



DT

Year 2 Knowledge Organiser— Terrific Towers

Key Questions



DT

Vocabulary

Key Vocabulary	Definition
Technical drawing	A drawing that shows how something is constructed
Structure	a building or other object constructed from several parts.
Free standing	not attached to or supported by another structure.
Architect	A person that designs buildings
Specification	A detailed requirement
Aesthetic	An appreciation of beauty or art.
Stable	(of an object or structure) not likely to give way or overturn; firmly fixed.
Vertical	at right angles to a horizontal plane; in a direction, or having an alignment, such that the top is directly above the bottom.
Mock-up	a model or replica of a machine or structure, used for instructional or experimental purposes.

How do types of structures effect stability of build? What are towers made from?

How are structures joined?

What are the purposes of towers?

Key Designers

Gustave Eiffel

December 15, 1832— December 27, 1923



Key Facts

Gustave Eiffel was a French engineer who designed and oversaw construction of the Eiffel Tower.

Gustave Eiffel began to specialize in constructing with metal after college, and his early work focused chiefly on bridges.

In 1882, Eiffel began work on the Garabit viaduct, which was, at the time, the highest bridge in the world. Soon thereafter, he began work on what would become known as the Eiffel Tower, the structure that would cement his name in history.

Early Life

Eiffel is most famous for what would become known as the Eiffel Tower, which was begun in 1887 for the 1889 Universal Exposition in Paris. The tower is composed of 12,000 different components and 2,500,000 rivets, all designed and assembled to handle wind pressure.

The tower also directed Eiffel's interest to the field of aerodynamics, and he used the structure for several experiments and built the first aerodynamic laboratory at its base

Work Examples



Timeline

Edmund Cartwright
1743— 1823

Isambard Kingdom Brunel
1806-1859

Samuel Fox
1815-1887

Gustave Eiffel
1832- 1923

Joseph Strauss
1870—1938

Richard Reed
1973-present