



Morton Trentside Primary School **Design and Technology Policy**

Intent:

We teach Design and Technology to enable children to design, make and evaluate functional products with users and purposes in mind, through creative and motivating projects within a range of contexts. As part of their food technology projects, children will apply the principles of nutrition and healthy eating, learning how to prepare dishes at KS1 and cook dishes at KS2.

Implementation:

The Kapow Design and Technology scheme of work is designed to cover five strands throughout. These are:

- Design
- Make
- Evaluate
- Technical knowledge
- Cooking and nutrition

We follow a broad and balanced Design and Technology curriculum that builds on previous learning and provides both support and challenge for learners. We follow a Design and Technology scheme that ensures progression of skills and covers all aspects of the Design and Technology curriculum. As we follow the Art and Design and Design and Technology combined and condensed LTP, subjects are alternated each term.

Impact:

Our children enjoy and value Design and Technology and know why they are doing things, not just how. Children will understand and appreciate the value of Design and Technology in the context of their personal wellbeing and the creative and cultural industries and their many career opportunities. Progress in Design and Technology is demonstrated through regularly reviewing and scrutinising children's work, in accordance with our Design and Technology assessment policy to ensure that progression of skills is taking place. Namely through:

- Looking at pupils' work, especially over time as they gain skills and knowledge
- Observing how they perform in lessons
- Talking to them about what they know.

The Design and Technology curriculum will contribute to children's personal development in creativity, independence, judgement and self-reflection. This would be seen in them being able to talk confidently about their work, and sharing their work with others. Progress will be shown through outcomes and through the important record of the process leading to them.

1. Aims and Objectives

Design and technology helps to prepare children for the developing world. The subject encourages children to become creative problem-solvers, both as individuals and as part of a team. Through the study of design and technology they combine practical skills with an understanding of aesthetic, social and environmental issues. Design and Technology helps all children to become discriminating and informed consumers and potential innovators. It should assist children in developing a greater awareness and understanding of how everyday products are designed and made

The aims of design and technology in our school are:

- To develop imaginative thinking in children and to enable them to talk about what they like and dislike when designing and making;
- To enable children to talk about how things work, and to draw and model their ideas;
- To encourage children to select appropriate tools and techniques for making a product, whilst following safe procedures;
- To foster enjoyment, satisfaction and purpose in designing and making;
- To use ICT software to assist our designing and learning.

2. Teaching and Learning Style

We use a variety of teaching and learning styles in design and technology lessons. Teachers ensure that the children apply their knowledge and understanding when developing ideas, planning and making products and then evaluating them. We do this through a mixture of whole class teaching and individual/group activities. All ideas will be treated with respect. Children critically evaluate their own work and that of others. They have the opportunity to use a wide range of materials and resources, including ICT.

Children will be given the opportunity to work within three main areas of development during each topic:

1. Investigative, disassembly and evaluative activities

These activities provide opportunities for the children to explore existing products and to gain skills, knowledge and understanding which can be applied in a design and make assignment.

2. Focused practical tasks

Focused practical tasks provide opportunities to learn and practice particular skills and knowledge.

3. Design and make assignments

A design and make assignment provides an opportunity for the children to combine their skills, knowledge and understanding to develop products that meet a real need. (In general DMAs in Key Stage One will tend to be shorter in duration and, as children move towards the end of Key Stage Two, their designing and making will become more complex and therefore more time consuming.)

In all classes there are children of differing ability. We recognise the fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child.

3. Design and Technology Curriculum Planning

We carry out the curriculum planning in Design and Technology in three phases: long, medium and short term within/linked to the topic planning. We follow the scheme from Kapow, where the long-term plan maps out the themes to be taught in

each year group with specific skills to ensure the requirements of the National Curriculum Programmes of Study are being met.

