

# Simple Machine

# The Lever

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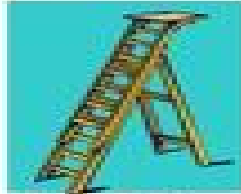
# What is a Simple Machine?

A basic device that is used to change the direction or the magnitude of a force applied on it.

## Simple Machines



Lever



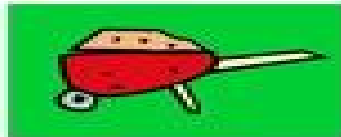
Inclined Plane



Wedge



Pulley



Wheel and Axle



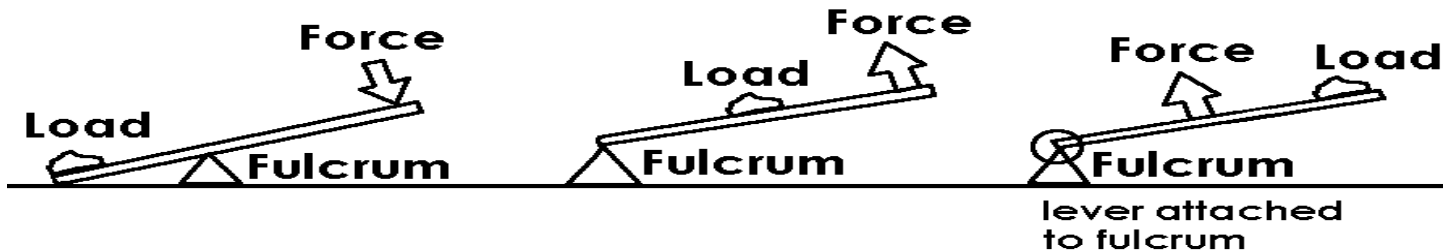
Screw

# What is the Lever?

- A lever is a type of simple machine
- It is comprised of the fulcrum, a effort and a load
- A lever has 3 different class.
- Uses: Weighing objects

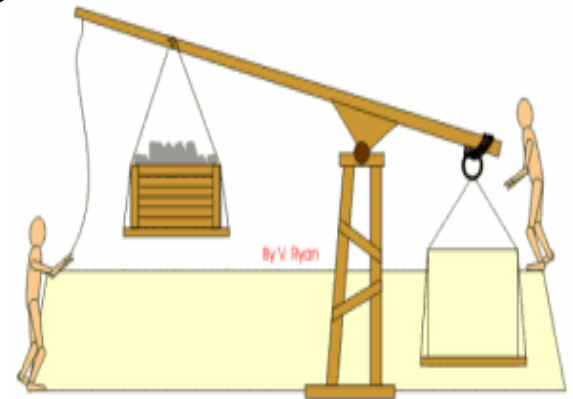
Increasing force output

Placing force on to a object



# Date of Usage and Name-Giver

- Archimedes(an ancient greek mathematician) he gave the description for the lever and the three different class.
- In early times, the egyptians used the lever to lift piles of rocks from one lower plane to a higher plane
- The egyptians also used them to lift obelisks as well.



# First Class Lever

- A First class lever is a lever with the fulcrum in the between the effort and the load
- Some examples of a First class lever are
  - Scissors
  - Balances
  - Oars



# Second Class Lever

- A Second Class lever has the fulcrum and effort on opposite end of the lever with the load in between.
  - There are multiple objects that is a second class lever such as:
    - Wheelbarrow
    - Paper Cutter
    - Stapler



# Third Class Lever

- A Third Class lever has the fulcrum on one end, the effort in the middle section, and the load on the opposite end of the lever.
- According to weebly.com there are multiple objects that is like such as:
  - Arm
  - Fishing Rod
  - Golf Club





# Bibliography

- <http://www.ohio.edu/people/williar4/html/haped/nasa/simpmach/lever.htm>
- [http://986181808561931607.weebly.com/\(first/second/third\)-class-lever.html](http://986181808561931607.weebly.com/(first/second/third)-class-lever.html)
- New Way Things Work by: Houghton Mifflin
- [www.thefreedictionary.com](http://www.thefreedictionary.com)
- <http://science.howstuffworks.com>
- [www.school-for-champions.com](http://www.school-for-champions.com)
- [www.enchantedlearning.com](http://www.enchantedlearning.com)