Design and Technology Policy
Richmond Hill

1 Aims and objectives

1.1 At Richmond Hill Primary school we aim to provide all children with a broad and balanced curriculum which prepares them for life beyond primary education. We encourage children to use their creativity and imagination, to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. During Design and Technology, we teach children the language skills they will need to be effective communicators. We actively encourage our children to be critical thinkers, forward planners and effective problem solvers. We also teach our children to be able to work as capable individuals and as part of a valuable, productive team. Resilience is a key theme running through our DT curriculum, and the children are encouraged to become innovators and risktakers. Design and Technology is a subject where children's capability in designing and making is developed through combining their designing and making skills with knowledge and understanding. At Richmond Hill Primary School we view Design and Technology as a subject which allows children to apply their knowledge and understanding in a creative way to design and make products

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1.2 Aims

- The national curriculum for design and technology aims to ensure that all pupils:
- 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.

2 DT Curriculum Planning

2.1 Key Stage 1

The school uses Kapow as the basis of its curriculum planning. Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment]. When designing and making, pupils should be taught to:

Design - 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

Make - 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

Evaluate - Explore and evaluate a range of existing products - Evaluate their ideas and products against design criteria Technical knowledge - 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. Key Stage 1 children will undertake one unit of work per term, at least. They will also have opportunities during Design and Technology lessons to develop their own ideas and generate designs independently. Progression of Design and Technology skills will be monitored by staff formally and informally with references to expectations from the National Curriculum. Planning will follow Kapow scheme planning which is linked to National Curriculum guidelines.

2.2 Key Stage 2

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. Kapow scheme of work should be used as long term planning. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment]. When designing and making, pupils should be taught to:

Design - 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

Make - Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately - 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

Evaluate - 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

Technical knowledge - 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 As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

3 Pupils should be taught to:

Key stage 1 - Use the basic principles of a healthy and varied diet to prepare dishes - Understand where food comes from.

Key stage 2 - 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.

4 Early years

4.1 Early Years children will undertake investigative and skills-based tasks during independent working time. The Design and Technology (construction) area will be available to them on a daily basis and they will be encouraged to undertake focused practical tasks through directed and self-initiated stimuli. They will be provided with resources based on topics/interests within the focus of the classroom and will be encouraged to design and develop ideas independently. Children in the Foundation Stage work on a range of creative themes and tasks, and their work in Creative Development links closely to other areas of the Foundation Stage Profile, especially Physical Development.

5 Health and Safety

Teachers will always teach the safe use of tools and equipment and insist on good practice.

6 Equal opportunities and inclusion of all children

6.1 We teach DT to all children, whatever their ability. DT forms part of the school curriculum policy to provide a broad and balanced education for all children. We provide learning opportunities that are matched to the needs of children with learning difficulties. Our work

in DT takes into account the targets set in the children's Individual Education Plans (IEPs).

7 Assessment and recording

7.1 We assess children's work in DT by making informal judgements as we observe them during lessons. On completion of a piece of work, the teacher marks the work and comments as necessary.

7.2 The DT subject leader keeps samples of children's work in a portfolio and uses these to demonstrate what the expected level of achievement is in science for each age group in the school.

8 Resources

8.1 We have sufficient resources for all DT teaching units in the school. We will continue to audit and order new resources in line with the new teaching scheme Kapow.

9 Monitoring and review

9.1 It is the responsibility of the DT subject leader to monitor the standards of children's work and the quality of teaching in DT. The DT subject leader is also responsible for supporting colleagues in the teaching of DT, for being informed about current developments in the subject and for providing a strategic lead and direction for the subject in the school. The DT subject leader has specially-allocated time for fulfilling the vital task of reviewing samples of children's work and visiting classes to observe teaching in the subject.

Signed: Miss O'Neil

Date: 22nd May 2025

To be reviewed: May 2026