



# Design & Technology Curriculum Policy

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# Design and Technology Policy

#### What is our vision?

We are committed to providing our children with a progressive and relevant Design Technology education, to prepare them for life in the wider world. We believe that high quality DT lessons will inspire children to think independently, innovatively and develop creative, procedural and technical understanding. The skills developed in this subject can be transferred across the curriculum. Children will acquire and build upon a range of knowledge and techniques, working with mechanisms, structures, food, textiles and electrical systems. Children will be taught how to cook and apply the principles of nutrition and healthy eating, allowing them to maintain a healthy lifestyle. We will equip them with the crucial life skills of how to feed themselves and others affordably and well, in later life. By the time our pupils leave, they will be able to select resources, take risks and solve problems, to become capable citizens.

#### **Curriculum Aims:**

Our curriculum ensures that all pupils:

- Are able to participate successfully in an increasingly technological world.
- Develop creative, technical and practical skills to enable them to perform everyday tasks.
- Can design, make and evaluate products with an awareness of the purpose and user.
- Understand and apply the principles of seasonality, food provenance and nutrition to enable them to cook a range of dishes, which form a balanced diet.

#### **Early Years**

Expressive Arts and Design The development of children's artistic and cultural awareness supports their imagination and creativity. It is important that children have regular opportunities to engage with the arts, enabling them to explore and play with a wide range of media and materials. The quality and variety of what children see, hear and participate in is crucial for developing their understanding, self-expression, vocabulary and ability to communicate through the arts. The frequency, repetition and depth of their experiences are fundamental to their progress in interpreting and appreciating what they hear, respond to and observe.

#### How do we achieve this?

Across school, an adaptation of the Kapow scheme of work will be employed to ensure a consistent approach and progression of skills within the key strands of the DT curriculum. The areas of mechanisms, textiles and structures will be revisited within each key stage to ensure that knowledge and skills are retained and developed overtime. Electrical systems will be taught twice during Key Stage Two. A focus will be placed on cooking and nutrition, which will be taught within each year group, with the children learning to prepare healthy and predominantly savoury dishes. Children will be taught about food provenance and seasonality. The long-term plan ensures that children build a repertoire of knowledge and techniques, such as building structures of increasing difficulty and progressing from simple mechanisms to mechanical systems. These are based on constructions in our locality, reflecting the importance of key events or individuals who have influenced designs which have shaped the world around them. Our pupils gain the practical skills in textiles to be able to perform everyday tasks in their future lives.

# **Scheme of Work:**

Year Group	Autumn	Spring	Summer
EY	Food Fruit Kebab	Food – Biscuits/ crispy cakes.	Food – Baking bread.
	Form Diva Lamps	Structures – Water Vessel.	Structures – House for 3 little pigs. Minibeast House.
		Mechanisms  Paper Toys	Textiles Finger Puppets
1	Food  Fruit and Vegetables  Healthy smoothies.  (Kapow Y1U1)	Mechanisms  Moving Story Book  Sliders  (Kapow Y1U3)	Textiles Puppets Sewing (Kapow Y1U5)
2	Structures Baby Bear's Chair Exploring stability and strengthening materials	Food  A Balanced Diet  Healthy wraps (Kapow Y2U2)	Mechanisms Moving Monster Pivot, lever, linkages (Kapow Y2U5)
3	(Kapow Y2U3)  Textiles  Cushions  Sewing, cross-stitch and  appliqué  (Y3U1)	Mechanical Systems Pneumatic Toys Thumbnail sketches and exploded diagrams (Kapow Y3U5)	Food Eating Seasonally Healthy vegetable tarts (Kapow Y3U3)
4	Food Adapting a recipe Biscuit Bake Off (As part of a balanced diet.) (Kapow Y4U4)	Structures Pavilions Frames and structures (Link to locality: Haigh Hall/Wigan Park.) (Kapow Y4U3)	Electrical Systems Torches (Kapow Y4U5)
5	Mechanical Systems Automata Cam mechanisms (Kapow Y6U2)	Food  What could be healthier?  Healthy Bolognese  (Kapow Y5U1)	Textiles Fastenings Sewing and fastening to create a book cover/ipad case. (Y4U2)

6	Structures	Electrical Systems	Food
	Bridges	Steady Hand Game	Come Dine with Me
	Stability and	(Kapow Y6U3)	3 ingredients, 3 courses
	strengthening materials.		(Kapow Y6U5)
	(Link to locality: Bridge		
	over Scotsman's Flash)		
	(Kapow Y5U5)		

#### **Resources:**

Staff will teach the units in the Yearly Overview using the support materials in the Kapow scheme of work. Units of work will begin with a Knowledge Capture activity to assess prior knowledge. Knowledge organisers are available to children at the start of each new topic to develop their vocabulary. Resources such as maps and season wheels support our children with their understanding of food provenance and seasonality.

## <u>Assessment – How do we assess skills and understanding?</u>

Pupils' progress is assessed and monitored during the year using the Subject Specification document. Work is recorded in books to allow for a record of their attainment.

Throughout a design and technology project, teachers will assess children on the following:

- Their planning and final piece.
- Discussions about their work.
- Observing the children's practical skills.

The following gradings will be given:

- **B2** Child has a specific SEND which prevents them from meeting the objectives.
- **B1** The child has not met/retained the year group objectives.
- **E1** The child has met/retained the objectives.
- **A1** The child has met the objectives with a large degree of independence. They also show design skill and talent.

#### **Health and Safety**

The children are made aware of the safe use and correct procedure involved when using tools and equipment in a learning environment and how to follow proper procedures for food safety and hygiene. The children are made aware of the need to be careful and to understand that their actions can affect others. The children build up a range of skills when using equipment to reduce unnecessary risk.

#### **Inclusion and Safeguarding Considerations**

All children will be provided with equal access to the design and technology curriculum. We aim to provide suitable learning opportunities regardless of gender, ethnicity or home background and according to their individual abilities. Adaptation in terms of learning objectives, tasks, teaching methods and resources are planned for pupils with SEN. All pupils have access to materials and opportunities that are suitable to their specific needs, e.g. a range of scissors are provided according to children's needs. Any children working above year group expectations are challenged with openended tasks which provide opportunities to tackle more complex issues and use a wider range of resources.

#### Other Points/Considerations:

With the need for many consumables in design and technology, staff will need to make sure that resources needed for the successful teaching of the project are checked well in advance.

The kitchen can be used to prepare or cook food. Teachers may consider small groups and the allocation of adults from across the phase, to support with practical activities.

Design and technology lessons may, at times, take place off site, for example at Hawkley Hall High School. If this is the case, risk assessments will need to be in place for the travel to and from and for use of the equipment.

### Monitoring and Review

The monitoring of the standards of children's work and of the quality of teaching in design and technology is the responsibility of the Design and Technology subject coordinator.

An audit of the subject is completed annually. This can be done through a selection of

- Discussions with teachers and pupils
- Reviewing evidence of children's work including design process, product and evaluations.
- Checking planning is in line with the National Curriculum objectives.
- Undertaking lesson 'drop ins' of Design and Technology

This helps to evaluate the strengths and weaknesses in the subject and indicates areas for further improvement.

The work of the subject coordinator also involves supporting colleagues in the teaching of design and technology, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school. These findings are shared regularly with the Subject Governor.