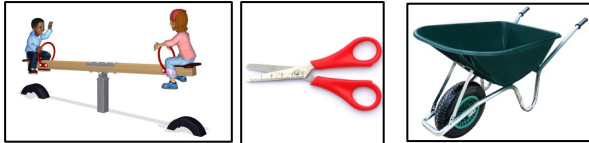




Oh I Do Like to be Beside the Seaside How can I move a heavy object?

What is a lever?

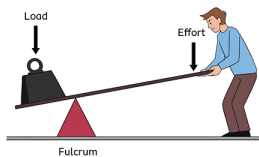
A lever is a simple machine that allows us to lift an object with less effort.



How does a lever work?

A lever is made up of three parts:

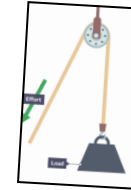
1. **Fulcrum** - The point where the lever pivots or balances.
2. **Load** - The object you are trying to move.
3. **Effort** - The force you apply to move the load.



A lever works by using a bar that rests on a fulcrum. When you push down on one side, the other side moves up! Depending on where the fulcrum is placed, levers can make lifting heavy things much easier.

Why use a pulley system?

A pulley system helps us lift heavy things more easily! It uses a wheel and a rope to move objects up, down, or across. Pulleys reduce effort, making lifting easier!



How It Works:

- A pulley is a wheel with a rope wrapped around it.
- When you pull one end of the rope, the other end moves, lifting or lowering an object.

Why Use Pulleys?

- Lifting Heavy Objects | Moving Things Up and Down | Saving Energy

A funicular railway is an example of a pulley system.



Why do we have gears on a bike?

Gears are special wheels with teeth that fit together to help things move!



How They Work:

- When one gear turns, it makes the other gear turn too.
- Gears can change speed, direction, or power to make machines work better.

When you turn a big gear, the smaller gear will turn faster.

Applying Our Past Knowledge

We will apply our knowledge of forces from Year 3 when we looked at how different things move.



Key Vocabulary

Moving Surface	anything that moves while you stand or place something on it.
Mechanism	a set of parts that work together to make something move or do a job.
Force	a push or a pull that makes things move, stop, or change direction.
Transfer	Move from one place to another