<u>Downholland Haskayne Design Technology Curriculum Statement</u>

Design and technology is an inspiring, rigorous and practical subject, that unlocks the creativity and imagination within all of our pupils. All children engage in designing and making products that solve real and relevant problems within a variety of contexts, whilst acquiring a broad range of subject knowledge taught progressively through the year groups. The children experience a rich DT programme, imparted by a DT specialist teacher. The curriculum has been tailored to teach a variety of creative and practical activities progressively throughout the year groups.

Our DT curriculum has been designed to ensure that the pupils of Haskayne experience a range of exciting, engaging and sometimes risk-taking experiences, that draw upon other subject skills such as mathematics, science, engineering, computing and art.

Pupils are taught the skills needed to participate in an engaging process of planning/designing, making and evaluating. We want to ensure that our pupils have all the skills required to achieve high standards in their DT creations, therefore basic skills such as cutting out, measuring and drawing accurately are taught and reinforced right through the school.

<u>How is DT taught at Haskayne?</u>

- **Timetabling DT -** Staff recognised that the teaching of DT was sometimes compromised due to time, therefore we decided to teach DT through discrete teaching days through the year, with classes off timetable for these days.
- **Structure of a lesson –** DT days will use following structure: plan/design, make and evaluate.
- **Evidencing –** Children's work will be evidenced through their final DT pieces, photographs and evidence in their DT folders. Each child has a personal file that is used to store their product planning and evaluation sheets. These files go up through the school with the pupil, so progression of skills will be evident.

<u>What do we expect to achieve through our DT curriculum?</u>

By the end of KS1, our pupils will be skilled in the following areas:

<u>Design</u>

- design purposeful, functional, appealing products for themselves and other users based on design criteria

- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make

- select from and use a range of tools and equipment to perform practical tasks, (or example, cutting, shaping, joining and finishing)
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria

Technical knowledge

- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms, (for example levers, sliders, wheels and axles), in their products.

Food Technology

- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from.

By the end of KS2, our pupils will be skilled in the following areas:

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, such as 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, (for example as gears, pulleys, cams, levers and linkages)
- understand and use electrical systems in their products, (for example series circuits incorporating switches, bulbs, buzzers and motors).