



Herne Bay Junior School Design and Technology Curriculum Coverage Map

	Autumn	Spring	Summer
Year 3	Cooking and Nutrition: A Balanced Diet Pupils will learn about food groups and balancing meals through the Eatwell guide. They will learn about methods of cooking and explore some of these through practical experience. Pupils will make a healthy balanced dish based on their learning	Movement and Mechanisms: Cams Pupils will learn about cam mechanisms. They will explore different shaped cams and then design, make and evaluate a simple automaton toy.	Functional Design Pupils will learn about the importance of functional design, exploring how selecting the correct structures and design features can lead to designs that fit specific purposes. They will learn techniques to strengthen structures and use tools safely. They will use their learning to design and construct a product that fulfils specific design criteria.
Year 4	Mechanical Movement: Pulleys & Levers Pupils will learn about simple machines using pulleys and levers. They will learn how these machines allowed early civilizations to construct large buildings before designing and constructing their own simple machine.	Fabric Design Pupils will learn about fabric design with a specific focus on the designer William Morris. They will learn techniques to decorate fabric, using block printing, hemming and embroidery. They will design and make a fabric sample.	Cooking and Nutrition: Food Preservation Pupils will learn about food preservation to slow decay. They will learn about key inventions involved in food preservation and the use and development of packaging. They will use their learning to prepare, make, package and evaluate a healthy snack.
Year 5	Mechanical Movement: Pneumatics Pupils will learn about pneumatic systems and how they can be incorporated into products to achieve specific design goals. They will model simple pneumatic systems before they design, make and evaluate a pneumatic machine that performs a useful function.	Cooking and Nutrition: Seasonality Pupils will learn about seasonality and the benefits of seasonal eating. They will learn about what ingredients are available and when in the UK is the best time to source them. They will learn food preparation and cooking techniques that they will use to create a recipe using seasonally available ingredients.	Building Design Pupils will learn about how designs and design practices change over time through the lens of architecture. They will learn about changing styles and technologies that have occurred over time in building production and then use this knowledge to design a building with specific features.
Year 6	Sewing Pupils will learn a range of simple sewing techniques. Inspired by the ‘Make Do and Mend’ mantra of the Second World War, pupils will learn about ways of recycling and repurposing old clothes and materials. .	Cooking and Nutrition: Healthy Choices Pupils will learn how some foods are processed and how to make healthy food choices. They will learn about the benefits of whole foods before they plan and make a meal as part of a healthy daily menu, evaluating their completed products.	Bridge Design Pupils will learn about bridge design. They will learn to identify features such as beams, arches and trusses and understand how these features support the safe design and function of bridges. They will use their knowledge to collaboratively build a bridge of their own design and measure how strong it is.