Year 3 DT British Inventors- stable structures- Knowledge Organiser

Design and create a structure that is fit for purpose

Start to look at what could be added to a structure to improve stability such as dowelling and adding triangles to joints.)

Star Vocabulary

Reinforce concrete: making the concrete stronger
Modroc: another name for plaster bandage
Waterproof: resistant to water
Desirable: wished for as being an attractive, useful, or necessary course of action
Origami: the Japanese art of folding paper into decorative shapes and figures
Flexible: capable of bending easily without breaking

Overview

You will be learning about different inventors and the impact their inventions have had on Britain. You will be asked to evaluate the different inventions and discuss whether the impact they have on people today are positive or negative.

Key Skills - Designing
Purpose -What it is for? User - Who will use it?

Key Skills
Planning- explaining plans for design. Making sure the folds are done correctly. Measurements are accurate.
Generate- refer to research while talking about your product. Follow instructions for the origami boats carefully.
Develop- peer discussions and evaluation.

Purpose
Boats need to be waterproof so that it can transport material and people without getting them wet or damaging them.

User
Boats are used for travel, recreation, sports, fishing, transportation, military use and for rescue operations

Making and Evaluating

Making
Work creatively with a range of materials, with some control.
Waterproof materials can be made by layering fabric with natural rubber.
Make sure you can fold the paper when a waterproof material is being used.

Evaluating
How did you waterproof your material?
How well was the material protected from water?
How easy was it to fold the paper once it had been waterproofed.
Why did you use the chosen waterproof material?

Timeline

Research the different Inventors and what their inventions were.

Discuss and decide which designs were successful and why?

Design and create your invention.

Make you invention using a stable structure.