

## Buckfastleigh Primary School Design and Technology Curriculum Statement



## INTENT

Designers and makers from Buckfastleigh Primary School are engaged through enquiry and questioning of the world they live in. Through evaluation of past and present Design and Technology, they develop a critical understanding of its impact on daily life and the wider world.

The intent of our design and technology curriculum is to cultivate creativity, resilience and problem solving. All learners acquire the skills and knowledge they need to design and make products that solve real and relevant problems within a variety of contexts and with an identified purpose and audience.

Key learning in each unit includes:

- revisiting prior knowledge
- designing
- making
- evaluating
- technical knowledge and understanding

Our curriculum is designed to provide opportunities for all children regardless of background, ability or additional needs. Knowledge, skills, techniques, vocabulary and questioning are taught progressively to ensure all learners develop as they move through the school. Children study the following aspects of design and technology

- mechanical systems
- > structures
- electrical systems
- > textiles
- ➤ food

Our Design and Technology curriculum, which works sequentially towards the end points as set out in the EYFS and National Curriculum, makes links to learning in several other subject areas including mathematics, science, computing and art and lays the foundations for interest and engagement in areas of engineering, design and food technology.



IMPLEMENTATION

The National Curriculum is taught through the Design and Technology Association's Projects on a Page planning structure – tailored to suit our curriculum and learners.

Children learn through:

- > class teacher delivery of planning which is shaped and overseen by the subject lead
- > a variety of creative and practical activities
- investigative and evaluative activities
- focused tasks
- > a design, make and evaluate assignment

Adaptations for SEND learners:

- DT communication symbols
- > a flexible approach to recording and communicating design ideas and developments
- 'one to one' support for physical making of designs (if necessary)
- key vocabulary sheets (Widget symbols with words)
- > flow charts and visual instruction sheets which explain a process in a step-by-step manner (if necessary)
- understanding of possible sensory issues



## Pupils will learn to:

EYFS

By the end of Key Stage 1, children will be able to:

By the end of Key Stage 2, children will be able to:

Exploring and using media and		Pupils will learn:	Pupils will learn:
materials		Design	Design
$\succ$	Safely use and explore a variety	Design purposeful, functional, appealing products	Use research and develop design criteria to inform the design of
	of materials, tools and	for themselves and other users based on design	innovative, functional, appealing products that are fit for purpose, aimed
	techniques.	criteria. Generate, develop, model and	at particular individuals or groups. Generate, develop, model and
$\succ$	Experiment with colour, design,	communicate their ideas through talking,	communicate their ideas through discussion, annotated sketches, cross-
	texture, form and function.	drawing, templates, mock-ups and, where	sectional and exploded diagrams, prototypes, pattern pieces and
		appropriate, information and communication	computer-aided design.
Being imaginative.		technology.	Make
$\succ$	Use what they have learned	Make	Select from and use a wider range of tools and equipment to perform
	about media and materials in	Select from and use a range of tools and	practical tasks accurately. Select from and use a wider range of materials
	original ways, thinking about	equipment to perform practical tasks. Select from	and components, including construction materials, textiles and
	uses and purposes.	and use a wide range of materials and	ingredients, according to their functional properties and aesthetic
$\succ$	Represent their own thoughts	components, including construction materials,	qualities.
	and feelings through design and	textiles and ingredients, according to their	<u>Evaluate</u>
	technology and art.	characteristics.	Investigate and analyse a range of existing products. Evaluate their ideas
Technology		<u>Evaluate</u>	and products against their own design criteria and consider the views of
$\succ$	Select and use technology for	Explore and evaluate a range of existing products.	others to improve their work. Understand how key events and individuals
	particular purposes.	Evaluate their ideas and products against design	in design and technology have helped shape the world.
		criteria.	Technical knowledge
		Technical knowledge	Apply their understanding of how to strengthen, stiffen and reinforce
		Build structures, exploring how they can be made	more complex structures.
		stronger, stiffer and more stable.	Understand and use mechanical systems in their products.
		Explore and use mechanisms in their products.	Understand and use electrical systems in their products.
		Cooking and nutrition	Apply their understanding of computing to program, monitor and control
		Use the basic principles of a healthy and varied	their products.
		diet to prepare dishes. Understand where food	Cooking and nutrition
		comes from.	Understand and apply the principles of a healthy and varied diet Prepare
			and cook a variety of predominantly savoury
			using a range of cooking techniques. Understand seasonality, know where
			and how ingredients are grown, reared, caught and processed.

## IMPACT

Children will meet the end of key stage expectations outlined in the National curriculum for Design and Technology. This will be evidenced through:

- Children's DT books
- > Progression of skills specific to DT- vocabulary, questioning and critical thinking
- Display
- Lesson observations
- Evaluation of own and others work
- Discussions with pupils
- End of unit assessments
- Annual pupil questionnaire

