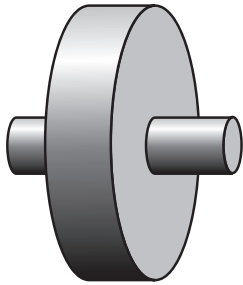
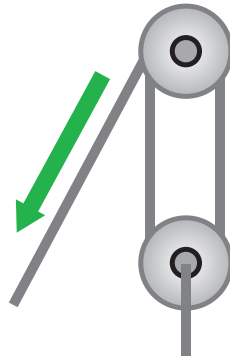


Simple Machines

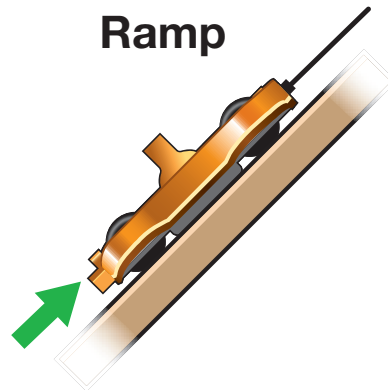
Wheel and axle



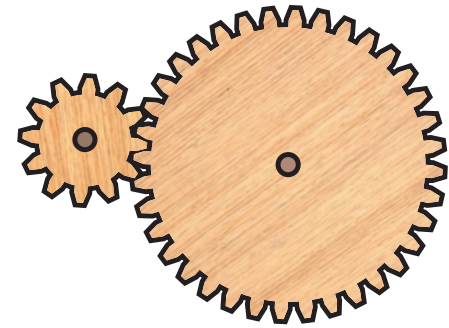
Rope and pulleys



Ramp



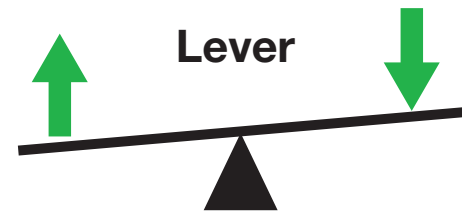
Gears



Wedge



Lever

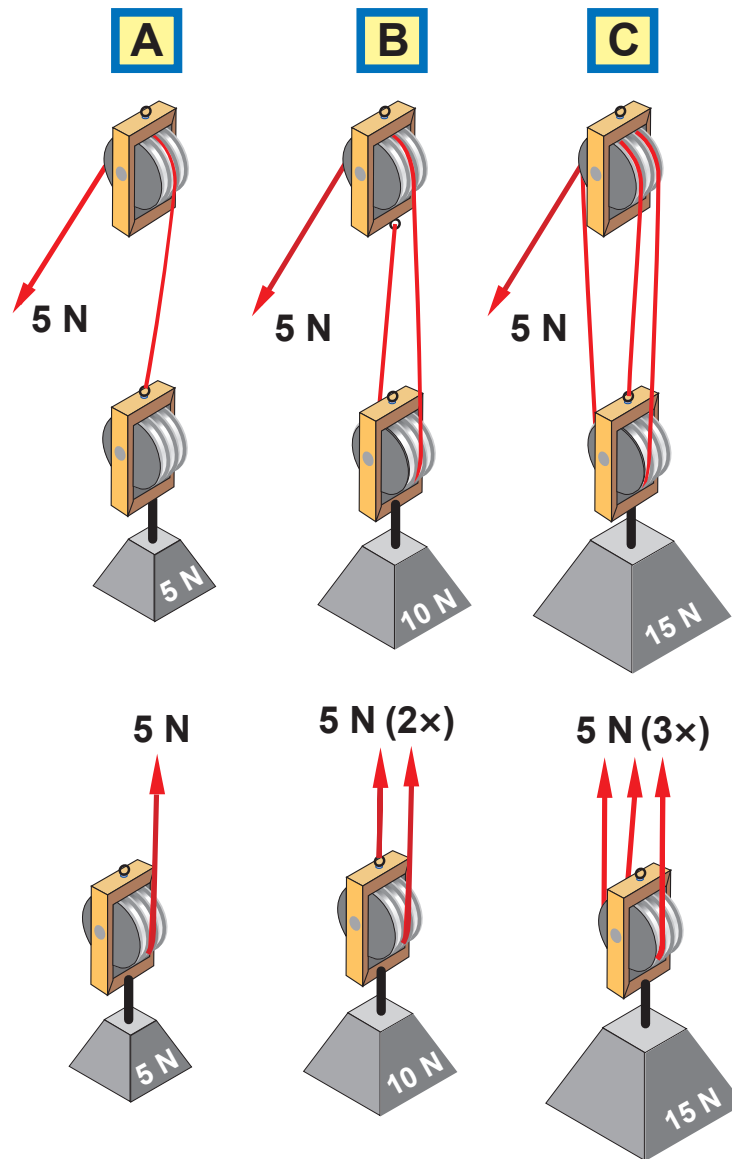


Gear Ratio Equation

GEAR RATIO

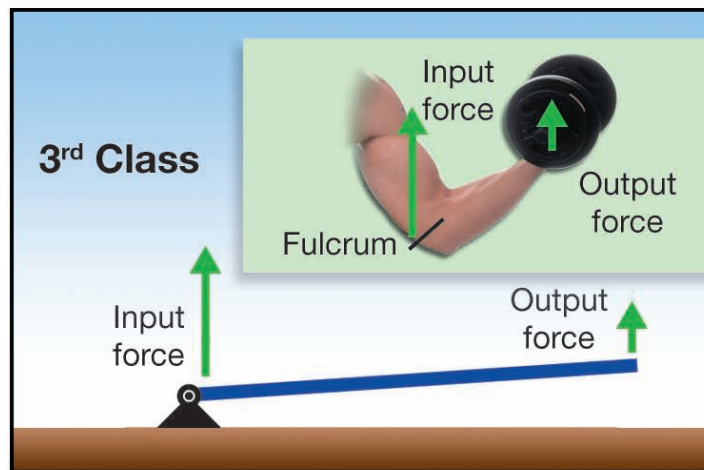
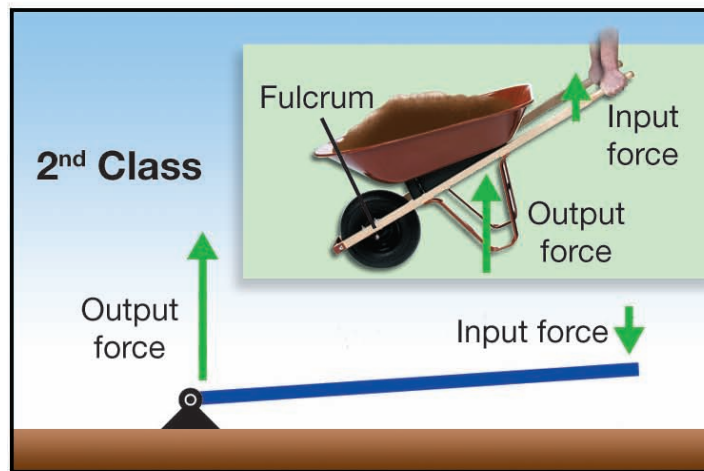
