

KNOWLEDGE BASED QUEST

YEAR 5 Building bridges - Construction – Levers and pulleys

<u>Vocabulary</u>	<u>Word definition</u>
Construction	the action of building something, typically a large structure
Bridges	a structure carrying a road, path, railway, etc. across a river, road, or other obstacle
Levers	a rigid bar resting on a pivot, used to move a heavy or firmly fixed load with one end when pressure is applied to the other
Pulleys	a wheel with a grooved rim around which a cord passes, which acts to change the direction of a force applied to the cord and is used to raise heavy weights
Trusses	a framework, typically consisting of rafters, posts, and struts, supporting a roof, bridge, or other structure
Pillars	a tall vertical structure of stone, wood, or metal, used as a support for a building, or as an ornament or monument
Arch	a curved symmetrical structure spanning an opening and typically supporting the weight of a bridge, roof, or wall above it.
Material	the matter from which a thing is or can be made

Why do we need bridges?

What material do we use to build bridges?

Could we build just one type of bridge?

How many different kinds of bridges can you think of?

Do you know the length of the world's longest bridge?

Can you name some of the most well-known bridges?

Think of examples where bridges need to have levers and pulleys built in, can you tell me why they are needed to be included in their construction?



Types of bridges: Based on Structure



