

Long Term Overview: Key Stage 1

Year A 2020-2021	Wheels and Axles	Windmills	Puppets
Rationale	Heritage- linked to history and local railway station/ school badge (Why is there a train on my sweatshirt? Creativity Problem-solving	Locality Creativity Problem-solving Speaking and listening, vocabulary, cultural heritage.	Creativity Problem-solving Speaking and listening, vocabulary, cultural heritage.
Focus	In this topic, children are given the opportunity to problem solve and experiment with mechanisms to help them develop a clear understanding of how they work. They even assume the role of a mechanic and troubleshoot why certain wheels don't rotate. They then demonstrate their learning by designing and building their own moving vehicles.	Drawing inspiration from the 'A Windmill in Old Amsterdam' song, children design, decorate and build a windmill for their client (the mouse) to live in. Throughout the topic they also build an understanding of what a windmill is, what it looks like and the different types that can be found, to help identify key features.	Children explore different ways of joining fabrics before creating their own hand puppets based upon characters from a well-known fairytale. Throughout they work to develop their technical skills of cutting, gluing, stapling and pinning.
Advances in technology through Worldwide, seasonal events- card making			
Year B 2021-22	Balanced diet	Moving monsters	Baby bear's chair
Rationale	Healthy diet Self-awareness	Problem-solving Creativity	Speaking and listening, vocabulary, cultural heritage. Problem-solving Resilience Creativity
Focus	Through their exploration of what makes a balanced diet, children taste test food combinations of different food groups. They will also aim to make a wrap that includes a healthy mix of protein, vegetables and dairy, and learn about the term 'hidden sugars'.	After learning the terms; pivot, lever and linkage, children set to designing a monster that will move using a linkage mechanism. After practising making linkages of different types and varying the materials they use, children can also bring their monsters to life with the gift of movement.	Using the tale of Goldilocks and the Three Bears as inspiration, children help poor Baby Bear by making him a brand new chair. When designing the chair, they consider his needs and what he likes and explore ways of building it so that it is a strong and stable structure and doesn't break again.
Advances in technology through Worldwide, seasonal events- card making, PSHE/ science links			

Long Term Overview: Lower Key Stage 2

Year B 2020-2021	Eating seasonally	Pneumatic toys	Cushions
Rationale	Locality/ global citizenship Responsibility Sustainability Healthy diet Creativity	Responsibility Sustainability Creativity Problem-solving	Aspiration Financial capability Creativity Resilience
Focus	Children discover when and where fruits and vegetables are grown and learn about seasonality in the UK. They will learn about the relationship between the colour of fruits and vegetables and their health benefits by making three dishes using seasonal ingredients.	Pupils design and create a toy with a pneumatic system, learning how trapped air can be used to create a product with moving parts while also building on their design knowledge. They will then be introduced to thumbnail sketches and exploded diagrams.	This topic offers extra challenge by introducing two new skills: cross stitch and appliqué. After learning these techniques, they apply their knowledge to the design, decoration and assembly of their very own cushions.
Advances in technology through Worldwide, seasonal events- card making, PSHE/ science links			
Year A 2021-22	Adapting a recipe	Pavilions	Torches
Rationale	Financial awareness Aspiration Healthy diet Creativity	Creativity Aspiration Problem-solving Resilience	Creativity Problem-solving Resilience
Focus	Children work in groups to adapt a simple biscuit recipe, to create the tastiest biscuit. Give children the opportunity to understand how to follow a recipe, potentially leading them to sell their recipe at the school Christmas market. While making, they will also ensure that their creation comes within the given budget of overheads and costs of ingredients.	Pupils explore pavilion structures, learning about what they are used for and investigating how to create strong and stable structures before also designing and creating their own pavilions, complete with cladding.	In this topic, children apply their scientific understanding of electrical circuits to create a torch made from easily available materials and objects. They will also design and evaluate their product against set design criteria. (science link)
Advances in technology through Worldwide, seasonal events- card making, PSHE/ science links			

Long Term Overview: Upper Key Stage 2

Y5	What could be healthier?	Pop up books	Stuffed toys
Rationale	Healthy diet Responsibility Global citizenship Sustainability	Community Creativity Problem-solving Resilience	Financial awareness Aspiration Community
Focus	Focusing on nutrition, children research and modify a traditional Bolognese sauce recipe to make it healthier. They will cook their new and improved versions, make appropriate packaging and learn about the ethical considerations of farming cattle.	After choosing a simple story or nursery rhyme, children create a four-page pop-up story book design. They will add accompanying captions and incorporate a range of mechanisms and decorative features, including: structures, levers, sliders, layers and spacers. (science link)	Creating their own stuffed toy is a really fun project as children can bring their drawings to life and can make them as challenging or as simple as they choose. Not only does this topic give them the chance to apply skills they have learned in previous topics, it also introduces them to a new stitch – blanket stitch.
Advances in technology through Worldwide, seasonal events- card making, PSHE/ science links			

Y6	Automata toys	Playgrounds	Steady hand games
Rationale	Aspiration Creativity Problem-solving Resilience	Community Creativity Problem-solving Resilience	Community Creativity Problem-solving Resilience
Focus	Using woodworking materials and skills, pupils make and construct a window display using an automata mechanism; measuring and cutting their materials, assembling the frame, choosing cams, designing the characters that sit on the followers and also finishing with a foreground and background.	This topic draws upon pupils' skills and knowledge of structures, challenging them to design and create a model of a new playground featuring five apparatus, made from three different structures. Creating a footprint as the base, pupils can practise visualising objects in plan view and also get creative with their use of natural features and cladding for their structures.	Using their understanding of electrical systems and design, pupils are challenged with designing and creating a steady hand game. Pupils will use nets to create their bases and their knowledge of electrical circuits to build a circuit with a buzzer which closes when the handle makes contact with the wire frame. (science link)
Advances in technology through Worldwide, seasonal events- card making, PSHE/ science links			