	Food Cooking and Nutrition	Textiles	Structures	Mechanical/Mechanical systems	Electrical systems	Digital world	Notes other milestones
1	*Fruit and Veg smoothie Summer* • Cut, peel or grate ingredients safely and hygienically. • Measure or weigh using measuring cups (added in as not instructed on Kapow) • Assemble or cook ingredients • Design products that have a clear purpose and an intended user. • Make products, refining the design as work progresses. • Explore objects and designs to identify likes and dislikes of the designs. • Suggest improvements to existing designs. • Explore how products have been created.	*Puppets* *Autumn* • 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). • Design products that have a clear purpose and an intended user. • Make products, refining the design as work progresses. • Use software to design (to be added in to planning) • Explore objects and designs to identify likes and dislikes of the designs. • Suggest improvements to existing designs. • Explore how products have been created.	*Windmills*	*Wheels and Axels* *Spring* • Create products using levers, wheels and winding mechanisms. • Design products that have a clear purpose and an intended user. • Make products, refining the design as work progresses. • Explore objects and designs to identify likes and dislikes of the designs. • Suggest improvements to existing designs. • Explore how products have been created. • Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products			*Wheels and axel unit to add in* • Measure and mark out to the nearest centimetre. *To the Kapow lesson* This construction milestone • Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products. to be covered during outdoor learning to also meet with the threshold concept They should work in a range of relevant contexts, such as the home and school, gardens and playgrounds, the local community, industry and the wider environment.
2	A balanced diet. Summer CQ Milestones • Cut, peel or grate ingredients safely and hygienically. • Measure or weigh using measuring cups or electronic scales. • Assemble or cook ingredients. • Design products that have a clear purpose and an intended user. • Make products, refining the design as work progresses. • Explore objects and designs to identify likes and dislikes of the designs. • Suggest improvements to existing designs.	Pouches Spring • 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)	Baby Bear's Chair Materials Autumn • Cut materials safely using tools provided. • Measure and mark out to the nearest centimetre. (Measure the legs etc added to the KO) • 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) • Design products that have a clear purpose and an intended user. • Make products, refining the design as work progresses. • Explore objects and designs to identify likes and dislikes of the designs. • Suggest improvements to existing designs. • Explore how products have been created	Fairground wheel			Add measuring using scales to food unit to meet milestone 2 KS1 Missing levers from milestone1 can this be added

	• Explore how products have been created						
3	Food- eating seasonally Summer 2 • 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) • 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. • Improve upon existing designs, giving reasons for choices	Cushions/ superhero masks Autumn 1 • Understand the need for a seam allowance. • Join textiles with appropriate stitching. • Select the most appropriate techniques to decorate textiles. • Identify some of the great designers in all of the areas of study (including pioneers in horticultural techniques) to generate ideas for designs. • Improve upon existing designs, giving reasons for choices. • Disassemble products to understand how they work. • 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 • Select appropriate joining techniques.	Structures Construing a castle Materials all milestones met and computing	Pneumatic Toy other lesson autumn 2 Mechanical • Convert rotary motion to linear using cams (Milestone 3). • Use innovative combinations of electronics (or computing) and mechanics in product designs (Milestone 3). • Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and gears). • 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. • Identify some of the great designers in all of the areas of study (including pioneers in horticultural techniques) to generate ideas for designs. • Improve upon existing designs, giving reasons for choices. • Disassemble products to understand how they work.		• Control and monitor models using software designed for this purpose.	Computing is covered under the computing milestones- see computing subject leader folder for curriculum map.
4	Food- Adapting a recipe Spring 1 Hits all milestones (could leave Y3 food) • Prepare ingredients hygienically using appropriate utensils.	Fastenings Hits all milestones	Pavilions Summer 2 • 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).	Making a slingshot car Mechanic milestone (pully)	Electrical system torches • Create series and parallel circuit • Design with purpose by identifying opportunities to design.	Moved from year 3 to 4 Mindful moments timer Computing milestone	Food Pavilions Torches- electrical systems – science links

	• Measure ingredients to the nearest gram accurately. • Follow a recipe. • Assemble or cook ingredients (controlling the temperature of the oven or hob, if cooking). • 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.		• Select appropriate joining techniques • 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. • Identify some of the great designers in all of the areas of study (including pioneers in horticultural techniques) to generate ideas for designs. • Improve upon existing designs, giving reasons for choices. • Disassemble products to understand how they work. • Choose suitable techniques to construct products or to repair items. • Strengthen materials using suitable techniques. Use software to design and represent product design.		• Make products by working efficiently (such as by carefully selecting materials). • Refine work and techniques as work progresses, continually evaluating the product design. • Improve upon existing designs, giving reasons for choices. • Disassemble products to understand how they work		
5	What could be healthier Hits all milestones	Textiles Stuffed toys. • 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).	Wooden Truss Bridge Materials all milestones Construction milestone • 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) • Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filing and sanding).	Pop up book Mechanics Milestone 2	This milestone is covered through Science lessons • Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips)	Mechanical and Electrical Digital World Monitoring devices CAD milestone met • Write code to control and monitor models or products. • Convert rotary motion to linear using cams. • Use innovative combinations of electronics (or computing) and mechanics in product designs.	**Covered in structures Bridges** Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filing and sanding)
6	Come Dine with me • 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.	Waistcoats	Playgrounds Materials all milestones	Automata Toys Mechanics All milestone (Cams) • Convert rotary motion to linear using cams. • Use innovative combinations of electronics (or computing) and mechanics in product designs.		Mechanical and Electrical Navigating the World CAD Milestone met • Use prototypes, cross-sectional diagrams and computer aided	

	• Demonstrate a range of baking and cooking techniques. • Create and refine recipes, including ingredients, methods, cooking times and temperatures.					designs to represent designs. • Convert rotary motion to linear using cams. • Use innovative combinations of electronics (or computing) and mechanics in product designs.	