



Jerry Clay Academy
Subject Knowledge Organiser

Subject: D&T Year Group: 4 Term: Spring

Core Learning of This Unit:

The children will create a **moving toy** as part of their **Guardians of the Planet theme**.

As part of this, pupils should be able to select appropriate tools and techniques for making their product

; measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques; join and combine materials and components accurately in temporary and permanent ways

Some children may use simple graphical communication techniques to share and progress their ideas.

Prior Learning:

- Select tools and techniques for making their product
- Measure, mark out, cut, score and assemble components with more accuracy
- Work safely and accurately with a range of simple tools
- Think about their ideas as they make progress and be willing change things if this helps them improve their work
- Use finishing techniques strengthen and improve the appearance of their product using a range of equipment

National Curriculum Statements:

- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
- 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
- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- understand and use mechanical systems in their products [for example, gears, pulleys, linkages]

Key Vocabulary:

Adjustments
Alterations
Permanent
Axle
Motion
Procedure
Components
Cross-section
Enlarged view
Perspective drawing
Proportion

Significant People

- John Spilsbury – first jigsaw – 1767
- Frank Hornby – Meccano – 1900
- History of axel toys - During the nineteenth century in the United States, pinwheels provided many children with numerous hours of enjoyment and amusement.^[1] An Armenian immigrant toy manufacturer, Tegrn M. Samour, invented the modern version of the pinwheel, originally titled "wind wheel," in 1919 in Boston, Massachusetts.