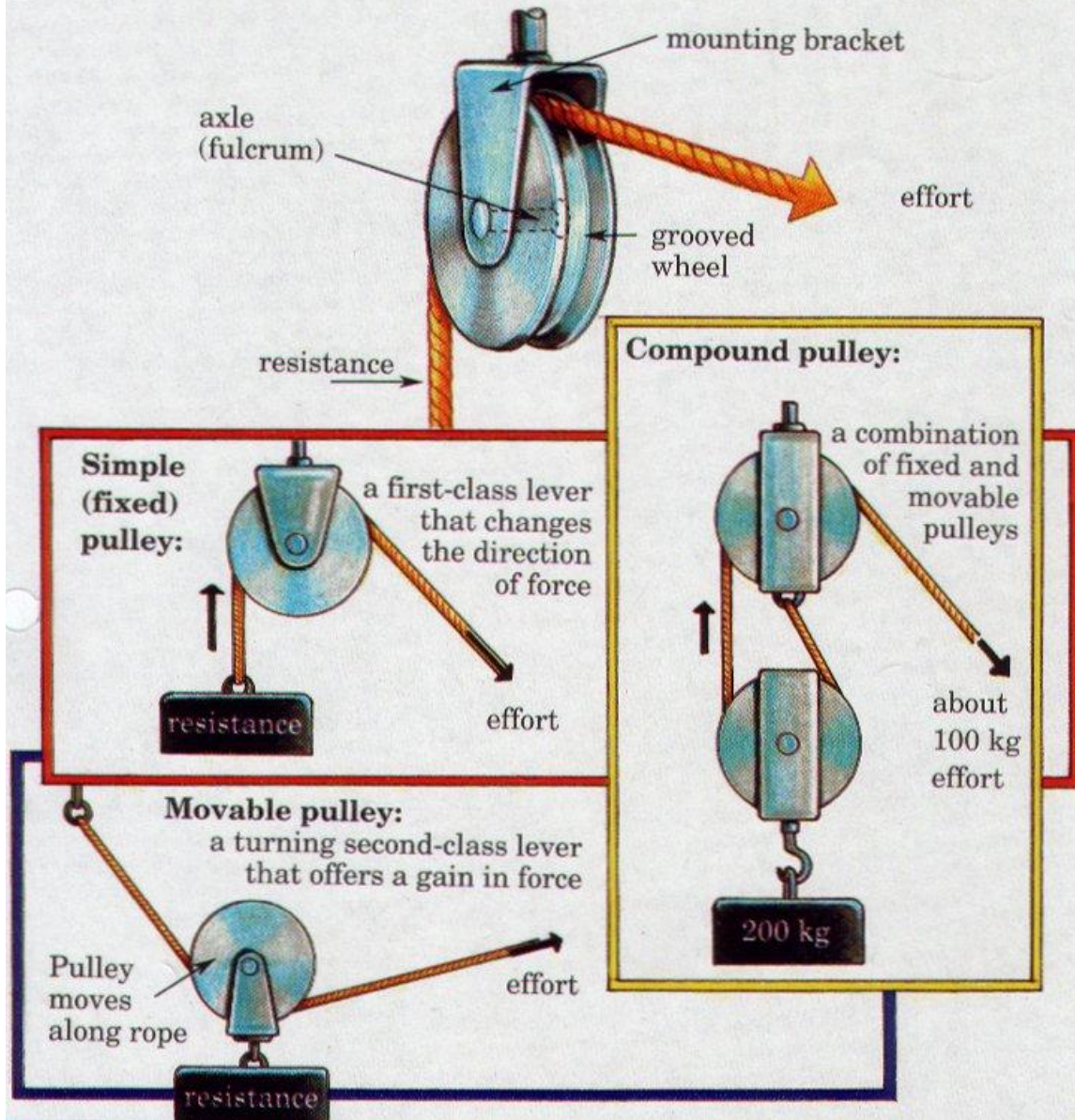


There are three kinds of pulleys  
Simple (fixed), Compound, and Movable

## The Pulley

A pulley is a wheel that turns around an axle.



1. A Pulley is a Grooved Wheel that turns around an Axle (Fulcrum), and a rope or a chain is used in the groove to lift heavy objects.
2. A Pulley changes the direction of the Force – Instead of lifting up, you can pull down using your body weight against the Resistance (load, what you are lifting).
3. A Pulley may be Fixed, Moveable, or used in combination.
4. The Simple Pulley gains nothing in Force, Distance or Speed, but it changes the Direction of the Force.
5. A Fixed Pulley (attached to something that doesn't move such as the ceiling or wall) acts as a First Class Lever with the Fulcrum located at the Axis, instead of a bar the Pulley uses a Rope.
6. A Moveable Pulley acts as Second Class Lever, the Load (Resistance) is between the Fulcrum and the Effort.
7. Samples of Pulleys in use – On Top of the Flag Pole to Raise and Lower the Flag, To Hoist a Sail, to Open Curtains or Mini Blinds, To Lift Hay into a Hayloft.

