



Curriculum and Pupils
11.06.25

Signed

DESIGN TECHNOLOGY POLICY

Entitlement

Design and Technology involves applying knowledge and skills when designing and making products. The activities undertaken will enable our children to consider the needs of individuals. Undertaking Design and Technology activities in school will give our children opportunities to use a range of materials and processes, and to work independently or as part of a team. It involves children in learning about the world we live in and developing a wide range of skills through designing and making. It helps children learn vital skills such as how to think through problems creatively, how to organise themselves, how to work with knowledge and practical skills to bring about change and to shape the environment. The activities undertaken will also try to reflect the children's local environment and support them in the wider world. Our work reflects the National Curriculum requirements for Design and Technology.

Intent

At Portway Infant School we aim to provide a Design and Technology curriculum which enables our children to gain a practical understanding of the world around them. Our curriculum helps children to begin to appreciate every-day products in our modern world and use this as inspiration when creating their own products and designs.

Children will understand the process of creating a new product as they design, make and evaluate their own products with consideration of the intended user and purpose of their product.

We want Design and Technology to prepare our children, to give them the opportunities, responsibilities, and experiences they need to be successful in later life.

We intend for all children to acquire appropriate subject knowledge, skills and understanding as set out in the National Curriculum.

At KS1, this includes

- mechanisms
- structures
- nutrition
- textiles

Aims

- To provide a range of structures and differentiated activities which develop breadth and progression. Where possible these will relate to the interest and everyday experiences of our children.
- To develop knowledge and teach skills in order to design and make products successfully.
- To help children become aware of and investigate simple products by disassembly and evaluation.

- To provide adequate time, access to information, skills and resources to make a good quality product.
- To motivate children by providing interesting and stimulating experiences.
- To provide equal opportunities and develop the qualities of individual children.
- To enable children to use design and technology to solve a range of problems.

Objectives

Children have the opportunity to:

- develop realistic outcomes to assignments
- take increasing responsibility for their own work
- critically evaluate their work and the work of others and suggest improvements
- work individually and in teams, groups, partners or pairs
- work with a range of materials and to use them appropriately
- use a variety of tools safely and correctly
- communicate ideas in a variety of ways
- develop skills and apply knowledge and experience when working on an assignment
- develop the ability to solve problems
- research and record relevant information where appropriate
- examine and evaluate design features in simple products including their historical development

Context

Design and Technology is taught in KS1 as an integral part of topic work, where appropriate. Focused, practical tasks are also planned by the class teacher to develop and practise particular skills and acquire knowledge. Meaningful assignments set within familiar contexts are used by class teachers. Where appropriate they are also linked to other subjects, for example, History and Science. The Foundation Stage follow the Early Years Foundation Stage curriculum.

As teachers we consider:

- Design and Technology opportunities arising within the curriculum and how they can link with other subject areas and bodies of knowledge
- How we present the teaching of new skills to the children, i.e. group based, class taught or on an individual level
- The role of Design and Technology in the teaching and learning process throughout the curriculum
- How to encourage children to produce work of quality
- How to encourage the safe, economic and appropriate use of materials, tools and equipment

Teachers ensure that the children apply their knowledge and understanding when developing ideas, planning and making products, and then evaluating them. Within lessons, we give children the opportunity both to work on their own and to collaborate with others, listening to other children's ideas and treating these with respect. Children critically evaluate existing products, their own work and that of others.

Planning

It is our aim that children learn through activities that are described in our long term plan. This plan will ensure all aspects of Design and Technology are covered through Key Stage 1 and most importantly, the key skills are all covered over the academic year in Key Stage 1. It is important that the tasks presented to children help them make progress in Design and

Technology. The sequence of tasks and assignments should be planned so that there is progression in what is taught, so that there is an increasing challenge for the children as they move up the school.

In Foundation Stage, we encourage the development of skills, knowledge and understanding that help children make sense of their world as an integral part of the school's work. These underpin the curriculum planning for children aged three to five. This learning, forms the foundation for later work in Design and Technology. These early experiences include:

- asking questions about how things work
- investigating and using a variety of construction kits, materials, tools and products
- developing making skills
- handling appropriate tools and construction material safely and with increasing control

We provide a range of experiences that encourage exploration, observation, problem-solving, critical thinking and discussion. These activities, both indoors and outdoors, attract the children's interest and imagination.

Adaptive Teaching

A range of approaches will be used and incorporated into our Design and Technology activities. This will allow all children to develop their potential according to their age and ability.

Health and Safety

Children will be taught to use tools and materials safely with regard to themselves and others. Teachers will be aware of precautions to be taken to avoid allergic reactions. Only non-toxic materials will be used. The appropriate risk assessment has been completed; please see Appendix A.

Equal Opportunities

The full range of activities in Technology will be made available to all children irrespective of race, gender or physical disabilities. We ensure that all children irrespective of their ability/disability have access to the design and technology curriculum. Through our teaching, we provide learning opportunities that enable all children to make progress. We do this by setting suitable learning challenges and responding to each child's individual needs. To reflect the diversity of our society, we ensure that children have access to the work of artists, artefacts and resources from a range of gender, ethnic backgrounds and cultures.

