## Design and Technology Curriculum: Intent, Implementation and Impact

## Intent

Through DT, we aim to equip and inspire children to be thoughtful, creative and skilled all-round problem solvers and potential designers and change-makers of the future. DT provides children with practical skills, knowledge of materials, tools and techniques, creative thinking skills as well as developing important personal aptitudes such as cooperation, collaboration and resilience. Opportunities to apply these skills and knowledge model real life problem solving considering brief, aims, audience and limitations.

## **Implementation**

Progression of knowledge and skills in DT develops designing, making and evaluating and five other strands: structures, mechanisms, textiles, food and nutrition, electrical systems and control. Pupils learn and build skills from each strand in each year group.

DT activities range from: short practical tasks to build skill; creative thinking tasks to develop problem solving and creativity; to complete projects. Involving the whole design cycle and culminating in a high quality finished product. Where possible, projects are topic linked, and may apply skills in science, maths and other curriculum areas.

## **Impact**

Through DT at St Mark's, children are able to:

- Perform a wide range of practical tasks with confidence, accuracy and safety, eg creating a strong structure, making things move in different ways, using tools, creating simple items from textiles, using circuits and technology to power and control machines, prepare food, following and adapting recipes;
- Be creative;
- Use the design cycle iteratively planning, making and evaluating;
- Appreciate how the design cycle has been and is being used in past and present industry, by inventors and can be applied to many problem solving situations beyond DT;
- Apply their knowledge of materials and practical skills along with creative problem solving skills and design cycle above to suggest, design, make and evaluate solutions to real life problems;
- Apply life skills such as resilience, cooperation, supporting peers, creative thinking which can then be used in other areas of the curriculum.