

# GLOSSARY

Click on the term or the definitions to hear the words and explanations of the key terms on this unit.

**STRUCTURE:** a group of connected elements capable of supporting weight. Structures have horizontal girders<sup>1</sup> for the load<sup>2</sup> and pillars<sup>3</sup> to support it.



<sup>1</sup> **Girder:** a beam, bar or board which supports the load in a structure.

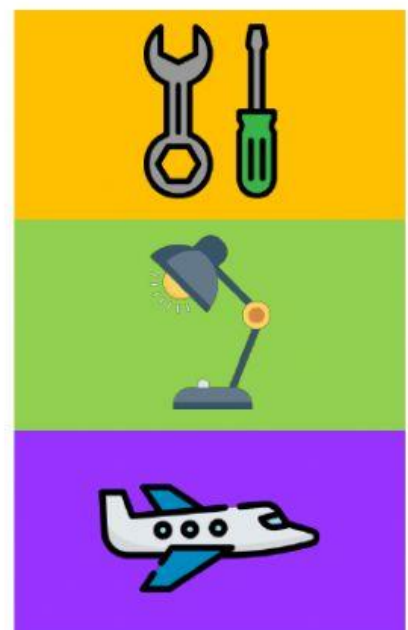
<sup>2</sup> **Load:** a weight to be moved by a machine or supported by a structure.

<sup>3</sup> **Pillar:** a vertical post or rod which supports the girder in a structure.

**MACHINE:** a device made of different materials that help us complete tasks with less effort. We can classify machines in two ways:

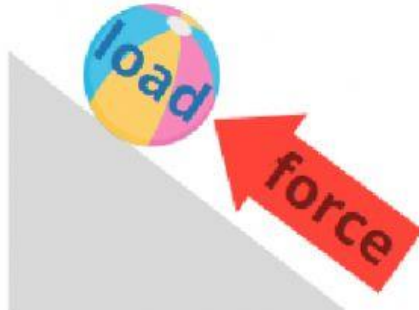
a) Depending on the **type of energy** they use:

- **MANUAL MACHINE:** a machine which uses human or animal energy to work.
- **ELECTRICAL MACHINE:** a type of machine which uses electrical energy to work.
- **THERMAL MACHINE:** a type of machine which uses the energy obtained by burning fuel.

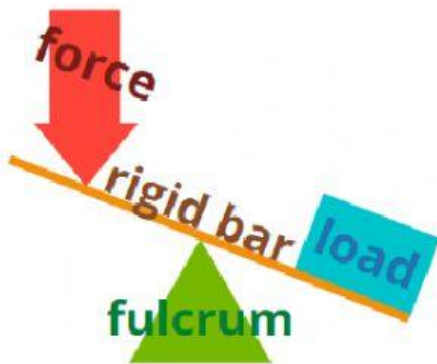


b) According to the **number of parts they have**:

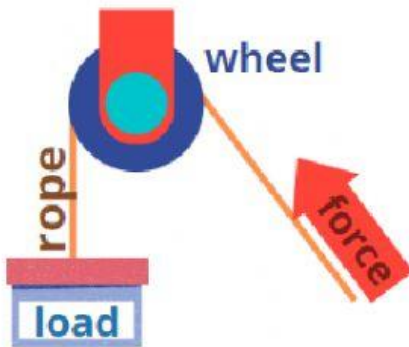
- **Simple machine:** a machine made from only one or very few parts.



**INCLINED PLANE:** a simple machine with an inclined board along its smooth surface, used to slide or drag objects.



**LEVER:** a simple machine made up of a **rigid bar** which moves up and down over a fixed point (named "**fulcrum**") to transmit and increase the force applied.

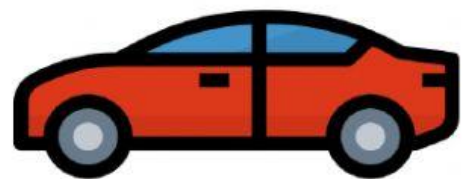


**PULLEY:** a simple machine made up of a **wheel** with a groove\* through which a **rope** moves.

\* **Groove:** part of the wheel that fixes the rope to it.



- **COMPLEX MACHINE:** a machine made from many different parts.



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