DT Pattern of Learning

All DT topics should follow the same pattern of:

- Technical Vocab/ prior Knowledge
- Design
- Make (Prototype- paper or similar)
- Evaluate
- Make (final product)
- Evaluate

Orange- National curriculum objectives Blue- skills progression

Year 1:

- Technical Vocab/ prior Knowledge
 - Explore and evaluate a range of existing products
- Design
 - 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
 - o Draw on own experiences to help generate ideas
 - Suggest ideas and explain what they are going to do
 - Identify target group
- Make (Prototype- paper or similar)
 - o Model ideas in card or paper
- Evaluate
 - o Evaluate their ideas and products against design criteria
 - Develop design ideas applying findings
- Make (final product)
- Evaluate
 - Evaluate their ideas and products against design criteria

Year 2:

- Technical Vocab/ prior Knowledge
 - Explore and evaluate a range of existing products
 - o Generate ideas by drawing on their own and other people's experiences
- Design
 - 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
- Identify purpose and design criteria
- Make a simple drawing and label parts
- Make (Prototype- paper or similar)
 - Develop their design ideas through discussion, observation, drawing and modelling

Evaluate

- o Evaluate their ideas and products against design criteria
- Develop design ideas applying findings
- Make (final product)
- Evaluate
 - o Evaluate their ideas and products against design criteria

Year 3:

• Technical Vocab/ prior Knowledge

- o Investigate and analyse a range of existing products
- Understand how key events and individuals in design and technology have helped shape the world.
- Generate ideas for an item, considering its purpose and users

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.
- o Identify a purpose and establish criteria for a successful product
- o Plan the order of their work before starting
- Make drawing
- **Make** (Prototype- paper or similar)
 - Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.
 - o Explore, develop and communicate design proposals by modelling ideas
 - Make drawings with labels when designing

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Evaluate

- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- Make (final product)
- Evaluate
 - Evaluate their ideas and products against design criteria

Year 4:

Technical Vocab/ prior Knowledge

- o Investigate and analyse a range of existing products
- Understand how key events and individuals in design and technology have helped shape the world.
- Generate ideas for an item, considering its purpose for what they are designing
- Evaluate products and identify criteria that can be used for their own design

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.
- Make labelled drawings from different views showing specific features
- Develop a clear idea of what must be done, planning how to use materials, equipment and processes
- **Make** (Prototype- paper or similar)
 - Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.

Evaluate

- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- Suggest alternative methods of making, if the first attempts fail
- **Make** (final product)
- Evaluate
 - o Evaluate their ideas and products against design criteria

Year 5:

Technical Vocab/ prior Knowledge

- o Investigate and analyse a range of existing products
- Understand how key events and individuals in design and technology have helped shape the world.
- Generate ideas through brainstorming and identify a purpose for their product
- Use results of investigations, information sources, including

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.
- o Draw up a specification for a design
- Develop a clear idea of what must be done, planning how to use materials, equipment and processes

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• Make (Prototype- paper or similar)

o Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.

Evaluate

- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- Suggest alternative methods of making, if the first attempts fail
- Make (final product)

Evaluate

Evaluate their ideas and products against design criteria

Year 6:

Technical Vocab/ prior Knowledge

- o Investigate and analyse a range of existing products
- Understand how key events and individuals in design and technology have helped shape the world.
- Generate ideas through brainstorming and identify a purpose for their product
- Use results of investigations, information sources, including

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.
- o Draw up a specification for a design
- Develop a clear idea of what must be done, planning how to use materials, equipment and processes

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• **Make** (Prototype- paper or similar)

o Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.

Evaluate

- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- o Suggest alternative methods of making, if the first attempts fail
- Make (final product)

Evaluate

Evaluate their ideas and products against design criteria