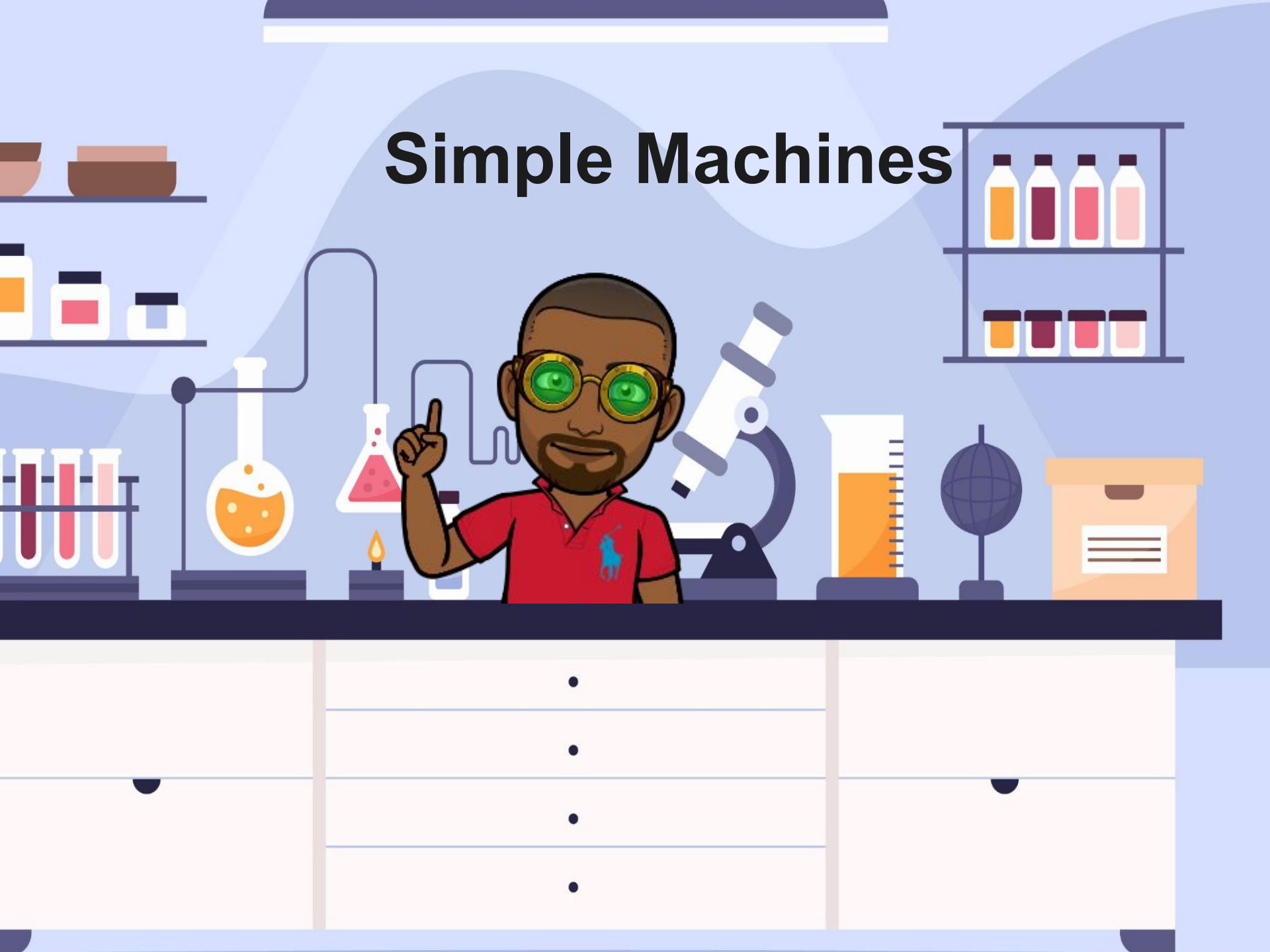


# Simple Machines



# What Is a Simple Machine?

A simple machine changes the direction or size of a force. It makes it much easier to pull or push something over a longer distance.



