Topic 7

Stable Structures

Stability

- Structures must be stable when being built
- Flat ground is important for stability
- Centre of gravity always falls in a straight line - pg 332

Unbalanced structures

- To find out if a structure is stable, draw a line straight down from the centre of gravity
- If the line falls outside the structure, it is unstable

Foundations

- We sink pilings (large metal or concrete cylinders) through loose soil
- Make a solid layer by packing soil before paving
- Spread the load out, using wide footings

Rotation

- While riding a bike, it is hard to balance while moving slowly
- Gyproscopes can be built to spin thousands of times per minute, to balance a structure

Questions

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