

Marvellous Machines

Year 6

FACTfinder

A **machine** is a device that is created by people (man-made) to make work easier and multiply human effort. There are six simple machines (shown below).

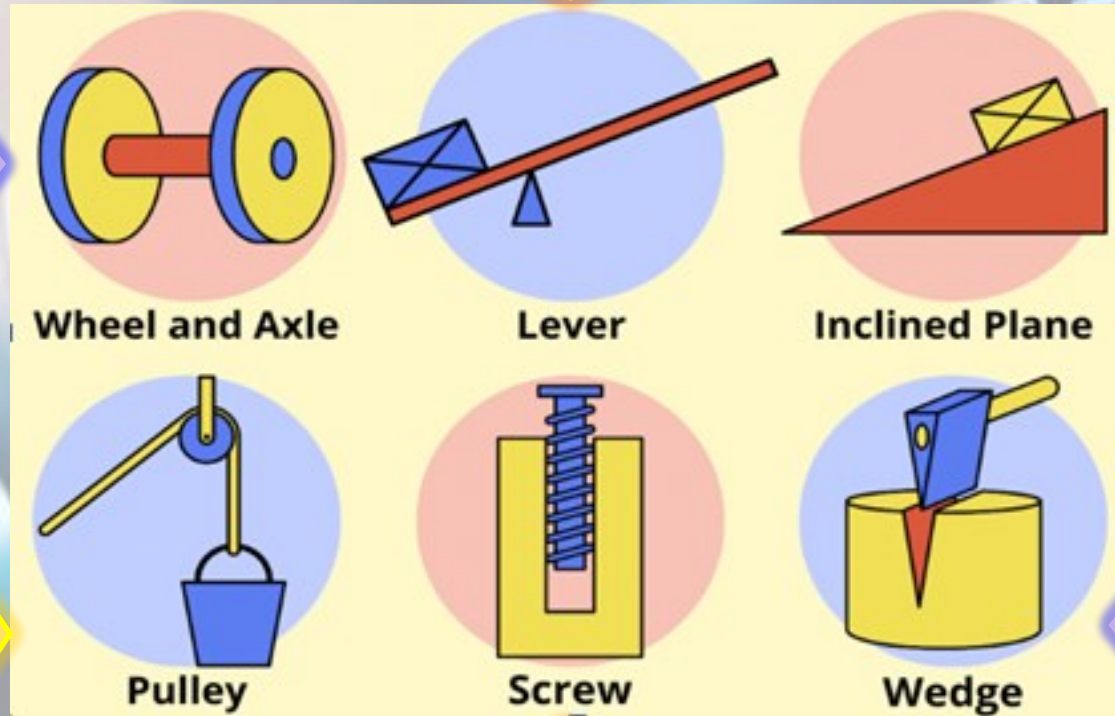
A **lever** is a bar with a balance point called the fulcrum. Everyday levers help us to lift, move, break, squeeze objects and cut things.



An **axle** is a bar that goes through the **wheels**, keeping them in place and allowing them to turn. Every vehicle with wheels has an axle.



An **inclined plane** allows objects to move from a higher to a lower point with less human effort — and vice versa.



Wheel and Axle

Lever

Inclined Plane

Pulley

Screw

Wedge

A **pulley** is a rope or chain, with a wheel and axle attached. With a pulley, heavier loads can be lifted with less human effort.



A **screw** allows something to move from a lower position to a higher position in a circular motion.



A **wedge** is used to separate an object or to hold objects together and stop them from moving.



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Wray Common Citizens
*This half term, our assemblies will explore our school value of **justice**, helping pupils understand what it means to act fairly and treat others with respect. We will be linking this value to the **British Values**, guiding children to recognise the importance of treating everyone with equality and kindness. Together, we will reflect on how our values at Wray Common help create a fair and supportive community, and how we can show respect for others while standing up against unfairness.*

English
We will be writing persuasive adverts for our invented spy gadgets and then instructions on how to train or capture a mythical creature.

Maths
We will be learning key facts and exploring measurement, percentages and ratio – then applying this knowledge to a variety of problems.

PSHE
Life skills including personal, social, health, spiritual, cultural and economic will focus on personal safety and online safety.


RE
In RE, we will be learning about Islam. We will explore how the Pillars of Islam help Muslims lead a good life.

Science
We will investigate the link between the brightness of a lamp, or volume of a buzzer, by varying the number of batteries and the voltage used in a circuit.

Computing
We will be using Python Coding to create algorithms and programming, with a specific focus on designing a program to achieve a specific goal.

PE
We will use our knowledge of compositional principles, develop our physical gymnastics skills, collaboration and reflective skills.
We will also continue to work towards our swimming targets.

CAPTURE
We will be using CAPTURE in our learning by collaborating. We will be discussing, thinking and contributing to group discussions, responding in class and building on ideas.



DT
This half term, our focus is on using the six simple types
Once we have explored how these work, we will be creating toys incorporating these machines.

