Eardisley CE Primary School

In all that we do our values shine through

Long Term Plan for Design and Technology

To be read alongside the Intent, Implementation and Impact Statement for Design and Technology

Aims

The national curriculum for design and technology aims to ensure that all pupils see Design and technology as an inspiring, rigorous and practical subject that is can be of benefit to humankind, and learn to:

♣ develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world

♣ build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users ♣ critique, evaluate and test their ideas and products and the work of others

♣ understand and apply the principles of nutrition and learn how to cook

In line with the National Curriculum for MFL, pupils at Eardisley CE Primary school are taught to:

- Use creativity and imagination to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values.
- Acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art.

- Take reasonable contextually based risks, becoming resourceful, innovative, enterprising and capable citizens.
- Evaluate past and present design and technology, developing a critical understanding of its impact on daily life and the wider world.

Year Group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Rowan						
Willow A	Structures: Understanding functions of freestanding structures/Designing a structure/Cutting and Joining/From Idea to Prototype/Designing a Bridge/Investigating and Testing/Baby Bear's Chair/Strong Stiff and Stable/technical Terms		Cooking and Nutrition: Preparing Fruit and Vegetables: Introduction: exploring Fruit and Vegetables/Where do our Fruit and Vegetables come from? /Making a Fruit Salad/Designing and Making a Savoury Salad/Planning a Savoury Salad/Making a Savoury Salad/Eatwell Guide: Investigating how to make a Smoothie/Exploring Ideas for a Fruit or Vegetable Smoothie/Making a Fruit or Vegetable Smoothie			
Willow B	Mechanisms: Explore a range of sliders and levers/Explore and Evaluate Products with Moving Parts/Investigate the Properties of Everyday Materials/Explore a Range of Materials to help Make Decisions/Explore a Range of Users and Purposes/Investigate and Evaluate Cards with Moving Mechanisms and Parts/Generate		Textiles: To explore a range of existing products/To work confidently within a chosen context/ To experiment with a range of joining techniques/To use design criteria to develop ideas/ To create a final design idea? To explore how to			

	Designs for a Moving Parts Card/Use Skills from Art and Design to Decorate Your Card/ Apply the Moving Mechanism part to a Card/Evaluate Your Card	make accurate templates/To explore finishing techniques/ To make a puppet/ To evaluate the puppet using simple judgements/ To evaluate the puppet for the end user.	
Beech A	Cooking and Nutrition: Healthy and Varied Diets What's in a packed lunch/using research to develop ideas/designing for a target market/Developing design ideas/Using ingredients to develop your ideas/Evaluating your product/Exploring food and where it comes from/Using Evaluation to develop ideas further/Delicious Dips/Marvellous Oat Bars	Mechanisms: Levers and Linkages: Understanding how a range of mechanisms create movement/Developing understanding of different mechanisms and how to make them/Design a product, meeting the needs of the user/Use a range of techniques to develop a prototype of different ideas/Plan the creation of your final idea/Use a range of techniques to make the final idea / Use a range of techniques to complete and test the final idea/Evaluate considering the views of others	
Beech B	Keep it Safe: Shell, Solid and Combination Structures: Investigate structures/Construct 2D nets /Evaluate existing structures/ Create a design brief and ideas sketches/Explore contexts and purposes of structures/Design, make and evaluate structures/Experiment with making techniques/Measure, mark, cut out and shape	Electronics: Simple Circuits and Switches Learn about electrical systems/Learn how electrical products meet the needs of users/Develop design criteria/Design an electrical circuit diagram/Know how to construct	

	materials/Assemble, join, and make product/Evaluate	simple series circuits/Generate ideas for electrical systems using different materials and components/Design/make and test components for an electrical system/Learning from science to design and make electrical products /Select materials to make electrical systems/Evaluate how well products meet user needs and wants.	
Oak A		Cooking and Nutrition: Celebrating Culture and Seasonality Introduction – celebrating culture and seasonality/Where does our food come from/Understanding the needs of a healthy varied diet/Combing ingredients- making soup/Evaluating the product/Combining ingredients – making healthy pancakes/The food industry/Making bread/Design your own dish to reflect a culture or celebration	Reactions: Control in DT Understanding electrical systems/Exploring electrical systems and the need for control / Exploring how to control simple circuits to create more functional products/Responding to a design brief and exploring ideas/Developing an Idea/ Exploring the use of new and emerging technology used in products/Planning to make an end product/Making a final prototype/Making a final prototype: electrical system /Critically evaluate the end product
Oak B	3D computer aided design How do we analyse existing products/ Why do we need to research before designing? / How can we identify what our users want? Who are architects and what do they do? /What is a specification and why do we need to write one? / What makes an effective range of initial design ideas? / What are the benefits of using computer aided design? / How can you develop	Textiles: combining different fabric shapes What are the properties of different fabrics? /What are modern and smart textile materials? / How can textiles become more sustainable? / What are the different types of stitches used in textiles? / What makes an	

	designs using computer aided design? / How can you present and share your final designs? / hy is it important to evaluate your final designs?	effective range of initial design ideas? / How do we develop our design ideas? / How to use the tools and equipment to mark our phone holder accurately / What stitch will be most suitable to join our pieces of fabric together? / How can we correctly apply a finish to our phone holder? / 0Why is it important to evaluate your finished product?	