Harrowbarrow School: Design Technology

Topic	World War 2	Year/s	5/6	Term	Autumn

What I should know already

I can use ideas from other people when I am designing.

I can produce a plan and explain it.

I can evaluate and suggest improvements for my designs.

I can evaluate products for both their purpose and appearance.

I can explain how I have improved my original design.

I can present a product in an interesting way.

I can measure accurately.

I can persevere and adapt my work when my original ideas do not work.

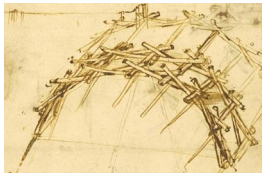
Vocabulary

span	The distance between two points.
transport	Take or carry (people or goods) from one place
mobile	Able to move or be moved freely or easily.
engineering	The design, building, and use of engines, ma-
manufacture	To make something on a large scale using ma-
criteria	A standard by which something may be judged.
evaluate	To decide the value of something.
function	To work in a proper or particular way.
features	A unique quality that something has.

Important facts

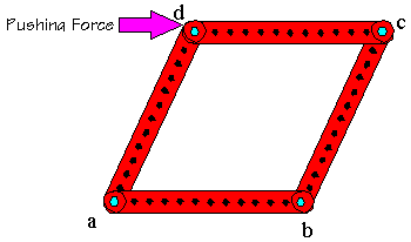
During World War 2, retreating armies often blew up bridges to prevent the enemy from crossing rivers and to halt their advance.

In 1502, Leonardo Da Vinci designed a pole bridge that could be transported on carts by invading armies.

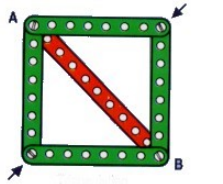


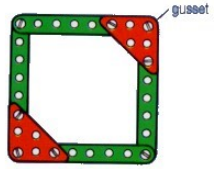
During WW2, British engineers designed a tank bridge and the Bailey bridge which could be transported to river crossings.

Key knowledge/diagrams



A parallelogram is weak as it can be pushed over.





Triangulation creates strength in structures.

A floating bridge has to be able to rise and fall with the tides and deal with river currents, otherwise it will fail.

What I should know by the end of this unit

I can come up with a range of ideas after collecting information from different sources.

I can produce a detailed, step-by-step plan.

I can suggest alternative plans; outlining the positive features and draw backs.

I can evaluate appearance and function against original criteria.

I can use a range of tools and equipment competently.