

- Lifting devices
- Space buggy/woven structures

Form 1

Key skills include:

- Develop problemsolving skills including the ability to plan and to make.
- Work independently and in groups, taking increased responsibility for their own work.
- Use a hammer and nails safely
- L

- Measure, mark out, cut and shape a range of materials, and assemble, join and combine components and materials accurately using finishing techniques to strengthen and improve the appearance of their product.
- Reflect on the progress of their work as they design and make, identifying ways that could improve their products carry out appropriate tests before making any improvements recognise that the quality of a product depends on how well it is made and how well it meets its intended purpose.
- Understand how the working characteristics of materials affect the ways they are used and how materials can be combined and mixed to create more useful properties.

These skills are developed in a wide range of contexts in each year:

Form 3

- An motor driven buggy
- A ball maze
- Electronic Matching Game

Form 4

- Fairground rides
- Electronic Textiles making a soft toy with internal circuitry
- Cams and Cranks mechanical engineering
- Prototyping and team problem solving through practical challenges

Form 5

- Technical Drawing
- LED with pressure switches
- Basic carpentry and joinery through making an jewelry box
- Desk lamp project.

Form 6

- Toothbrush/penholders
- Design Enterprise organizing a charity event.
- Clock faces using CAD/CAM

Further opportunities

In DT Clubs up to Form 4 these are some of the projects which also extend children's skills:

- Moles o wind chimes
- Sweet Dispenser
- Pewter Casting
- Soft toys for enterprise initiative
- Flight– making gliders
- Marionette puppets
- Storage container

For Form 5 and Form 6, DT Club offers the opportunity for choice based projects where individuals can be guided through a particular discipline. This may mean that an individual might be interested in developing carpentry skills or making a fabric bag. What one in these sessions also allows potential Scholarship pupils to build their portfolio of work.

Contribution to Spiritual, Moral, Social and Cultural Development

DT develops SMSC in a number of ways, including:

- Reflecting on products and inventions, the diversity of materials and ways in which design can improve the quality of our lives
- Opportunities to work as a team, recognising others' strengths, sharing equipment
- Develop imagination, intuition, inspiration and insight

- Develop creativity through risk taking, imagination, perseverance, evaluation and collaboration
- Understanding how products have been invented to solve problems from a wide range of needs around the world
- Through sharing in the ability to create and invent
- Developing perseverance