

## **Design and Technology Policy**

This policy is a whole school policy including EYFS

### **1 Aims and objectives**

**1.1** Design and technology prepares children to take part in the development of tomorrow's rapidly changing world. Creative thinking encourages children to make positive changes to their quality of life. The subject encourages children to become autonomous and creative problem-solvers, both as individuals and as part of a team. It enables them to identify needs and opportunities and to respond by developing ideas and eventually making products and systems. Through the study of design and technology they combine practical skills with an understanding of aesthetic, social and environmental issues, as well as functions and industrial practices. This allows them to reflect on and evaluate present and past design and technology, its uses and its impacts. Design and technology helps all children to become discriminating and informed consumers and potential innovators.

**1.2** The aims of design and technology 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 explore attitudes towards the made world and how we live and work within it;
- to develop an understanding of technological processes, products, and their manufacture, and their contribution to our society;
- to foster enjoyment, satisfaction and purpose in designing and making.

### **2 Teaching and learning style**

**2.1** The school uses a variety of teaching and learning styles in design and technology lessons. The principal aim is to develop children's knowledge, skills and understanding in design and technology. 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. Within lessons, we give children the opportunity both to work on their own and to collaborate with others, listening to other children's ideas and treating these with respect. Children critically evaluate existing products, their own work and that of others. They have the opportunity to use a wide range of materials and resources, including ICT.

**2.2** In all classes there are children of differing ability. We recognise this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this through a range of strategies:

- setting common tasks that are open-ended and can have a variety of results;
- setting tasks of increasing difficulty where not all children complete all tasks;
- grouping children by ability and setting achievable tasks for each group;
- providing a range of challenges through the provision of different resources;
- using additional adults to support the work of individual children or small groups.

## **3 Design and technology curriculum planning**

- 3.1** Design and technology is a foundation subject in the National Curriculum. At Springmead school we use a wide variety of resources to plan our DT curriculum and use the National curriculum learning objectives to support the planning. Sometimes it is taught through theme.
- 3.2** We carry out the curriculum planning in design and technology in three phases: long-term, medium-term and short-term. The long-term plan maps out the units covered in each term during the key stage and specify some areas to be covered in each year to ensure coverage over key stage.
- 3.3** Our medium-term plans, give details of work for each term. They identify learning objectives and outcomes for each unit, and ensure an appropriate balance and distribution of work across the terms.
- 3.4** Lesson plans/daily plans list the specific learning objectives for each lesson and the content of the lesson.
- 3.5** The activities in design and technology build upon the prior learning of the children. We give children of all abilities the opportunity to develop their skills, knowledge and understanding, there is an increasing challenge for the children as they move through the school.

## **4 The Foundation Stage**

- 4.1** We encourage the development of skills, knowledge and understanding that help nursery and reception children make sense of their world as an integral part of the school's work. As the nursery and reception classes are part of the Foundation Stage, we relate the development of the children's knowledge and understanding of the world to the objectives set out in the Early Years Foundation Stage. This learning forms the foundations for later work in design and technology. 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.
- 4.2** We provide a range of experiences that encourage exploration, observation, problem solving, critical thinking and discussion. These activities, indoors and outdoors, attract the children's interest and curiosity.

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

### **5.1 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 during their English lessons. Discussion, drama and role-play are important ways that we employ for the children to develop an understanding that people have different views about design and

technology. 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.

## **5.2 Information and communication technology (ICT)**

We use online ICT to support design and technology teaching. Children use software to enhance their skills in designing and making, and use draw-and-paint programs to model ideas and make repeating patterns. The children also use ICT to collect information and to present their designs through draw-and-paint programs.

## **5.3 Personal, social and health education (PSHE) and citizenship**

Design and technology contributes to the teaching of 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. Their work encourages them to be responsible and to set targets to meet deadlines, and they also learn through their understanding of personal hygiene, how to prevent disease from spreading when working with food.

## **5.4 Spiritual, moral, social and cultural development**

The teaching of design and technology offers opportunities to support the social development of our children through the way we expect them to work with each other in lessons. Our groupings allow children to work together, and give them the chance to discuss their ideas and feelings about their own work and the work of others. Through their collaborative and co-operative work across a range of activities and experiences in design and technology, the children develop respect for the abilities of other children and a better understanding of themselves. They also develop a respect for the environment, for their own health and safety and for that of others. They develop their cultural awareness and understanding, and they learn to appreciate the value of differences and similarities. A variety of experiences teaches them to appreciate that all people are equally important, and that the needs of individuals are not the same as the needs of groups.

## **5.5 Science, History, Geography, R.E,** contribute to many aspects of the themed curriculum e.g. maps, Anderson Shelters etc.

## **6 Teaching design and technology to children with special needs and disabilities**

**6.1** We teach design and technology to all children, whatever their ability. Design and technology also forms part of our school curriculum policy to provide a broad and balanced education to all children. Teachers provide learning opportunities that are matched to the needs of children with learning difficulties. Work in design and technology takes into account the targets set for individual children.

## **7 Assessment and recording**

**7.1** Teachers assess children's work in design and technology by making assessments as they observe them working during lessons. They record the progress that children make by assessing the children's work against the learning objectives for their lessons; use it to plan the future work of each child and to make an annual assessment of progress for each child, as part of the annual report to parents. Each teacher passes this information on to the

next teacher at the end of each year.

- 7.2** The design and technology subject leader keeps evidence of the children's work. This demonstrates what the expected level of achievement is in design and technology in each year of the school.

## **8 Resources**

- 8.1** 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. This area is accessible to children only under adult supervision.

## **9 Health and safety**

- 9.1** The general teaching requirement for health and safety applies in this subject, for example we teach children how to follow proper procedures for food safety and hygiene.

- 9.2** High risk activities require a risk assessment sheet.

## **10 Monitoring and review**

The role of subject leaders is to:

- provide a strategic lead for the subject with the aim of improving standards;
- offer support and advice to colleagues on the subject;
- monitor pupil progress in that subject area across the school through observations and discussion with staff and children. Also through leveling and scrutinizing work.
- review the way the subject is taught at the school and plan for improvement;
- understand current standards in the subject across the school and how this compares to expected targets;
- plan how we are going to improve standards in conjunction with staff and principal;
- provide efficient resource management for the subject;
- review the curriculum plans for the subject and ensure that there is coverage of the National Curriculum, where we feel it is appropriate, and that progression is planned into schemes of work;
- to keep up to date with the developments in the subject at both national and local level;
- keep detailed information on their subject in a subject leader file;
- work with the principals to produce a development plan for the subject which links the whole school objectives;
- review policy annually;
- present a review of the subject to staff annually at a staff meeting.

The school gives subject leaders non-contact time, so that they can carry out the necessary duties involved with their role.

This policy is the principal's ongoing responsibility and reviewing its effectiveness annually in consultation with the staff.

**Signed:**

**Date:**