The learning environment should show progress in the children's learning, specifically related to the DT skills progression. Outcomes of the children's projects will be displayed on the walls in the classroom, the website and display boards around the school. Evidence of the process followed to complete the work will be evident in the children's DT books/folders.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	Stand alone lessons
Y1	Design and technology Structures: Constructing windmills (4 lessons)	Art and design Art and design skills (5 lessons)	Design and technology Textiles: Puppets (4 lessons)	Art and design Formal elements of art (5 lessons)	Design and technology Food: Fruit and vegetables (4 lessons)	Art and design Landscapes using different media (5 lessons)	> Snail sculptures > Junk model animals > Natural materials collage
							Design and technology > Exploring sliders and movement
Y2	Art and design Formal elements of art (5 lessons)	Design and technology Structures: Baby bear's chair (4 lessons)	Art and design Sculpture and mixed media (5 lessons)	Design and technology Mechanisms: Fairground wheel (4 lessons)	Art and design Art and design skills (6 lessons)	Design and technology Mechanisms: Making a moving monster (4 lessons)	> Hidden sugars in drinks
							Art and design > Making faces > Opie style portraits
Y3	Design and technology Food: Eating seasonally (4 lessons)	Art and design Prehistoric art (5 lessons)	Design and technology Digital world: Electronic charm (4 lessons)	Art and design Formal elements of art (5 Lessons)	Design and technology Structures: Constructing a castle (4 lessons)	Art and design Craft (Lessons 1, 2, 3, 4 only) Art and design skills (Lessons 2 and 3 only)	Puppets (choose one from Lessons 4, 5 or 6) > Drawing: My toy story
							Design and technology > Cross-stitch and appliqué > Exploring pneumatics > Designing a pneumatic toy
Y4	Art and design Art and design skills (6 lessons)	Design and technology Structure: Pavilions (4 lessons)	Art and design Formal elements art (Lessons 1, 2, 3, 4 only)	Design and technology Mechanical systems: Making a slingshot car (4 lessons)	Art and design Every picture tells a story (5 lessons)	Design and technology Electrical systems: Torches (4 lessons)	Sculpture (either Lesson 1 OR 2 and Lessons 3 and 4)
							Design and technology > Following a recipe > Evaluating fastenings
Y5	Design and technology Electrical systems: Doodlers (4 lessons)	Art and design Formal elements of art: Architecture (5 lessons)	Design and technology Mechanical systems: Making a pop-up book (4 lessons)	Art and design Every picture tells a story (5 lessons)	Design and technology Food: What could be healthier? (4 lessons)	Art and design Design for a purpose (5 lessons)	Art and design skills (Lessons 1, 2 and 6 only)
Y6	Art and design Photography (Lessons 2, 3, 4, 5 only)	Design and technology Textiles: Waistcoats (4 lessons)	Art and design Make my voice heard (5 lessons)	Design and technology Structure: Playgrounds (4 lessons)	Art and design Still life (5 lessons)	Design and technology Digital world: Navigating the world (4 lessons)	Art and design skills (Lessons 1, 2, 3 and 5 only)

4. The Foundation Stage.

We encourage the development of skills; knowledge and understanding that help reception children make sense of their world as an integral part of the school's work. We relate the development of the children's knowledge and understanding of the world to the objectives set out in the Early Learning Goals. 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 and handling appropriate tools and construction material safely and with increasing control. These activities, indoors and outdoors, attract the children's interest and curiosity.

5. Contribution of design and technology to teaching in other curriculum areas.

English

Design and Technology contributes to the teaching of English in our school by providing valuable opportunities to reinforce what the children have been doing in their English lessons. The evaluation of products requires children to articulate their ideas and to compare and contrast their views with those of other people. Through discussion children learn to justify their own views and clarify their design ideas.

ICT

We use ICT to support design and technology teaching when appropriate. The children also use ICT to collect information and to present their ideas through draw and paint programs.

Personal, social, and health education and citizenship.

We encourage the children to develop a sense of responsibility in following safe procedures when making things. They also learn about health and healthy diets. Through their understanding of personal hygiene they also learn how to prevent disease from spreading when working with food.

