

## Gravity

- **GRAVITY:** Force of attraction between two bodies.

## FACTORS THAT INFLUENCE GRAVITATIONAL FORCE:

- Mass: More mass more gravity
- Distance: Gravitational force decreases with increasing distance

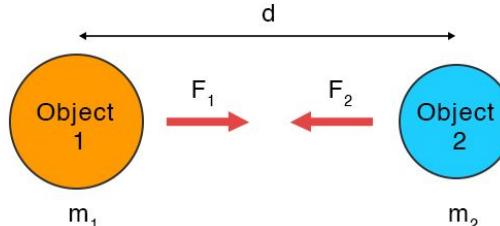
## GENERAL POINTS TO REMEMBER:

- Gravity always attract and does not repel
- Acceleration due to gravity on the surface of the earth is  $9.8 \text{ m/s}^2$
- The sun and moon's gravity causes tides
- Gravitational force obeys the inverse square law

## Gravitational Force Formula

source

## Gravitational Force



$$\text{Force (F)} = F_1 = F_2 = G \frac{m_1 \cdot m_2}{d^2}$$

 ScienceFacts.net

- Gravitational force:  $F$
- Mass of object 1:  $m_1$
- Mass of object 2:  $m_2$
- Distance between the objects:  $d$
- Universal gravitational constant  $G: 6.67 \times 10^{-11} \text{ N}\cdot\text{m}^2/\text{kg}^2$