MM

# How Many Simple Machines Are There?

There are six types of simple machines:

levers

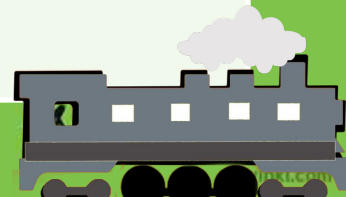
screws

wheel and axles

inclined planes

pulleys

wedges



# Lever

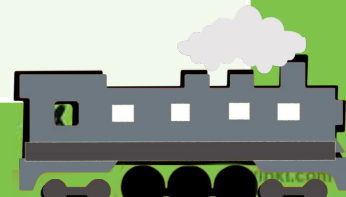
Levers are everywhere in our daily life and examples include:

see-saws

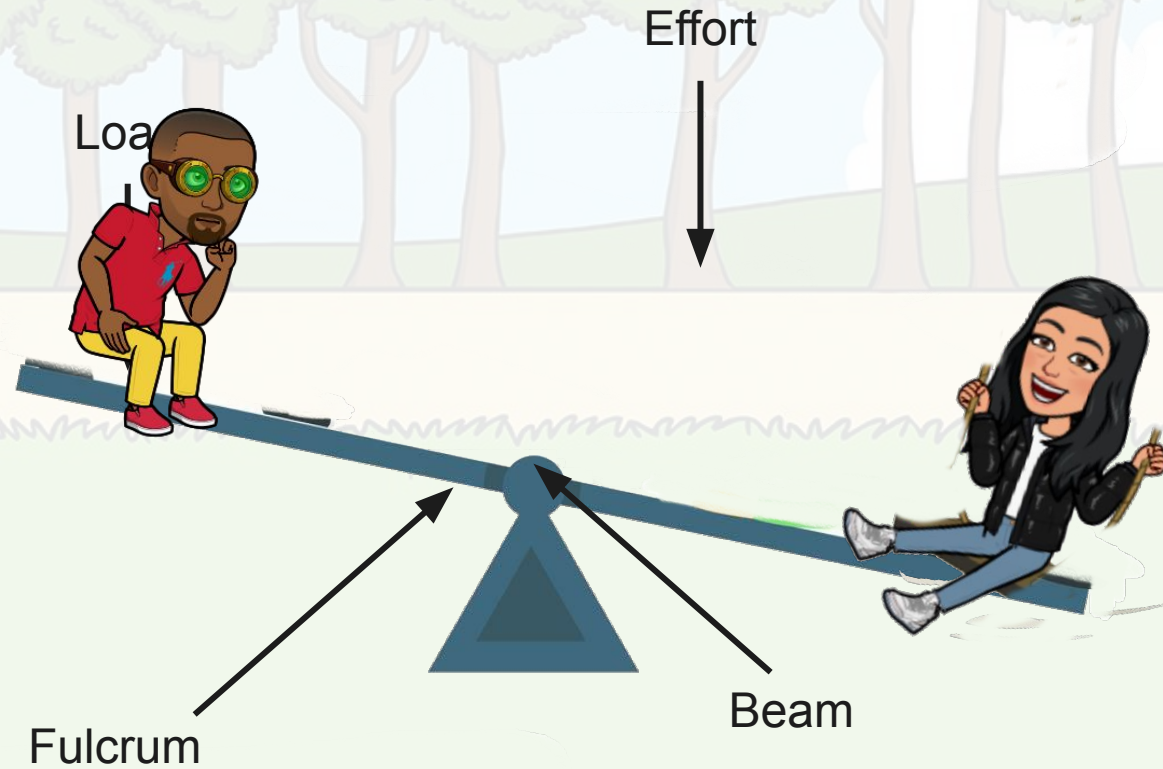
oars

wheelbarrows

scissors



# Lever



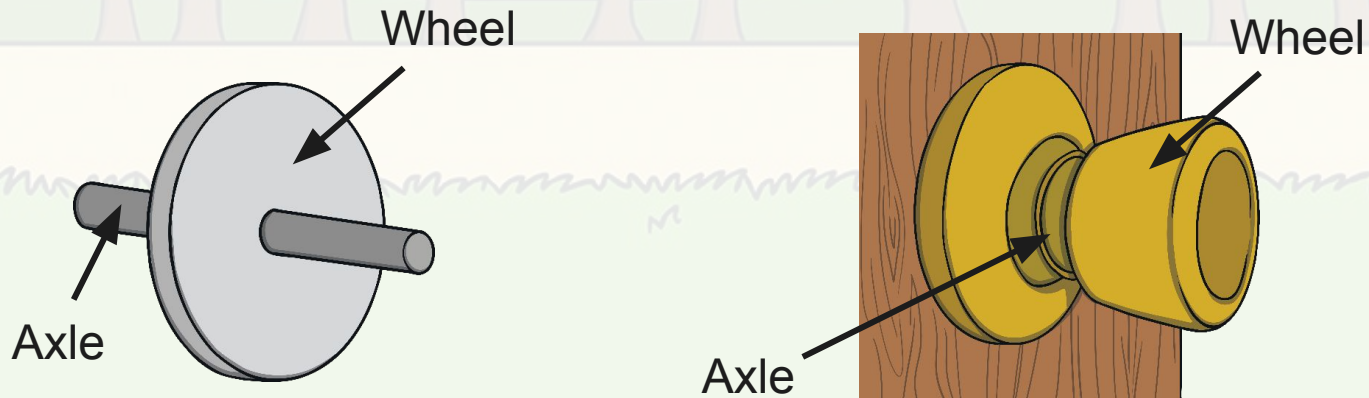
Examples of objects that use levers, include seesaws, oars, wheelbarrows and scissors.