Special Needs

In keeping with the greater emphasis on inclusion in the National Curriculum, we at Portway will endeavour to plan with regard to

- setting suitable learning challenges
- responding to children' diverse learning needs
- overcoming potential barriers to learning and assessment for individuals and groups of children
- obtaining the necessary tools and equipment for individual special needs

Assessment

Teacher assessment is used to inform future planning and to review children's capability. Design and Technology assignments are used throughout the Key Stage to assist with formative and summative assessment. As part of the Plan, Make, Evaluate process children will complete an evaluation of their finished products

Recording

Evidence of learning the children have experienced in Design and Technology is recorded on design and evaluation sheets in their Art & Design and Design & Technology books. In Foundation Stage, evidence of children's work can be found in their learning workbook. Sketchbooks are given to the children in their first year at school and follow them through each year to show the progression they make.

Resources

The school has a range of resources kept in the stock cupboard. Each class teacher is responsible for their safe use and return when they are finished with.

Computing

The school subscribe to Purple Mash which allows the children the opportunity to design and create models online. For example, they can design and create their own nets and structures.

Role of the Curriculum Leader

The Curriculum Leader works with the whole staff to develop a cohesive Design and Technology experience throughout the school. The Curriculum Leader will also:

- support colleagues in their development and understanding of detailed work plans and implementation of schemes of work and in assessment and record keeping.
- take responsibility for the purchase and organisation of resources for Design and Technology.
- monitor whole school planning, to ensure progression and continuity.
- keep staff informed of developments or changes in the Design and Technology curriculum

Abigail Hughes, Design and Technology Curriculum Lead

Reviewed summer 2025

To be reviewed summer 2027

Appendix A

PORTWAY INFANT SCHOOL

RISK ASSESSMENT FORM

Classroom Activity

Considered and adopted by Portway Infant School on

Signed and accepted by (Headteacher) date:

Signed and accepted by (Chair of C&P committee) date:

List significant hazards – anything that could cause harm	What harm could occur and who might be affected?	What measures are already in place to protect people?	What harm could still occur and how likely is this?	What more needs to be done? List extra measures needed, the person responsible for action and the timescales
Tools/equipment	Physical Injury Cuts Slips, trips and falls Blocking off escape routes leading to evacuation problems Children Staff Visitors	• Appropriate arrangements in place to prevent unauthorised access to hazardous tools/equipment e.g. sharp/pointed, electrical, gas etc. • Equipment to be used only by teaching staff is locked in cupboard or stored away from children • The use of glass is avoided wherever possible e.g. containers, mirrors etc. • Ensure it is of the correct type and there is adequate supervision	Low	

		• All tools/play equipment is obtained from a reputable education source. • All electrical equipment is PAT tested on a two year cycle. • Ensure floors are kept clear of debris and children tidy up areas in the classroom. • Equipment is not blocking fire routes or fire equipment.		
Poor posture during teaching activities	Long term musculoskeletal problems Staff	• Appropriate furniture to be provided for teaching staff to include adjustable chair and appropriate size desk. • Avoid stooping over low tables to talk to children	Medium	If problem arises HR will be contacted to see what else needs to be put in place for individuals.
Trailing cables	Trips and falls Staff Children Visitors	• Provision of sufficient sockets to avoid need for long cables. • Ensure laptops are positioned so as not to have trailing cables. • Wherever possible do not use extension cables • Visually inspect cable, plug and socket before use • Cables PAT tested every two years • If multi-plug extensions are used make sure these are not overloaded	Medium	
Moving and handling equipment	Long term musculoskeletal problems Staff	• Eliminate manual handling where possible or reduce it to the lowest practicable level. • Carry out specific manual handling assessments as necessary. • Staff to be training in moving and handling techniques and issues.	Medium	

Poor storage	Items falling from height Items overbalancing Staff Children Visitors	- Only use shelves, fastening etc recommended by the manufacturer - Stack items on shelves, not on top of each other where they can become unstable - Do not stack heavy/numerous items on top of cupboards - Where possible, secure large cabinets/racks of shelving to the structure of the building.	Low	
Cooking	Burns and scalds Children Staff	- Adequate supervision is available to prevent injury when undertaking hazardous activities e.g. heating/ burning/ cooking/boiling activities - Guards such as 'hob safety guards' and other devices are fitted to heating equipment where appropriate e.g. nursery - Staff aware of the procedure for treating burns and scalds and first aiders available - Children do not put things on hob or in the oven	Low	
Small objects	Choking Children	Items are checked before being brought into the school to ensure so far as reasonably practicable they will not create a choking hazard	Low	
Harmful substances	Inhalation, burns, ingestion Children Staff	- All substances used in the classroom must be suitable and not considered harmful to the children - Non hazardous substances to be used at all times - All substances are labelled correctly and when transferred into smaller bottles.		

		• All substances must be disposed of correctly • Appropriate PPE to be worn at all times		
Personal hygiene	Infection, etc. Children Staff	• Procedures in place to ensure effective standards of personal hygiene are achieved i.e. always washing hands after practical work and covering any cuts and abrasions.		
Fire	Burns, inhalation of smoke Children Staff	• Arrangements are in place to ensure flammable materials or liquids are kept to a minimum and stored safely • Appropriate firefighting equipment readily available		

Risk assessment action plan				
Actions required	By who	By when	Date completed	Comments