# **BROOMWOOD PRIMARY SCHOOL**

# **Design and Technology Policy**

# **Rationale:**

In keeping with the ethos of Broomwood School, we believe every child within our school should have full access to Design and Technology as laid down in the National Curriculum regardless of gender, ethnic origin or ability. We believe that Design and Technology is essential to prepare children to participate in the rapidly changing technologies of the world. Through this subject child develop their investigating, designing, making and evaluating skills by thinking and intervening creatively.

We believe all children should be encouraged to believe, achieve and succeed for a brighter future, within a positive, enjoyable atmosphere, which inspires all to learn and grow!

We seek to ensure that our teaching reflects the current guidance to schools which emphasises the particular importance of designing and making.

#### Our aims for Design and Technology are to:

- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- critique, evaluate and test their ideas and products and the work of others
- understand and apply the principles of nutrition and learn how to cook.

# Objectives

Our objectives in teaching Design and Technology are that all children should be able to:

- Show interest and motivation in designing and making.
- Show knowledge of a variety of materials, tools and components.
- Show an awareness of the need to exercise safe and hygienic practices and to employ these whilst working.
- Creatively apply their knowledge and skills when designing and making.
- Communicate their ideas orally, in writing, drawing and in 3 D models.
- Plan work individually and as a member of a team.
- Evaluate and make appropriate modifications within their designing and making.
- Evaluate the work of others, including those from other times and cultures.
- Show an awareness of the ways in which a design and technology activity might have an effect upon people and the environment.
- Investigate the work of designers through first hand experiences.

# **Organisation and Planning**

We accept the need to plan educational programmes which deliver Design and Technology as defined in the existing statutory orders to each child. Where possible we integrate

Design and Technology into our curriculum, creating many cross curricular links. Due to this, Design and Technology may be taught in blocks rather than on a weekly basis. At Broomwood Primary School classes are to complete at least one Design and Technology project each term (totalling three a year) linked to the appropriate topic as set out below in the two-year overview of skills and topics in Design and Technology.

All pupils take part in a series of design and make projects. Specific skills are taught within these projects through structured teaching and through the application of those skills in more open ended projects. As the children go through the school, they will build on their skills and have the opportunity to practise a range of skills in one project. (See skills progression doc)

	progression doc)		
KS1	Mechanisms (Simple lever- 1 lever to cause	Food (Preparing cold food – fruit/veg)	<b>Textiles</b> (Sew, join, patterns, templates)
Year A	one action)		
	Topic – Toys-Changes within living memory	Topic – Circle of life	Topic – Seaside
KS1	Food	Mechanisms	Structures
NJ1	(Preparing cold food – Savoury	(wheels and axles)	Structures
Year B	e.g. sandwiches)		
	Topic – Investigating India	Topic – Superheroes	Topic – Who lives in a house like this and where is it?
Lower	Structures	Textiles	Food
KS2		(3d e.g. making a bag)	(Heat element)
Year A			
	Topic – Stone age to Celts	Topic – Rotten romans	Topic – Our brilliant bodies
Lower	Mechanisms	Food	Electrical systems
KS2	(2d levers and linkages)	Textiles	(computer control)
Year B			
	Topic - Vikings	Topic – where does our food come from?	Topic – Rise of the robots
Upper	Fairground	Structures	Textiles
KS2	(Carousel)	(bridges)	
Year A	Topic – Circuit builders	Topic – Raging rivers and monstrous mountains	Topic – Ancient Egypt
Upper	Food	Mechanical systems	Textiles
KS2	(Use heat)	(Lego)	
Year B	Topic – Is it right to fight?	Topic – Adventures in space	Topic – The Ameri <del>ĉ</del> as

In order to address a number of 'Every Child Matters' outcomes (Stay Safe, Be Healthy, Enjoy and Achieve) we have an established room for food technology, where children have access to a number of resources. Children are to be supervised at all times when using this room and it is to be locked when vacant. Alongside cooking lessons, children are to be taught the importance of a healthy diet and preparing food hygienically.

Within the Foundation Stage, Design and Technology is taught through a cross curricular approach using the Early Years Foundation Stage Curriculum 2012. Children learn to explore a variety of technological toys and computing equipment through the Understanding of the World area of learning. They learn about cooking, food safety and hygiene through the Physical Development areas of learning. Children also explore a variety of tools, techniques and materials through the Expressive Arts area of learning.

