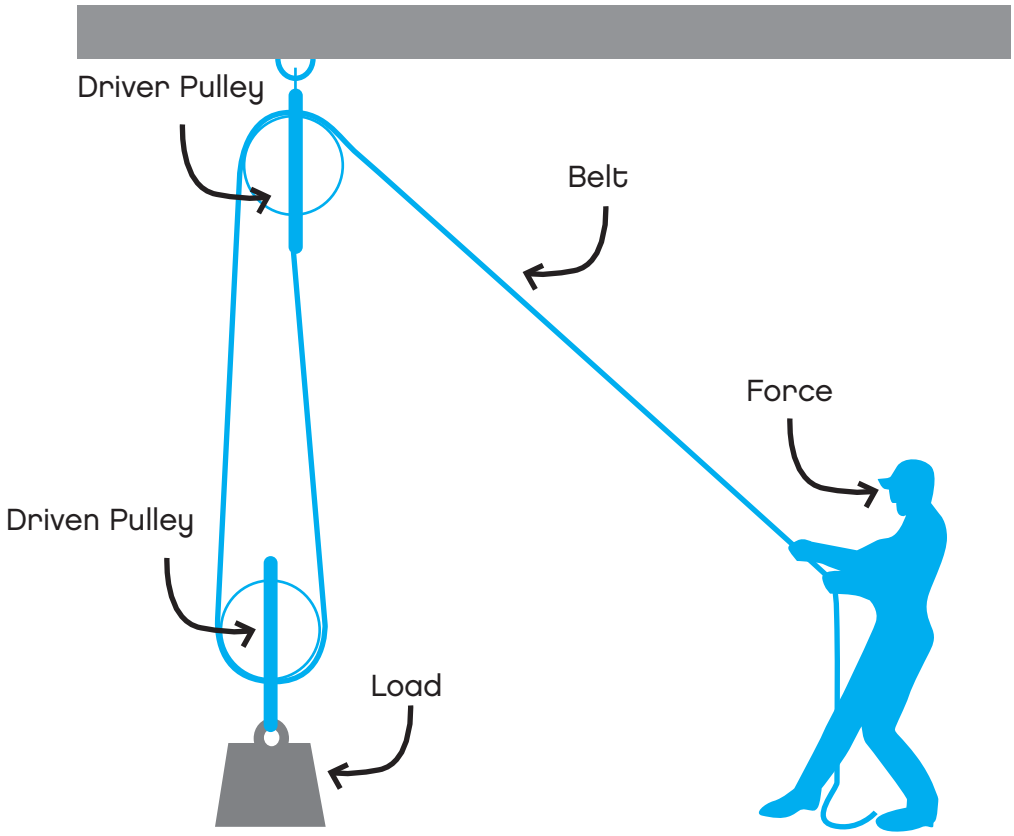
Pulley System/Block-And-Tackle

What is a Pulley System?



A pulley consists of a wheel with a grooved rim. A cord is passed around the wheel on this groove. A Pulley acts to change the direction of movement of the cord and is usually used to apply a force to lift a load.

A Pulley System (also called as a Block-and-Tackle, first invented by Archimedes) is two or more wheels that share a belt. One wheel or pulley is fixed and the force is applied to this wheel resulting in a movement of the other wheel as well because of the connecting belt. Changing the configuration of the Pulley Belt affects the direction of motion. Changing the size of the Pulley Wheels changes the speed. The pulley directly connected to the force (in this case the motor) is called the “Driver” pulley - the other one is called the “Driven” pulley.

Block-and-Tackle systems can be assembled with several “driven” pulleys in order to distribute the weight and move/lift heavier loads.