Jump Primary School

Design & Technology Map

I am talented; together we are AWESOME!

05/01/2026

Intent

At Jump Primary, through our teaching of Design and Technology, we aim to develop pupils' abilities through encouraging creativity and imagination throughout the design and make process. Pupils design, make, evaluate and test products that solve real and relevant problems within a variety of contexts. They are encouraged to consider others' needs, wants and values as well as their own. Pupils acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world.

We also aim to develop pupils' abilities with regards to the crucial life skills of cooking and the principles of nutrition. We hope to inspire a love of cooking and to enable pupils to cook healthy Food and Nutrition for themselves and others which is affordable both now and in their later life. This also links with the newer elements of PSHCE, where children are expected to understand what a healthy lifestyle is, and how it is created.

Pupils at Jump Primary School will leave Year 6 being able to:

- ✓ design and make high-quality prototypes and products for a wide range of users developing a wide range of techniques
- ✓ critique, evaluate and test their ideas and products and the work of others
- ✓ talk, articulately, about the products they, and others have made, focussing on the successes and what could be improved.
- ✓ Understand where Food and Nutrition comes from
- ✓ understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed
- ✓ Understand and apply the principles of a healthy and varied diet in order to prepare and cook predominantly savoury dishes using a variety of cooking techniques

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Implementation

In the Foundation Stage (Nursery and Reception)

Pupils will be taught the relevant EYFS curriculum development matters in Expressive Arts and Design through the following methods:

- Group time input
- Adult-led small group or individual follow-up activities
- During free play adults will follow pupil's interests

Children:

- Are given opportunities to explore and use a wide variety of media and materials in both adult-led and child-led/free play.
- Are encouraged to experiment with a wide range of construction materials, joining them together to build and balance.
- develop an understanding that tools are used for a purpose.
- are encouraged to design their constructions and to adapt their work where necessary.

Key Stage One and Two

All of the following points are taught through interactive, practical units of work. Through modelling and support, children are encouraged to think and talk creatively about the products that they are making how they will benefit the target audience. Furthermore, these skills are developed through a variety of creative and practical activities taking place in a range of relevant contexts.

If there are opportunities to make cross-curricular links, these are done so through applying previous knowledge and skills.

At Key Stage One (Years 1 and 2)

Children learn to:

- ✓ design purposeful, functional, appealing products for themselves and other users based on design criteria
- ✓ generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology
- ✓ select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- ✓ select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics
- ✓ explore and evaluate a range of existing products
- ✓ evaluate their ideas and products against design criteria
- ✓ build structures, exploring how they can be made stronger, stiffer and more stable
- ✓ explore and use mechanisms [for example, levers, sliders, wheels and axles] in their products

Cooking and Nutrition

- ✓ Use the basic principles of a healthy and varied diet to prepare dishes
- ✓ Understand where Food and Nutrition comes from
- ✓ Begin to know that Food and Nutrition is seasonal and grow at different times of the year.

At Key Stage Two (Years 3-6)

Children learn to:

- ✓ use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- ✓ generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
- ✓ select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately

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- ✓ select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities
- ✓ investigate and analyse a range of existing products
- ✓ evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- ✓ understand how key events and individuals in design and technology have helped shape the world
- ✓ apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- ✓ understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- ✓ understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- ✓ apply their understanding of computing to program, monitor and control their products

Cooking and Nutrition

- ✓ Understand and apply the principles of a healthy and varied diet
- ✓ Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
- ✓ Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

Statutory requirements for the teaching and learning of Design and Technology are laid out in the National Curriculum (2013) and in the Expressive Arts and Design section of the Early Years Foundation Stage Curriculum (2017).

Impact

Foundation Stage

Pupils will have developed the skills and knowledge in the EAD aspect of learning to be confident to continue their academic development in Design and Technology in Key Stage 1.

Pupils will

- ✓ be confident to select the appropriate tool for a particular purpose.
- ✓ Use these tools and a variety of materials to design and create a construction and adapt it where necessary.
- ✓ Begin to talk about their designs using appropriate language.

