

EXPLORING ENGINEERING

Workshop Vocabulary



ENGINEERING & LANDSCAPE

Bridge: A structure built to go over a gap, like a road, a river, or a railway.

Valley: A low area of land between hills or mountains, often with a river running through it.

Cliff: A very steep, vertical rock face, usually found by the sea or in the mountains.

Sustainable: Using things in a clever way so they don't run out or hurt the planet. It means making things last for a long, long time!

THE SCIENCE OF STAYING STILL

Stable: Something that is steady and not likely to tip over or fall down.

Balance: When different parts are equal in weight or strength so that something stays upright.

Balancing Forces: When forces pushing or pulling on an object are the same size but acting in opposite directions they cancel out. This makes the object stay still instead of moving.

THE SCIENCE OF FORCES

Force: The scientific word for a push or a pull that can make something move, stop, or change shape.

Contact Forces: These are "touching" forces. They only happen when two things actually hit or rub against each other (like kicking a ball).

Gravity: An invisible force that pulls everything down toward the centre of the Earth. It's the reason your toast falls on the floor instead of floating to the ceiling!

CONTACT FORCE

NON-CONTACT FORCE



Friction is a force that happens when two surfaces rub against each other. It's like a sticky force that makes things harder to move smoothly.



Resistance is a force that happens when something tries to slow down or stop another thing from moving. Even though we can't see air it creates resistance.



Gravity is a force that pulls objects towards each other. On Earth, it is what keeps us on the ground and what makes things fall down.