3. Progression and Coverage of Core Knowledge + Skills – DESIGN TECHNOLOGY

Subject Leader: Sam Holt **Year Group: Year 2** **Last updated: Sept 2021**

Robert Miles Infant School

	Autumn 1 7 weeks	Autumn 2 7 weeks	Spring 1 5 weeks	Spring 2 6 weeks	Summer 1 6 weeks	Summer 2 7 weeks
Topic	**Great People who Changed the World**		**All Creatures Great and Small**		**Land Ahoy!**	
Coverage Overview	**Technical Knowledge - Mechanisms** Wheels and axles mechanism **(Design, make, evaluate)**	**Technical Knowledge - Mechanisms** Spring mechanism	**Technical Knowledge - Cooking and Nutrition** Understand where our food comes from and sort items according to origin. Understand the need for a healthy diet, exploring the 'eat well plate' and '5 a day'.	**Technical Knowledge - Cooking and Nutrition** Prepare healthy dish, performing a range of food preparation skills. **(Design, make, evaluate)**	**Technical Knowledge - Mechanisms** Choose own mechanism to create moving part in a product.	**Technical Knowledge – Textiles** Join two pieces of fabric together to create product (sewing). **(Design, make, evaluate)**
Core Knowledge	**Technical Knowledge - Mechanisms** **Design** I know I can use my own ideas to create a product. I understand what 'designing' means. **Make** I understand how wheels and axles work and how they make a product move in a certain way. **Evaluate** I understand why it is important to evaluate a product. I understand what 'evaluating' means.	**Technical Knowledge - Mechanisms** **Make** I understand how a spring mechanism works.	**Technical Knowledge - Cooking and Nutrition** I know that food comes from different places. I understand what 'Five a Day' is. I know what the food groups are on the 'Eat Well Plate'.	**Technical Knowledge - Cooking and Nutrition** I know why we follow safe procedures for food safety and hygiene. **Design** I understand how looking at existing products will help me with my own product. **Make** I know why it is important to use food preparation tools safely. I understand why I need to use different tools to create my product. **Evaluate** I know that evaluating a product will help me improve future products.	**Technical Knowledge - Mechanisms** I understand I can use different mechanisms that I've learnt to create a desired effect.	**Technical Knowledge – Textiles** I understand how to join two pieces of fabric together to create a product (sewing). **Design** I understand why it is important to create and follow a design. **Make** I know how to make stitches to join two pieces of fabric together. I understand how a 3D textile structure can be made. **Evaluate** I know that evaluating a product will help me improve future products and can identify an improvement with my own product.

Skills Development	**Technical Knowledge - Mechanisms** I can explain how wheel and axel mechanisms work. **Design** I can draw simple designs and label parts of product using words. I can explain what a design is and what t is showing. **Make** I can use wheels and axles to make a product that moves in a certain way (forwards and backwards). **Evaluate** I can explain how I made my product and how the wheels and axles work. I can explain what evaluating is.	**Technical Knowledge - Mechanisms** I can explain how a spring mechanism works. **Make** I can explain what I am doing to create my spring mechanism. I can fold card in the correct way to create my spring mechanism.	**Technical Knowledge - Cooking and Nutrition** I can say where certain foods come from (origins). I can classify foods into groups depending on their origins. I can recall the food groups on the 'Eat Well Plate' and say which are healthy or not. I can describe what '5 a day' means and share examples.	**Technical Knowledge - Cooking and Nutrition** I can safely prepare a food product. **Design** I can observe products, discussing what makes them appealing and purposeful. I can use this knowledge to inform my own design. I can design own packaging/product. **Make** I can produce product by: - cutting fruit carefully (bridge grip and claw grip) - measuring ingredients - following recipe. I can demonstrate procedures for food safety and hygiene and explain why this is important. **Evaluate** I can explain what went well, thinking about the design criteria.	**Technical Knowledge - Mechanisms** I can choose a mechanism to use in a product, to create a desired effect. I can explain why I have chosen that mechanism.	**Technical Knowledge – Textiles** I can create a textile product. **Design** I can design products for myself and others following a design criteria. **Make** I can mark out and cut fabric, with support. I can join two pieces of fabric together using stitches. I can explain what tools I am using and why I am using them. I can use finishing techniques that have been modelled to make a product look good. **Evaluate** I can explain what went well, thinking about the design criteria. I can talk about what I would do differently if I were to do it again.
Critical Vocab	mechanism, movement, forward, backwards, product, push, pull, wheels, axles, explain, design, materials, evaluate, build, explain, functional, purposeful, build, suitability, joining, (names of tools being used).	mechanism, movement, spring, in, out, fold, attach, create, explain	food groups – fruit, vegetables, carbohydrates, starches, dairy, protein, sugars, fat, eat well plate, 5 a day, origins, classify, healthy, unhealthy, balanced diet	senses – feeling, smelling, tasting, healthy, hygiene, food safety, claw grip, bridge grip, origins, peeling, grating, design, evaluate, prepare, product, criteria, chop, appealing, ingredients, measure, recipe, audience, opinion	All previous mechanism vocabulary + desired effect.	textiles, fabric, needle, eye of needle, thread, cotton, felt, 3D, structure, join, sew, stitches, stuffing, techniques, design make, evaluate, criteria, plan, suitability, purposeful, bink.
nrichm nt Opps	Test cars down ramps		Invitation to dinner party – what healthy dinner would you make?	Write recipe.		Sewing materials out during Golden Time.
Assessing Impact	Create a moving mechanism using wheels and axels. Missing word – fill in to show understanding of the use of wheels and axles. Verbal explanation of how I made my product and how	Make a spring mechanism at another point.	Nutrition quiz.	Design product and explain how it is appealing to particular audience. Show a bridge and claw grip when cutting. Evaluate product using given criteria.	Children to create a moving part in a product using mechanism of their choice. Children to explain why they chose that mechanism.	Produce a labelled design and explain the importance of it. Use stitching to join two pieces of fabric together. Written evaluation of product.

	the wheels and axles work – record on iPad?					