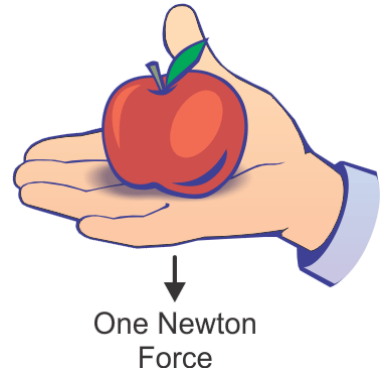


The metric unit for force is a Newton, English is a pound.

In the metric system of units, where force is measured in newtons (abbreviated N), work is measured in **newton**-meters (N-m). For reference, a **newton** is roughly equal to the force exerted on your hand by a baseball. In the **metric** system, forces are measured in units of **Newtons**. This unit is named after Isaac Newton.



In the **English** system, forces are measured in units of **pounds**.

A force can be measured with
a Newton spring balance.
The SI unit for measuring force is
the Newton (symbol N).



A Newton of force is much smaller than a pound of force. It takes about 4.5 Newtons to equal a force of one pound. So, if you usually state your weight in pounds, then you could figure your weight in the Newtons by multiplying those pounds by 4.5.

Forces are vectors.

Forces are [vectors](#). That is, they are quantities that have both **size** and **direction**. To completely describe a force you need to state its size or strength, and also state its direction.

Forces can be symbolized with **arrows**, as can all vectors. The arrow in the picture below is meant to show a force with the size of 15 Newtons directed toward the left.

One must understand vectors to understand forces.

