

Purpose of subject

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.

<u>Aims</u>

To develop knowledge and understanding of: materials and components; mechanisms and control systems; structures; existing products, and health and safety.

• 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, design 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.

Teaching and learning

A variety of teaching techniques are used for design and technology to appeal to a range of learning styles. The principal aim of the National Curriculum is to develop children's knowledge, skills and understanding in the subject, whilst providing enjoyable, creative and inspiring design and technology lessons. During design and technology lessons children are encouraged to apply their knowledge and understanding when developing ideas, planning, making and evaluating products.

Cross curricular approaches with Maths, English and Science is encouraged to support children's understanding of conceptual and procedural knowledge and ensure it is applied. Children are provided with a mixture of whole class teaching, individual and group activities, as well as encouraging both independence and collaborative working.

Subject and curriculum planning

We carry out the curriculum planning in Design and Technology in three phases: longterm, medium-term and short-term. The long-term plan maps out the units covered in each term during the key stage. Medium and short term planning is done by teachers. We plan the activities in Design and Technology so that they build on the prior learning of the children. We give children of all abilities the opportunity to develop their skills, knowledge and understanding, and we also build planned progression into the scheme of work, so that the children are increasingly challenged as they move through the school.

<u>EYFS</u>

We encourage the development of skills, knowledge and understanding that help Foundation children make sense of their world as an integral part of the school's work. 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. 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.

Cross Curricular links

Design and technology contributes significantly to the teaching of other curriculum areas in our school by actively promoting skills such as:-

- Teamwork and co-operation.
- Problem solving.
- Speaking and Listening.
- Planning and evaluating
- Keyboard skills With an aim of actively improving:- Writing
- Mathematical knowledge and confidence.

Assessment and recording

At St Andrew's School assessment is an integral part of the teaching process. At the beginning of each half term the class teacher creates a knowledge map to show the outcomes at the end of the half term and review some assessment questions that are asked at the beginning and end of topics.

Monitoring and review

Each child uses back of their Art sketchbook which serves as a cumulative record of their work and is passed on to the next teacher at the end of each year. Samples of children's work are also collected. Monitoring takes place regularly through sampling children's work, teacher planning and lesson observations.