# Wheel and Axle

This type of simple machine is the most common.

Wheels cannot work without axles.



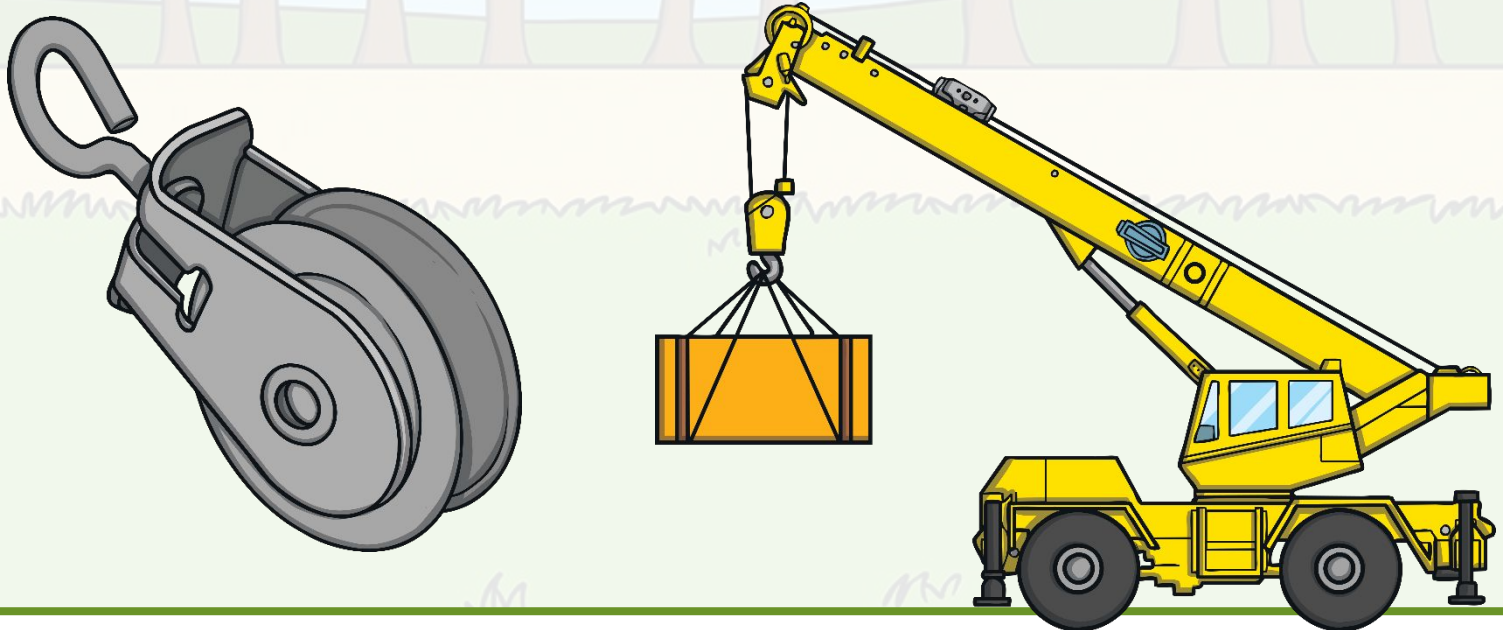
Force is used to turn the wheel, which then causes the axle to turn. Examples of wheels and axles being used in everyday life include screwdrivers, skateboards and doorknobs.



# Pulley

A pulley is a rope or chain with a wheel and axle attached.

Using a pulley means that heavy loads can be lifted without much effort.



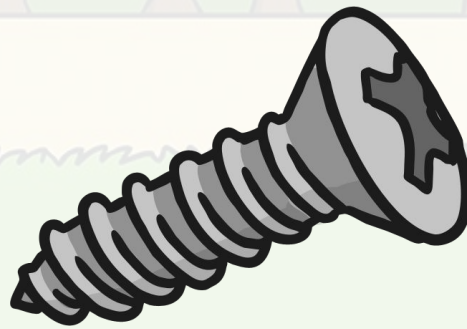
Examples of objects that use pulleys include lifts, cranes and wells.



