

Jerry Clay Academy Subject Knowledge Organiser

Subject: D&T Year Group: 1 Term: Autumn

Core Learning of This Unit:

The children will create a machine as part of their Dungeons and Dragons.

As part of this, children will be able to Suggest ideas and explain what they are going to do; identify a target group for what they intend to design and make; model their ideas in card and paper; develop their design; make their design using appropriate techniques; with help measure, mark out, cut and shape a range of materials; use tools *eg scissors and a hole punch* safely; assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape; use simple finishing techniques to improve the appearance of their product. After completing their product, they should be able to evaluate based on how well it works in relation to the purpose, identifying strengths and possible changes as well as ask questions about what they have made and how they have done it.

Prior Learning:

- To show skill in making toys work by pressing parts or lifting flaps to achieve effects
- To use simple tools and manipulate materials to effect changes
- To construct with purpose in mind, using a variety of resources
- To handle tools, objects, constructions and malleable materials safely and with increasing control.
- To handle equipment and tools effectively
- To safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function

National Curriculum Statements:

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria
- design purposeful, functional, appealing products for themselves and other users based on design criteria
- communicate their ideas through talking, drawing, templates, mock-ups
- select from and use range of tools and equipment to perform practical tasks [for example, cutting, shaping]

Key Vocabulary:

Diagram

Design

materials

Evaluation

Template

Target audience

Measure

Technique

Mark

Cut

Shape

Join

Goggles

Hacksaw

g-clamp

masking tape

Significant People