## Year 5 - Building Bridges

Key Vocabulary	
Stable	A structure that is not likely to fall
Structure	over.
Stabilise	To make something strengthen or support something.
Beam	A length of sturdy material that has
	been cut and shaped to span a gap or support a floor/roof.
Pillars	A structure that can span bigger
	gaps. Made from stone, steel,
	concrete etc.
Truss	Made up of many beams connected
	together in different ways.
Arch	A curved structure, usually made
	from stone steel or wood frame.
Suspension	A bridge made from cables attached
Bridge	to pillars at anchorage points.



Tower Bridge, London



Clifton Suspension Bridge, Bristol



Queensway Bridge, Manchester



St Stephen's Kearsley Moor

CE Primary School **Believe and Achieve** 

### Sticky Knowledge:

A structure is **stable** if it is not likely to fall over or collapse.

Beams and Pillars are used to strengthen and stabilise a bridge construction.

Truss, Arch and Suspension are type of the most commonly used bridge designs.

Bridges are used to connect to a gap, e.g., crossing rivers, cliffs etc.

# Design a **Prototype** Bridge

## Golden Threads



Stable Structure



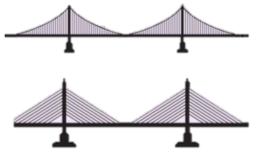
#### **Types of Bridges:**



Truss Bridges



Arch Bridges



Suspension Bridges



Combining these designs to create a strong stable structure.