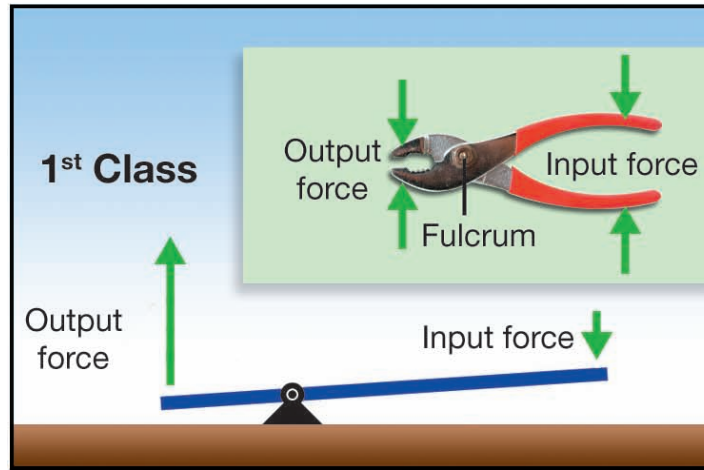
$$\begin{array}{l} \text{Turns of output gear} \text{ --- } T_o \\ \text{Turns of input gear} \text{ --- } T_i \end{array} = \frac{N_i}{N_o} \begin{array}{l} \text{--- Number of teeth} \\ \text{on input gear} \\ \text{--- Number of teeth} \\ \text{on output gear} \end{array}$$

Rope and Pulley Systems



	A	B	C
Input force	5 N	5 N	5 N
Output force	5 N	10 N	15 N
Mechanical advantage	1	2	3

Three Classes of Levers



Levers in the Human Body

