MARUS BRIDGE PRIMARY SCHOOL

Curriculum Policy

Design and Technology

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Subject Coordinator 20/21:

Design and Technology Policy

What is our vision?

At Marus Bridge, we are committed to providing a progressive and inspired Design Technology curriculum whereby all children develop skills both within and beyond school. The skills that are developed in this subject can be transferred across the curriculum and thus aid learning. Children will engage with a range of techniques and cover all areas of Design Technology throughout their Primary education.

Curriculum Aims:

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupil's will design and make products that solve real and relevant problems within a variety of contexts, considering their own and other's needs, wants and values.

Design and technology prepares children to take part in the development of tomorrow's rapidly changing world. Through this subject, children are given the opportunity to expand and experiment their own creative ideas, whilst learning new skills and reflecting on technology in today's society. They 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. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

Children at Marus Bridge will have the opportunity

- To develop the skills of designing, planning, making, adapting and evaluating products for a particular purpose
- To look for needs, wants and opportunities and respond to them by developing a range of ideas and making products and systems
- To develop an understanding of technological processes, products and their manufacture, and their contribution to our society
- To nurture creativity and innovation and become creative and autonomous problem solvers, as individuals and as part of a team.
- To reflect on and evaluate present and past design and technology, its uses and effects
- To promote pupils spiritual, moral, social and cultural development

How do we achieve this?

- Pupil's will be taught five different areas of design and technology which are covered across both key stages. The five areas are mechanisms, textiles, structure, food and electrical components.

- Each year group has two of the areas of Design Technology that will be taught in that specific year.
- Each area will be revisited at least twice in the children's time at Marus Bridge. This will allow for skills to progress.
- Subject area objectives have been made specific in the planning and assessment document.
- Children will be taught age specific skills for the area in which they are taught. Staff will use progression of skills document to inform the careful and considered planning of this.

Scheme of Work:

Staff will use the objectives from the planning and assessment document to plan and deliver successful design and technology lessons. Resources from outside or online providers, such as PlanBee can be used if appropriate and if objectives are matched to those in the school's document and those in the National Curriculum.

Each area of design and technology will be covered at least twice in the children's time at Marus Bridge. This will enable children to build on skills as they move up through school.

See Appendix 1

Resources:

Our school has a wide range of resources to support the teaching of design and technology across the school. Classrooms have a range of basic resources, with the more specialised equipment being kept in the design and technology store. The resources are reviewed and restocked to ensure that enough resources are available and staff are encouraged to feedback when additional resources are required that may benefit their teaching of design and technology.

Assessment – How do we assess skills and understanding?

Pupils' progress is assessed and monitored during the year through normal teacher marking, planning and observation.

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

- Looking at a child's recorded work i.e. model, photographs, written work.
- Individual discussion.
- Listening to the children's ideas as they discuss between themselves.
- Group discussions in both planning and reporting back sessions.
- Observing the children's skills in Design and Technology.
- Record the progress that children make by assessing the children's work against the learning objectives for their lessons.

Pupils' Design and Technology work is marked by the teacher in line with the School's Marking policy. Children are also encouraged to make judgements on how their work can be improved.

A record of class achievement for each topic is collated by the teacher on the school's foundation assessment tracking document. The following gradings with 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.

This information is passed on to the next teachers at the end of the year. Furthermore, parents are informed of their child's progress at termly parents' evenings and via the end of year reports which are sent home in the summer term.

Health and Safety

There is a design and technology risk assessment document in place that can be found on the school's shared drive under '**DESIGN AND TECHNOLOGY RESOURCES'**. It is the class teacher's responsibility to ensure they are familiar with it prior to using tools.

The safety of the children is the responsibility of the class teacher. 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.

All staff, including helpers, are made aware of food safety procedures when working with food to minimise any risks. The children wear protective clothing if necessary.

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. Differentiation 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 open-ended 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. Orders will need to placed and signed off at least 4 weeks before the start of teaching. If staff use up all of a certain resource, this will need reporting to the subject coordinator who can then advise and assist on the replenishment of the resource.

If a lesson is planned for food technology and the kitchen is needed to prepare or cook food, be mindful that this will need to be booked out in advance of the lessons. This will ensure that the workspace is free and in full working order with correct health and safety measures in place.

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.

Any members of staff who have requests for training or musical instruments/resources should discuss this with the subject coordinator and put in an order request as required.

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 evaluates 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.

Appendix 1

YEAR		
Y1	**Mechanisms** E.g. Moving picture	**Textiles** E.g. Puppets
Y2	**Structures** E.g. Packaging	**Food** E.g. Dips and Dippers
Y3	**Mechanisms** E.g. Pulley for puppet theatre	**Textiles** E.g. Making a pencil case
Y4	**Structures** E.g. Bug hotel	**Electrical Components** E.g. Lighting up
Y5	**Mechanisms** E.g. Moving Toys	**Food** E.g. Salads in around the world
Y6	**Structures** E.g. Shelters	**Electrical Components** E.g. Moving fairground ride