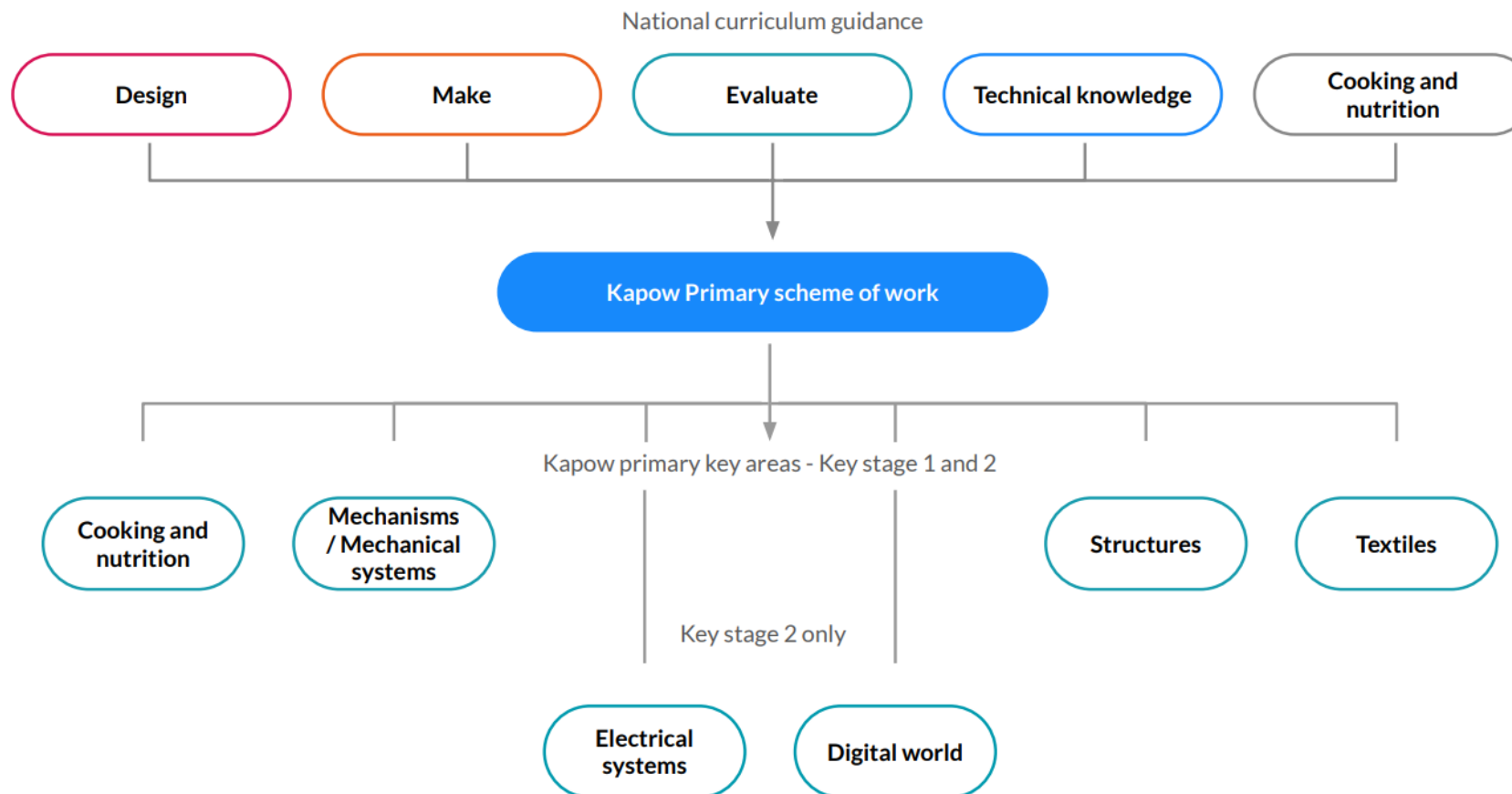
		DMEI Use the qualities of materials to create suitable visual and tactile effects in the decoration of textiles (such as a soft decoration for comfort on a cushion). TEXTILES					
Year 6	  	Project – Structures – Playgrounds Designing 5 pieces of playground apparatus using 3 different structures. Ensure products have a high-quality	Project – Textiles – Waistcoats Children design, make and evaluate a waistcoat to wear (this could be for an end of year occasion; to be decided) Create objects (such as a cushion) that employ a seam allowance.	Project – Electricals and Electronics – Make a ‘Steady Hand’ Game Children make and test their circuit game. Create circuits using electronics kits that employ	Project – Overflow time to complete or consolidate projects and celebrate achievements within DT with a gallery of products	(SATS)	Project – Food – Come Dine With Me Children Research and Prepare 3 course Meal; rotational activity. Demonstrate a range of baking and cooking techniques. Create and refine recipes, including

