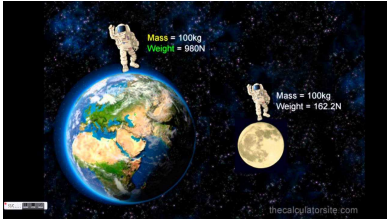


Mass vs. Weight

Objective:

Differentiate between weight & mass.



Mass vs. Weight

Mass (kg)

- amount of matter in an object
- Not changed by its location

Weight (N)

- amount of gravitational force acting on an object
- changed by location

equation: $W = m \cdot g$

units: $N = kg \cdot m/s^2$

Mass = 1 kg

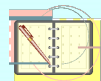
Weight on Earth?

$$W = mg \quad 1kg \cdot 9.8 \frac{m}{s^2} = 9.8N$$

Weight on the moon?

$$W = mg \quad 1kg \cdot 1.6 \frac{m}{s^2} = 1.6N$$

Assignments . . .



- Quiz: Newton's 1st Law & FBD's