#### Assessment and Monitoring

Each Design and Technology project will be evidenced in the children's topic books through the use of a workbook. During the project the children will use their work to record their research, designs and evaluations. Children will be given the opportunity to evaluate throughout their project. Where possible photographic evidence of the children practising their skills and their final products are to be included in the workbooks. Although two year groups complete the same project, the different level of skill and questioning must be reflected in the children's workbooks and lesson plans.

Teachers must ensure that all aspects of Design and Technology are taught. When designing and making, children must be taught to design, make and evaluate their work. They must also develop their technical knowledge. Medium term planning, short term planning and topic books will provide evidence of the coverage of all aspects of Design and Technology. Teachers will be able to assess children's understanding during lessons through discussions, observations and their evaluations of their final piece of work.

Teachers will assess children in this subject as being emerging, expected or exceeding. These judgements will be reported to parents at the end of the year through the children's reports.

Within the Foundation Stage observational evidence is collected throughout the year and is used half termly to make assessment through Target Tracker. At the end of Reception children are judged as being emerging, expected or exceeding within all areas of learning. In the early years, children should be encouraged to plan their ideas before construction or creating models. They need opportunities to develop their early DT skills and have the opportunities to evaluate their creations through the use of adult questioning and supervision.

# **Health and Safety**

An important aspect of Design and Technology is the need to develop the children's awareness of the need to work safely and with due regard to the health and safety of themselves and others. Children will be shown how to use equipment correctly and will be given the opportunity to practise their skills and techniques under adult supervision. Annual Health and Safety checks are carried out to ensure that staff continue to be aware of the need for vigilance in this area. Staff are not permitted to use electrical equipment from home, without gaining permission from the Head teacher.

The teacher is the final decision maker about safety in his/her classroom. If there is any doubt about how to work safely, or the capacity to provide the necessary level of supervision then the activity should be postponed until advice from the subject manager or Headteacher has been obtained. If activities are deemed to be dangerous then other alternatives should be sought.

All relevant risk assessments have been carried out and are updated as necessary. Teachers are to reads and evaluate risk assessments before teaching any Design and Technology lesson.

Where a child or member of staff is involved in an accident during a Design and Technology lesson, the incident must be recorded in the first ait book and the help of a first aider must be sough (depending on the severity of the accident). Parents are to be informed of any accident either through the first aid book or through a telephone call, depending on the severity of the injury. Please report all serious injuries to the Head teacher.

# Food technologies lessons

Teachers are to seek the permission of parents before allowing the children to prepare and consume any food. It is the responsibility of the teacher to be aware of any allergies or dietry requirements of the children in their class and cater towards them. Teachers are to inform the Design and Technology coordinator about the possible purchase of ingredients before purchasing them for cooking activities. Teachers are to ensure that all food purchased is stored correctly and is in date to avoid possible illness.

# **Equal Opportunities**

All children at Broomwood School have complete access to Design and Technology regardless of gender, ethnic origin or ability. Individual tasks should be structured so that all pupils can achieve success whatever their level of ability or special circumstance, although all pupils will work in a variety of grouping, i.e. individually, in pairs, small groups and large groups.

Broomwood Primary School recognises that children with Special Education Needs (SEN) are very diverse and include children with physical impairment, visual impairment, hearing impairment, learning difficulty, specific learning difficulty (e.g. dyslexia), mental health issues, people who are deaf, British sign language users and people with long term health conditions. Broomwood Primary School is committed to challenging discrimination and promoting equality at all levels and in all aspects.

Teachers must therefore differentiate their Design and Technology lessons to meet the needs of all pupils. Where necessary teachers must provide suitable equipment and adult support to those who require it to make progress in Design and Technology.

#### **Gifted and Talented**

Children are encouraged to achieve their full potential in Design and Technology, however where the school's resources do not meet the needs of particularly talented children, extra provision will be sought by either the coordinator or the class teacher.

ICT

Whenever ICT or technology is used in this subject, the ICT and E-safety policies will be followed.

# In-service Training and Support

Training is available through Trafford LEA courses, which are run at regular intervals throughout the year. The subject manager attends co-ordinator meetings and reports through staff meetings on developments and issues concerning Design Technology. It is the responsibility of each teacher to take up the training opportunities available to them.

**Policy Review** 

Reviewed by P Martin April 2020

Chair of Governors \_\_\_\_\_

Date\_\_\_\_\_