



Knowledge Mat: Sculpture (Bridges)

How does this link to GROW?

O: Outstanding Knowledge and Skills - To develop accuracy in my cutting and sculpting skills to create a wooden truss bridge



Key Knowledge:



Forces can change the shape of objects or make them begin to move, speed up or slow down.

Subject Specific Vocabulary

reinforce	to make a structure or material stronger, especially by adding another material or element
structure	something which stands, usually on its own
truss bridge	a bridge which is build from a series of triangular beams
tension	a stretching force caused by two parts of a structure being pulled apart
compression	a squashing force caused when parts of a structure are pushed together
accurate	neat, correct shape, size and pattern with no mistakes
coping saw	a saw with a narrow D-shaped metal blade



Truss bridge



Suspension bridge



Beam bridge

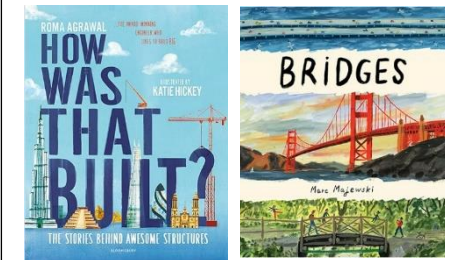


Arch bridge

Gravity is a force which pulls everything towards the centre of the Earth. The weight of something is the force that the Earth's gravity is having on it.



Books you might like:



What I've learnt previously:

I have learned to design purposeful and functional products based on design criteria by selecting from and using a range of tools and equipment to cut, shape and join materials I have chosen.

This will help me to:

Use a wider range of tools and equipment to perform practical tasks like cutting with a coping saw and a tenon saw. I will use these skills and the technical knowledge I will build in this unit to create a wooden truss bridge that can support a load.