1.0 INTRODUCTION

1.1 Design Technology prepares pupils to participate in rapidly changing technologies. It calls for pupils to become autonomous and creative problem solvers as individuals and as part of a group.

2.0 AIMS

2.1 To develop children's design and technology capability through combining designing and making skills with knowledge and understanding in order to develop, plan and communicate ideas; work with tools, equipment, materials and components to make quality products; evaluate processes and products.

3.0 RATIONALE

In Design Technology each child should have the opportunity to -

- 3.1. Design and make using a variety of materials and tools
- 3.2. Practise particular making skills with their own design
- 3.3. Investigate and evaluate simple products
- 3.4. Plan and record the processes involved in designing and making
- 3.5. Work individually, in a group and as a class
- 3.6. Work in a safe environment
- 3.7. Reflect on Health and Safety issues raised during technology lessons
- 3.8. Apply skills, knowledge and understanding to other subjects, including Art, Science, ICT and Maths
- 3.9. Evaluate and improve their design

4.0 OBJECTIVES

Design Technology provides opportunities for pupils to develop the skills of -

- 4.1. **Communication** through exchanging, designing and making ideas with their teacher and peers, producing design ideas and recording/evaluating their work
- 4.2. **ICT** through preparing, presenting and reviewing information as they work on their design ideas using ICT based sources

BYRON COURT PRIMARY SCHOOL

DESIGN AND TECHNOLOGY POLICY

- 4.3. **Working with others** through drawing on other people's designs, both in group projects and when seeking support for individual work/working together to meet a challenge
- 4.4. **Improving own learning and performance** through carrying out practical tasks/topics. Pupils should be taught to reflect on their work as they design and identify ways they could improve their product
- 4.5. **Problem solving** through dealing with conflicting requirements when making and topic planning, and through considering alternatives in designing when investigating and evaluating products

5.0 ASSESSMENT

- 5.1 Opportunities for assessment may come through observation, outcome, discussion or interview.
- 5.2 Much of the assessment in design technology is the children's self-evaluation of their work.
- 5.3 The work children do will serve as a record for classes working on each topic. It is not necessary to make detailed records for each child.
- 5.4 Where a child's progress differs markedly from that of the rest of the class, teachers may wish to make a note of this, and the reasons for the difference, to pass on to the next teacher.
- 5.5 Assessment may be considered by the areas as stated above, and generally alongside the stages of progression in design technology.
 - 5.5.1 Foundation Stage (within the Early Learning Goals/"Knowledge and Understanding of the World") and Y1: At the early stages of developing capability, children should be able to
 - 5.5.1.1 Generate and develop ideas through talking about what their design has to do, handling materials and, where appropriate drawing.
 - 5.5.1.2 Increasingly take account of people's needs and wants
 - 5.5.1.3 Reflect more on their ideas
 - 5.5.1.4 Draw what they have made

- 5.5.1.5 Recognise and begin to select suitable tools and materials
- 5.5.1.6 Apply their previous knowledge and experience
- 5.5.1.7 Suggest achievable ways forward and begin to suggest improvement to their own models
- 5.5.2 Year 1 and Year 2 As children make progress, they should -
 - 5.5.2.1 Become more involved in finding out information useful to their designing and use their experience of products and applications as the stimulus for ideas.
 - 5.5.2.2 Use 2D and 3D models to try out and develop ideas as they become more reflective about their designs.
 - 5.5.2.3 Suggest an increasing number of achievable ways forward and develop simple plans, which take into account the resources available.
 - 5.5.2.4 Start combining and shaping materials to create products, which meet their intentions.
 - 5.5.2.5 Use tools safely and with increasing accuracy.
- 5.5.3 Year 2 and KS2 As children make further progress, they should -
 - 5.5.3.1 Use a variety of information sources for their research, and set criteria for their designs, which increasingly take account of the views and preferences of the intended user.
 - 5.5.3.2 Become more familiar with techniques, e.g. brainstorming and product analysis to generate ideas, and have a clearer sense of priorities in their design ideas.
 - 5.5.3.3 Use a range of modelling techniques and be able to justify the decisions they make.
 - 5.5.3.4 Plan and evaluate in a more considered manner, and show a greater awareness of constraints and the implications of their designs.

- 5.5.3.5 Draw upon a greater range of techniques and skills to create quality products for identified purposes.
- 5.5.3.6 Become increasingly competent at matching how they work to the materials and the task.

6.0 MONITORING AND EVALUATION

- 6.1 Monitoring and evaluation of the policy implementation is carried out by the Science and Technology Faculty through liaison with class teachers/year groups.
- 6.2 Observations (where possible), photographs of children's work and an overview document, filled in by each year group in the Spring Term outlining topics and the key skills that have been covered within each topic will be recorded.
- 6.3 Resources will be reviewed and purchased according to need.

7.0 THE ROLE OF THE HEAD TEACHER AND SCIENCE AND TECHNOLOGY FACULTY

- 7.1. To monitor implementation of the Science and Technology Action Plan, which forms the School Development Plan and to report progress to the Governing Body.
- 7.2. To set a yearly budget that will identify resource needs and approve new investment.
- 7.3. To encourage links with the local community and visitors to enrich the learning.
- 7.4. To ensure that this policy is followed by all staff.
- 7.5. To review the National Strategy Framework for teaching and learning in Design Technology in light of recommendations of the New Government Review.
- 7.6. To order and check delivery of resources.

8.0 EQUAL OPPORTUNITIES

- 8.1. There is a need to ensure that technological learning offers equal interests and opportunities to all and that it prepares children for the technological challenges that they will encounter in adult life.
- 8.2. Resources should reflect school policies on equal opportunities and inclusion including race, gender, culture, class and special education needs.

9.0 HEALTH AND SAFETY

- 9.1 When working with tools, equipment and materials, in practical activities and in different environments, including those that are unfamiliar and food technology(to include healthy eating), pupils should be taught –
 - 9.1.1. About hazards, risks and risk control

- 9.1.2. To recognise the risks to themselves and others
- 9.1.3. To manage their environment to ensure the health and safety of themselves and others

10.0 REVIEW

- 10.1. Date of Policy June 2014.
- 10.2. Date of review June 2017