		finish, using art skills where appropriate. DMEI 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) MATERIALS. Develop a range of practical skills to develop products such as screwing, gluing, nailing, filing and drilling. CONSTRUCTION	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). TEXTILES Design with the user in mind, motivated by the service a product will offer (rather than simply for profit). Ensure products have a high-quality finish, using art	a number of components (such as LEDs, resistors, transistors and chips) ELECTRICALS Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filing and sanding). CONSTRUCTION Design with the user in mind, motivated by the service a product will offer (rather than simply for profit). Ensure products have a high-quality finish, using art			ingredients, methods, cooking times and temperatures. Measure accurately and calculate ratios of ingredients to scale up or down from a recipe. Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms). FOOD Design with the user in mind, motivated by the service a product will offer (rather than simply for profit). DMEI
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			skills where appropriate. DMEI	skills where appropriate. DMEI			
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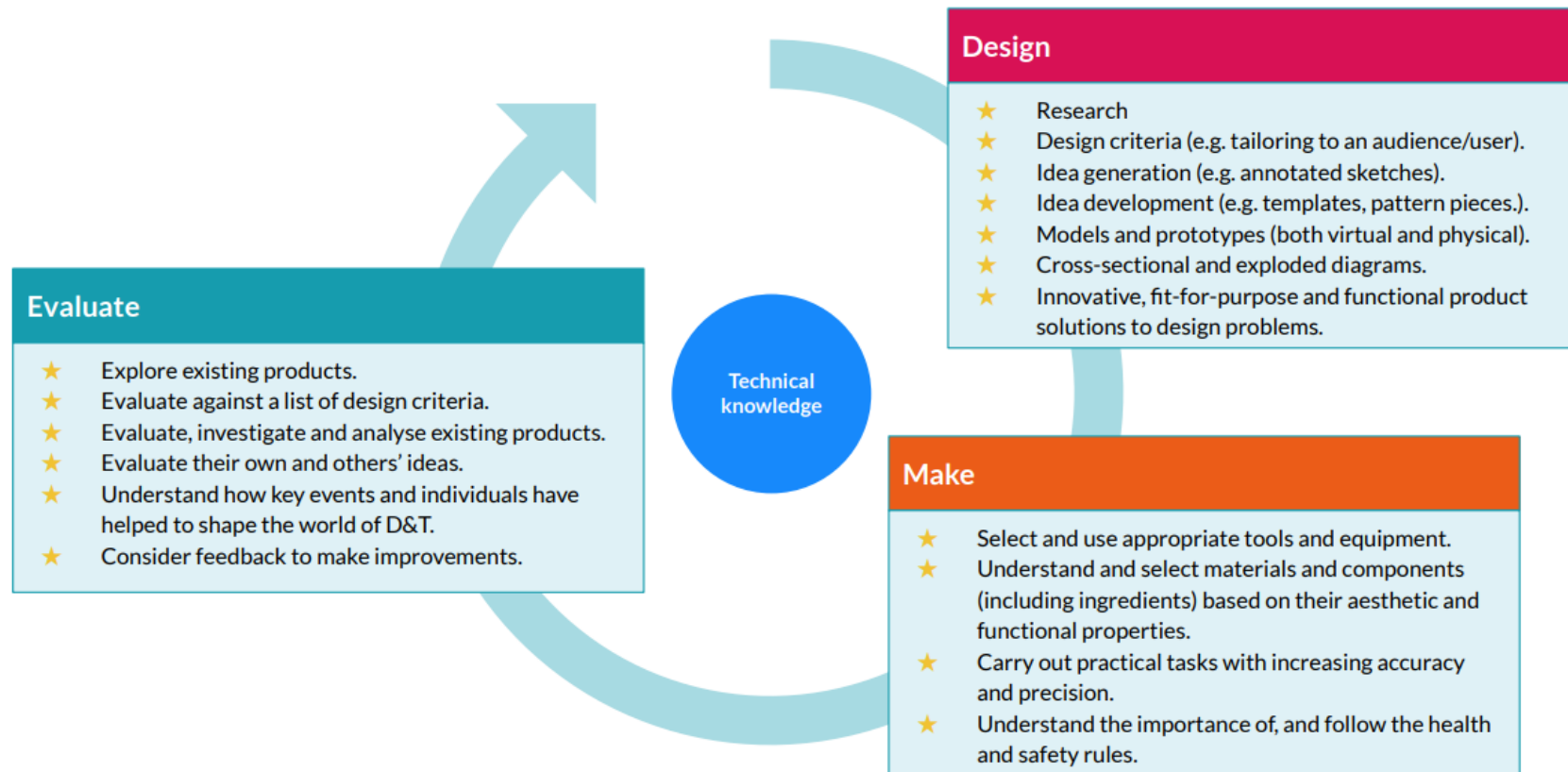
Appendix 7 How the Kapow scheme is linked to the National Curriculum and the Milestones.

How is the Design and technology scheme of work organised?



The design process

The Design and technology National Curriculum outlines the three main stages of the design process: design, make and evaluate. Each Kapow Primary unit follows these stages, to form a full project. Each stage of the design process is underpinned by technical knowledge which encompasses the contextual, historical and technical understanding, required for each strand.



Cooking and nutrition* has a separate section in the D&T National Curriculum, with additional focus on specific principles, skills and techniques in food, including where food comes from, diet and seasonality. Food units still follow the design process summarised above, for example by tasking the pupils to develop recipes for a specific set of requirements (design criteria) and to suggest methods of packaging the food product including the nutritional information.

A spiral curriculum

The scheme of work has been designed as a spiral curriculum with the following key principles in mind:

- ✓ **Cyclical:** Pupils return to the key areas again and again during their time in primary school.
- ✓ **Increasing depth:** Each time a key area is revisited it is covered with greater complexity.
- ✓ **Prior knowledge:** Upon returning to each key area, prior knowledge is utilised so pupils can build upon previous foundations, rather than starting again.



Appendix 7- Oracy statement.

D.T.

Through design and technology lessons, we provide all children with opportunities to improve oracy skills. Technical vocabulary is taught in all year groups and children are encouraged to use this language within their independent work. Children throughout the school are given the opportunity to participate in termly exhibitions where other children and parents can view their work and they can present their work, explaining the thought processes and decision making.

End