

Max's Magnificent Structures

Build Better, Build Stronger: Master the Art of Engineering!

- **Stability** is how well a structure stays upright without wobbling or falling over.
- **Triangulation** involves adding diagonal beams to create triangles, which helps stop a structure from changing shape.
- **Compression** is a squeezing force that pushes materials together; strong materials like stone are great at handling this.
- **Tension** is a pulling force that stretches a material, like the cables on a suspension bridge.
- **Reinforcement** means adding extra support, such as beams or struts, to make a structure hold more weight.

Did you know? Did you know? Engineers often use triangles in their designs because triangles are the strongest shape! Unlike squares, which can wobble or collapse into a parallelogram, a triangle keeps its shape even when pushed from the side. This is why you see them in bridges and tall towers everywhere.

Key vocabulary: Compression · Tension · Reinforcement · Triangulation · Stability · Strut