High Green Primary School

STATEMENT FOR LEARNING

Design & Technology

INTENT

In helping to prepare our children for their future, Design & Technology and the skills associated with the subject are listed as some of the top 15 requirements of the future work force: analytical and critical thinking, innovation, active learning, complex problem solving, creativity, originality, initiative, technology use, monitoring and control, technology design and programming.

Utilising strong cross curricular links between Maths, Science, Computing and Art, we intend for Design Technology to prepare our children, to give them the opportunities, responsibilities, and experiences they need to be successful in later life.

Design and Technology education involves two important elements - learning about the designed and made world and how things work, and learning to design and make functional products for particular purposes and users.

Children acquire and apply knowledge and understanding of materials and components, mechanisms and control systems, structures, existing products, quality and health and safety.

The skills learned in D&T also help with learning across the curriculum. Knowledge about the properties of materials helps in science and the practice of measuring accurately helps in maths. These skills help in IT through the children's use of computer control and, naturally, in art and design.

Design and Technology education helps develop children's skills through collaborative working and problem-solving, and knowledge in design, materials, structures, mechanisms and electrical control.

Children are encouraged to be creative and innovative, and are actively encouraged to think about important issues such as sustainability and enterprise.

IMPLEMENTATION

Design Technology is taught throughout the year, with an in-depth focus on '**STEAM'** subjects during the summer term. This allows children to apply a range of skills in a relevant and meaningful way.

Where possible, Design Technology projects are linked to other curricular areas.

There are three core activities children engage with in Design and Technology:

1. Activities which involve investigating and evaluating existing products
2. Focused tasks in which children develop particular aspects of knowledge and skills
3. Designing and making activities in which children design and make 'something' for 'somebody' for 'some purpose'

These three activities are combined in sequence to create a Design and Technology project.

Design Technology is supported by the Design and Technology Association.

SEND

Children with special educational needs will be encouraged in all aspects of Design Technology appropriate to their ability. Teachers will plan tasks to match their ability and additional support may be given by a support teacher to enable pupils to progress and demonstrate achievement. Children with SEND may be provided with specialist equipment, have room layouts adapted, given adult support and have additional time for tasks, when required. Sentence stems, word banks, adapted frameworks, and ideas repositories.

Health and Safety

This is an essential part of teaching Design and Technology. At all times, children must be taught and understand how to use and handle equipment and media safely, what to do in case of an emergency and how to be safe.

Any potential dangers of working with certain medias and tools will be discussed with the children first, and should not prohibit their use by children. Teachers will ensure that issues of Health and Safety are addressed in the planning and delivery of the curriculum.

Any risks are assessed by staff. In case of an emergency, classrooms have a first aid kit and access to additional first aid equipment across school.

All food will be checked for the use by date and the ingredients will be checked for allergies. A list of food allergies will be updated yearly. Before undertaking a food technology activity, a ParentMail will be sent to parents outlining the activity if it involves tasting the food. The class teacher/ teacher assistant will ensure that equipment, table tops, cooker etc. are clean and in working order.

Cleaning routines, including washing hands, will always be followed.

IMPACT

How does D&T support SMSC?

- Design & Technology enables children and young people to actively contribute to the creativity, culture, wealth and **well-being** of themselves, their community and their nation.
- It teaches how to take risks and so become more resourceful, **innovative, enterprising** and capable.
- Children develop a **critical understanding** of the impact of design and technology on daily life and the wider world.
- It provides excellent opportunities for children to develop and apply value **judgements** of an aesthetic, economic, moral, social, and technical nature both in their own designing and when evaluating the work of others.
- It provides excellent opportunities for children to develop and apply value judgements of **ethical and environmental issues,** particularly when learning about different materials, products and manufacturing.

How does D&T support personal development?

Design & Technology encourages development of a range of **personal learning and thinking skills** which are essential to success in learning, life and work.

- Boosting self-esteem and self-confidence.
- Recognition of success and progress.
- Recognition of abilities and achievements.
- Enhanced intrinsic value; tasks have a real purpose and importance.
- Children see a reason for learning and recognise a need beyond their own.
- They are useful and enjoyable. Learning is fun!
- Product evaluation has a real-life application and understanding.
- Independent Enquiry and Complex Problem Solving
- Creative and Critical Thinking
- Creativity and Reflective Learning
- Effective Participation; team work, negotiation, people management and co-ordinating others
- Self-Management; judgement and decision making
- Cognitive Flexibility; *the brain's ability to transition from thinking about one concept to another*.

How is D&T assessed and monitored?

- On-going assessment for learning is a continual process to support children in narrowing gaps and making progress.
- Lessons/activities may be adapted in light of on-going assessments.
- Summative assessments are recoded at the end of each project.
- Subject leaders carry out data analysis of the summative assessments to support further enquiries and action plans to ensure continued development and improvements.

- Bi-annual **Deep Dives** – subject team: children's voice, children's work, data analysis, coverage. action planning, report/presentation to governors
- Bi-annual **light touch reviews** – subject leader & deputy; children's work, pupil voice, review of action plan.