Buglawton Primary School

Be the Best We Can

Topic: Structures	Subject: DT	Year: 4	Term: Spring

What should I already know?

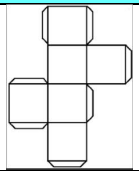
- Know how to make freestanding structures stronger, stiffer and more stable.
- Understand how to identify a target group for what they intend to design and make based on a design criteria.
- Know and use technical vocabulary relevant to the project.

What will I know by the end of the unit?

- Know how to measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques.
- Understand how to reinforce and strengthen a 3D framework.
- Develop and use knowledge of nets of cubes and cuboids and, where appropriate, more complex 3D shapes.
- Know and use technical vocabulary relevant to the project.

What should I be able to do by the end of the unit?

- Start to generate ideas, considering the purposes for which they are designing- link with Mathematics and Science.
- Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail.
- Identify the strengths and areas for development in their ideas and products.
- When planning explain their choice of materials and components according to function and aesthetic.
- Select a wider range of tools and techniques for making their product safely.
- Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques.
- Start to join and combine materials and components accurately in temporary and permanent ways.
- Reinforce and strengthen a 3D framework.
- Start to evaluate their work both during and at the end of the assignment. Be able to disassemble and evaluate familiar products and consider the views of others to improve them.
- Evaluate the key designs of individuals in design and technology has helped shape the world.

Prior Key Vocabulary	
fold	**join**
	
to bend over on itself	to connect or link together
strong	**strengthen**
	
able to withstand force	to make stronger
weak	**structure**
	
not able to withstand force	an object built using many parts
Key vocabulary	
3D	**net**
	
3 dimensional	how a 3D shape looks when it is opened out flat

Agreed Real-Life Outcome:
Create a bridge that goes over a make-shift river. Can it hold a toy car as it travels across?
Significant people:
Isambard Kingdom Brunel

assemble	reinforce
	
putting something together	To strengthen and support with additional material