CURRICULUM STATEMENTS: DESIGN AND TECHNOLOGY

At SJS, we want our curriculum to lead to confident, independent learners who have a passion for learning and are adaptable to the needs of the world when they leave school. We want to promote positivity, happiness and self-esteem in a caring and supportive environment that meets the needs of each child.

INTENT

To fulfil the requirements of the National Curriculum and ensure pupils are able to use creativity and imagination to design and make products to solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values.

To develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.

To 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.

To critique, evaluate and test their ideas and products and the work of others.

To understand and apply the principles of nutrition and learn how to cook.

To learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens.

IMPLEMENT

The National Curriculum's Design and Technology skills 'design, make and evaluate' skills are embedded in the classroom through the clear and comprehensive design and technology scheme, Kapow.

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 (e.g. 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 (e.g. gears, pulleys, cams, levers and linkages)
- understand and use electrical systems in their products (e.g. series circuits incorporating switches, bulbs, buzzers and motors)
- apply their understanding of computing to program, monitor and control their products

Cooking and nutrition

- understand and apply the principles of nutrition and learn how to cook.

IMPACT

With everything in place, it is expected that children can make good progress in Design and Technology. If they are demonstrating good subject knowledge and completing planned outcomes, they will be deemed to be secure in the subject.

We measure the impact of our curriculum through the following methods:

- pupil discussions and interviewing the pupils about their learning (pupil voice).
- governor monitoring with our Design and Technology link governor.
- photo and video evidence of the pupils practical learning.

Pupils are quickly supported with the most appropriate support in class if progress is not at the expected standard. Pupils are monitored regularly to ensure continued success and progress.