Spiritual, moral, social and cultural development

Our groupings allow children to work together and they understand how we expect them to do this. Collaborative work in design and technology develops respect for the abilities of others and a better understanding of themselves. In addition, they develop a respect for the environment, for their own health and safety and that of others. They learn to appreciate the value of similarities and differences. A variety of experiences teaches them to appreciate that all people are equally important.

6. Special Needs Pupils.

We teach design and technology to all pupils, whatever their ability. We provide learning opportunities that enable all pupils to make progress. We do this by setting suitable learning challenges and responding to each child's different needs.

Where pupils are to participate in activities outside the classroom, we carry out a full risk assessment prior to the activity, to ensure that the activity is safe and appropriate for all pupils.

7. Assessment and Recording.

Assessment of the pupil's achievements will be by teacher assessment. This will be through teacher observations, discussions with pupils, and by looking at the work produced or how individuals have performed. Progress in Design and Technology will be assessed through photographic evidence of children's work, including their designing and evaluating process. We are also enrolling the Kapow assessment tool, where a quiz is used at the beginning of a unit to see what the children already know

and they then receive this back at the end of a unit to see what they have learnt. There is also a 'knowledge catcher' document for each unit as another way for children to be assessed.

8. Resources.

Our school has a wide range of resources to support the teaching and learning across school. Kapow has a resources list, where items can be ordered to ensure teachers have correct resources to teach each unit. These are kept in the central store room.

9. 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 subject leader. Their work also involves supporting colleagues in the teaching of this subject, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school. The subject lead routinely analyses children's work samples and speaks with the children to get feedback on what they recall from the lessons they have been taught, including language relevant to the subject. Lesson observations are also conducted on occasion.

Design and Technology Policy Statement regarding the use of Food

When working with food:

- *An adult will be required to supervise activities involving cooking and food handling/preparation.
- *When undertaking food activities the appropriate Health and Safety Procedures must be adhered to.
- *When working with food all children should follow personal hygiene guidance (tie back hair, clean apron, use of blue plasters and washing hands)
- *Teachers should check the dietary needs of the children in their class to identify any foods that should not be available to specific children, or groups of children.
- *Any perishable food should be stored in a fridge.
- *Only the equipment in the food cupboard, which is for food use only, should be used.
- *Glass and wooden items should never be used.
- *Ensure that the plastic work sheets, especially for use with food, cover the desk area. This sheet should be wiped down with a steriliser.
- *Only use equipment set aside to use with food.
- *Set aside an area for children to wash their hands.
- *Teachers taking part in any food activity should dress appropriately and follow the same procedures as the children with regard to any rules regarding personal hygiene.
- *Ensure that all equipment is cleaned and put away in the food cupboard.
- *Ensure that all children use their own equipment when tasting food.
- *Certain spoons should be identified and used when placing food onto plates for children to taste food, teachers/TA's need to ensure children do not use their own.

10. Health and Safety

All adults leading DT lessons/ activities should ensure that they have read and understood the D and T Health and Safety section of the Policy.

Adults should ensure that:

DT equipment is not left out and unsupervised, Floors and work surfaces are kept clean and tidy and all tools used must be of good quality, in good condition and stored safely.

Direct safety instructions should be given to children each time they undertake a design and technology activity.

Children should be given suitable instruction on the operation of all equipment before being allowed to work with it.

Children should be strictly supervised in their use of equipment at all times. Adult to child ratio must be appropriate to the activity e.g. closer supervision on activities such as use of a glue gun.

Children should be taught to recognise and consider hazards and risks and to take action to control these risks, having followed simple instructions.

Specific health and safety points will need to be included onto topic plans.

These will help teachers to identify activities of a high risk and highlight any areas in which they need to reduce risk or ensure safe practice.

Risk assessments for specific tools should be referred to during the planning and use of equipment. These will be found in the risk assessment file on the staff shared area of the network and in a folder as a paper copy with the DT resources.

Reviewed by Katie Fleming – Design and Technology Subject Leader
November 2022