



Medium-Term Planning



Subject: D&T

Term and Year:	Autumn 1 2021
Teacher:	Miss O'Neil
Subject:	D&T
Vocabulary that will be taught:	<ul style="list-style-type: none">• Castle• Turret• Moat• Flag• Tower• Gatehouse• Drawbridge• Battlements• Curtain walls

National Curriculum Objectives:

- 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
- Select from and use a wider range of tools and equipment to perform practical tasks [for example, 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
- 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

D&T Skills that will be taught and assessed:

- Designing a castle with key features to appeal to a specific person/purpose
- Drawing and labelling a castle design using 2D shapes, labelling: -the 3D shapes that will create the features - materials need and colours

- Designing and/or decorating a castle tower on CAD software
- Constructing a range of 3D geometric shapes using nets
- Creating special features for individual designs
- Making facades from a range of recycled materials
- Evaluating own work and the work of others based on the aesthetic of the finished product and in comparison to the original design
- Suggesting points for modification of the individual designs
- Identifying features of a castle
- Identifying suitable materials to be selected and used for a castle, considering weight, compression, tension
- Extending the knowledge of wide and flat based objects are more stable
- Understanding the terminology of strut, tie, span, beam
- Understanding the difference between frame and shell structure

Focus of each lesson 'Can I...' Statement(s)		Activities/Key points
Lesson 1	LO: To identify features of a castle in order to design a castle. <ul style="list-style-type: none"> • Can I identify different features of castles? • Can I design my own castle? • Can I label the features of my castle? 	<ul style="list-style-type: none"> • Discuss the features of a castle. • Design a castle using these features. • Discuss the shapes of the features.
Lesson 2	LO: To make a 3D design model of a castle. <ul style="list-style-type: none"> • Can I recall the features of a castle? • Can I add two design points to the Design Specification to appeal to the person/purpose of my castle? • Can I draw the design of my castle using 2D shapes, labelling: the 3D shapes that will create the features materials I need, colours I will use? 	<ul style="list-style-type: none"> • Watch the video on how to use the shape nets. • Use the design brief to design the castle model. • Peer review the models.
Lesson 3	LO: To use 3D nets to make the pieces of our castle. <ul style="list-style-type: none"> • Can I understand that a net is what a 3D shape would look like if it were opened out flat • Can I construct a range of 3D geometric shapes using a net by: Cutting along the bold lines, folding along the dotted lines, keeping the tabs the correct size, making crisp folded edges and constructing the net using glue to make a geometric shape 	<ul style="list-style-type: none"> • Recap the design brief. • Decorate and make the 3D shapes using the nets.

Lesson 4	<p>LO: To construct and evaluate my final product.</p> <ul style="list-style-type: none">• Can I construct my castle to meet the requirements of my brief by:-making neat 3D shapes using nets-stacking shapes and recyclable materials to make the structures of my castle-creating a castle base to secure my structures to-adorning my castle with facades and other decorative features?• Can I evaluate my work and the work of others?	<ul style="list-style-type: none">• Construct the castle after watching the video on how to ensure it is sturdy.• Review the design brief and decide if we have met it.• Discuss how their final design is or is not suitable for their audience and purpose.
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