# Screw

A simple machine that uses a screw allows something to move from a lower position to a higher position by moving it in a circle.

Examples of screws in everyday life are:

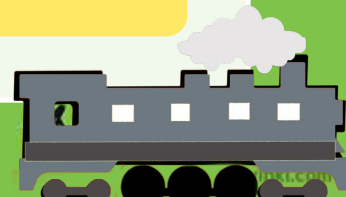


a jar lid

a tap

a drill

the end of a lightbulb





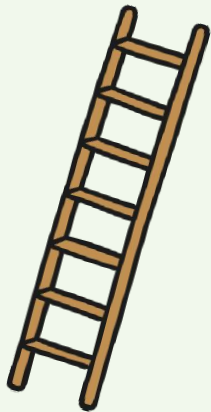
# Inclined plane

Some simple mechanisms use an inclined plane.

Inclined means sloping.

On an inclined plane, one end is lower than the other end. This allows things to travel from the higher end to the lower end, or vice versa, with little effort.

There are inclined planes all around us, such as:

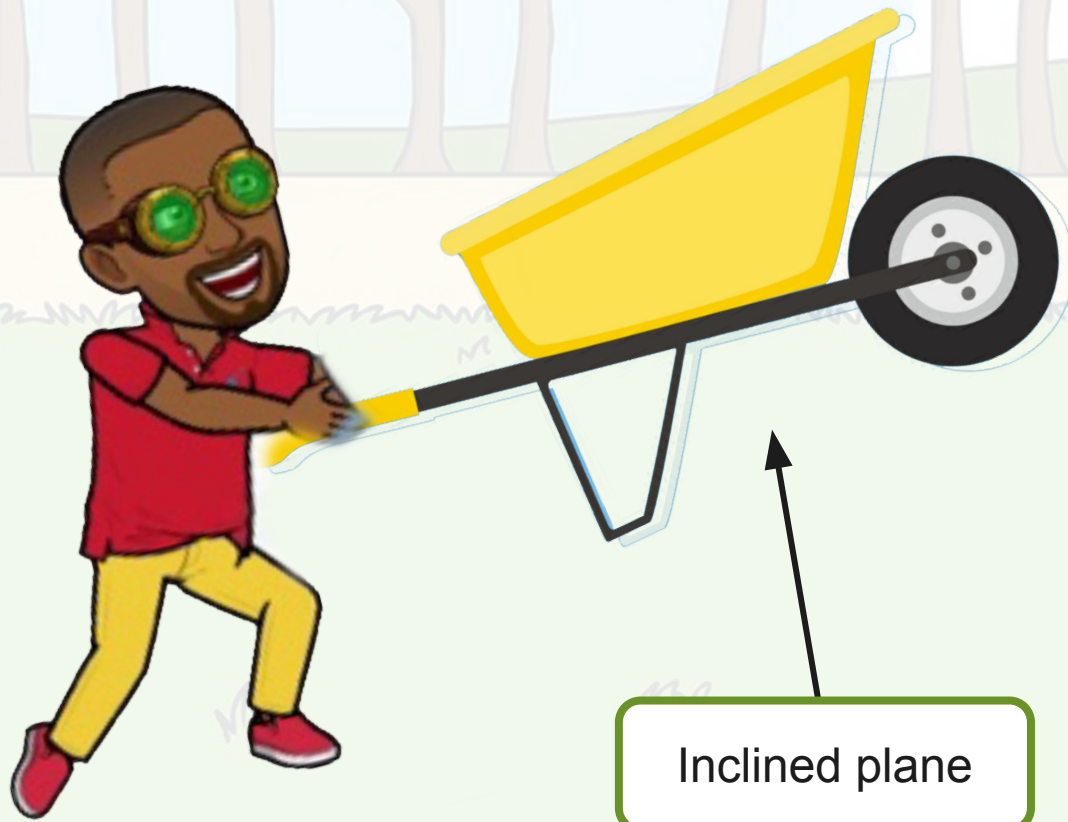


slides

**ladders**

ramps

# Inclined plane



Inclined plane

# Wedge

A wedge can be used to separate an object. It is usually triangular shaped.

An example of this is an axe, which is two inclined planes.

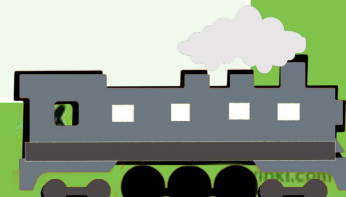
Wedges can also hold things together and stop them from moving.

Example include:

staples

nails

doorstops



**Can you remember the six simple machines?**

