Year Group Class	Autumn Term	Spring Term	Summer Term
Year 4/5	3.10 BOLOGNAISE	TEXTILES (KAPOW)	3.3 ELECTRONIC MOTORS
Hazel	To design and make a bolognaise dish	Design and make a stuffed toy	To design and make a motorised car
Breadth	Cooking and Nutrition  To design and make a bolognaise dish considering user and safety features – consider ingredients, adaptability and	Textiles To design and make a stuffed toy  To use blanket stitch, running stitch and cross stitch and applique for description	Electrical Systems  To design and make a motorised car  Explore rotary movement in electronic motors.  Explore how when motors are combined with gears they will adjust speed
	costs	stitch and applique for decoration	To show how a motor can be used in a practical way
Threshold Concepts	Master practical skills - chopping Crushing Sautéing Stirring Design, make, evaluate, improve. Take inspiration from design – pre- made bolognaise dishes – spaghetti bolognaise, lasagna and pasta al forno	Master practical skills - drawing around a template, cutting a simple pattern, threading a needle, joining fabrics, running stitch, decorating fabric Design, make, evaluate and improve.	Master practical skills – Measuring, estimating, cutting, joining, using electronic circuits  Design, make evaluate, improve.
		Take inspiration from design – puppets and soft toys	Take inspiration from design – motorised cars, motorised propellers, motorised fan
Milestones	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).  Apply knowledge of techniques to decide which would be appropriate to the task.  Adapt, organise, arrange, experiment	Cut materials accurately and safely by selecting appropriate tools.	Convert rotary motion to linear Cut materials with precision and refine the finish with 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)	Show an understanding of the qualities of materials to choose appropriate tools to cut and shape.  Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips).
		Select appropriate joining techniques.	Develop a range of practical skills to create products (such as cutting, drilling and
		Understand the need for a seam allowance.	screwing, nailing, gluing, filing and sanding). Use innovative combinations of electronics (or
		Join textiles with appropriate stitching.	computing) and mechanics in product designs.  Use prototypes, cross-sectional diagrams
		Select the most appropriate techniques to decorate textiles	and computer aided designs to represent designs. Use software to design and represent product designs – Tinkercad