Hamworthy Primary Schools – Design and Technology Medium Term Plan

Rationale:

As a Federation, our Design and Technology offer will inspire our children to use their creativity and imagination to design, make and evaluate purposeful, innovative products whilst considering a specific brief. They will apply learning from different areas of the curriculum such as Science, Maths and Art to create high quality prototypes and products. The children will be encouraged to challenge themselves and take risks which will help to develop their resilience and problem-solving skills.

We believe that food and nutrition is an important part of the Design and Technology curriculum and we want to instil a love of cooking in our children. Teaching children about the importance of good nutrition and how different types of food impacts our bodies can inform healthier decision making now and in later life. Learning how to prepare different foods is a crucial life skill. This is why we offer a food unit in every year group throughout the federation.

Design	Make	Evaluate	Technical knowledge	Cooking and Nutrition
				

Key Stage 1 and 2 Design and Technology Units of Work						
	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
EYFS	**Development matters, 3 – 4 year olds:** Explore different materials freely, to develop their ideas about how to use them and what to make. Develop their own ideas and then decide which materials to use to express them. Join different materials and explore different textures. Explore and talk about different forces they can feel. Use one-handed tools and equipment, for example, making snips in paper with scissors. Explore different materials and tools. **Early Learning Goal:** Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. Work and play cooperatively and take turns with others. Use a range of small tools, including scissors, paint brushes and cutlery. Begin to show accuracy and care when drawing. Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Share their creations, explaining the process they have used.					
Year 1	Art	**Mechanisms- Sliders and Levers.** e.g. card, page of a book, poster, - pop up.	Art	**Textiles Templates and joining techniques.** e.g. sewing skills on binca fabric. Scrap book style. Possible bookmark.	Art	**Food- Preparing fruit and vegetables** e.g. teddy bears picnic, chopped vegetables and sandwiches.
Year 2	Art	**Textiles Templates and joining techniques.** e.g. purse, puppet, simple bag,	Art	**Food- Preparing fruit and vegetables** Developing skills from Year 1, washing, grating,	Art	**Structures Freestanding structures** e.g. furniture for a room.

		clothes for teddy or doll. running stitch.		peeling, slicing and squeezing.		
Year 3	**Mechanical systems- Levers and Linkages** e.g. moving greetings card, information book.	Art	**Food- Healthy and Varied Diet.** e.g. Breakfast bowl. Heating oats etc.	Art	**Structures- Shell Structures using computer aided design (CAD)** Explore tinkercad and develop CAD skills	Art
Year 4	Art	**Textiles and sewing skills** Explore textiles and demonstrate a range of stitching techniques.	Art	**Food- Healthy and Varied Diet.** Kneading and shaping dough e.g. make pizza or bread.	Art	**Mechanical Systems- Pneumatics** e.g. moving creature/toy.
Year 5	Art	**Food- Celebrating culture and seasonality** e.g. Harvest festival, seasonal soup.	Art	**Textiles- Combining different fabric shapes.** e.g. mobile phone case.	Art	**Structures- Frame Structures** e.g. playground shelter/playhouse.
Year 6	Art	**Mechanical systems- Cams** e.g. Moving toy, moving signs for a shop.	Art	**Electrical systems- Monitoring and control** e.g., electronic money box/alarm for valuable artefact/garden light	Art	**Food- Celebrating culture and seasonality** e.g. burgers.