Key Stage 1 and 2

By the time our pupils leave Year 6 they will:

- ✓ Be enthusiastic and motivated to learn about all aspects of Design and Technology.
- ✓ Be able to consider these 6 principles when working within Design and Technology lessons:
    1. User - who is it for?
    2. Purpose – does it meet the needs of the consumer?
    3. Functionality – does their product work?
    4. Design Decisions – be able to justify the decisions that they have made about their product.
    5. Innovation - being original in their thinking
    6. Authenticity – creating a design that is useful to themselves and others
- ✓ Talk, articulately, about their product; why it fit the criteria, and how it could be improved in the future.

Cooking and Nutrition

- ✓ Understand the basic principles of nutrition and healthy eating.
- ✓ Have developed the basic skills of preparing and cooking Food and Nutrition, as well as making sure their preparation area is hygienic.
- ✓ Have developed the life skill of being able to cook and feed themselves affordably now and in later life.

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Impact

Throughout all 3 key stages should be able to complete the following points appropriate to their age range and ability.

Children will:

- ✓ be able to produce creative, imaginative work, exploring their ideas and recording their experiences
- ✓ be able to become proficient in drawing, painting, sculpture and other art, craft and design techniques, using the appropriate technical vocabulary for each process.
- ✓ be able to evaluate and analyse creative works using the language of art, craft and design
- ✓ know about great artists, craft makers and designers, and understand the historical and cultural development of their art forms.
- ✓ Be able to use this knowledge to create their own, unique final piece of work, showing competent use of previously taught skills.
- ✓ Children will have opportunity to link their artwork and understanding to other areas of learning.

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Children will have access to Continuous Provision throughout the year where they will have access to: construction materials, joining materials such as glue and Sellotape, scissors and a variety of materials.

	Autumn	Spring	Summer
N	Christmas Cards Children to create their own Christmas card, thinking about how they are going to attach the decorations	Continuous provision	Continuous provision
R	Making a Rocket Children to make a rocket thinking about how they can join and secure the different parts	Continuous provision	Building a bug hotel Children to create a bug hotel that will be suitable for lots of different bugs. Building a boat. Children will build a boat that is capable of floating.
Food and Nutrition	This is done throughout the year, at least once a half term.		

Key Stage One and Two alternate half term is an Art focus.

	Autumn	Spring	Summer
1	Textiles	Mechanisms	Food and Nutrition
	Felt Christmas Decorations Children to create a small, sewn Christmas decoration.	Moving pictures Children to make a moving picture to tell part of the story forma traditional tale.	Dips and Dippers Children to create dips and dippers ready of a summer picnic
2	Constructions	Food and Nutrition	Textiles
	Fire engines Designing and construct a fire engine for a younger child	Sensational Salads Children to create a variety of different salads for a picnic	Puppets Children to create an animal puppet to help younger children understand about habitats.
3	Textiles	Mechanisms Construction	Food and Nutrition
	Pencil Cases To make a pencil case that can successfully story stationery.	Let's Go Fly a Kite	Edible Garden
4	Textiles	Food and Nutrition	Mechanisms construction
	Christmas Stockings Designing and creating a Christmas stocking that will hang up and be able to contain a present.	The Great Bread Bake Off Design and making their own flavoured bread cakes for a healthy lunch box.	Cams Poster for WWF and Endangered Animals
5	Food and Nutrition	Construction Mechanisms	Textiles
	Global Food Children to create a variety of different foods that they can then take home and cook.	Marble Run Designing and creating their own marble run.	Worry monsters Creating a worry monster for a child who is anxious. Children to think about the different textures and materials that they could use.
6	Textiles	Food and Nutrition	Construction Mechanisms
	Great British sewing bee challenge Chn to create and design their own product, using recycled materials.	Super seasonal cooking Creating their own meal based around their knowledge of seasonal food	CAD Steady hand game Creating their own steady hand game for older children to play.

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