

gravity field

central gravitational field

gravitational constant

vertical throw

Gravitational force is evident in giant bodies such as the Earth, the Moon, the Sun, etc.

the first orbital speed

acceleration of gravity

throw horizontal

The gravitational constant is a universal constant.

gravitational acceleration

The force of gravity F_G is the force exerted by the Earth on every object near its surface and gives it the acceleration of gravity g .

free fall

oblique throw up

$$F_g = \kappa \frac{m_1 m_2}{r^2}$$

$$y = h - \frac{1}{2} g t^2$$

$$x = v_0 t \quad F_G = m \cdot g$$

$$v = v_0 - g t$$

$$a_g = \kappa \frac{M_z}{R_z^2}$$

$$\frac{a_p^3}{a_z^3} = \frac{T_p^2}{T_z^2}$$

$$T = \frac{2\pi R_z}{v_k} \quad v_k = \sqrt{\frac{\kappa M_z}{r}}$$

$$h = v_0 t - \frac{1}{2} g t^2$$

Gravitational force

Orbital period

height of horizontal throw

gravitational acceleration

speed vertical throw

horizontal distance throw

The force of gravity

vertical distance throw

the first orbital speed

Kepler's third law

Effects of Gravity

Reset ⓘ

50kg x 4 = 200 N

50kg x 10 = 500 N

50kg x 26 = 1300 N

- Mars
 - Earth
 - Jupiter
- Drop



Weight = mass x gravitational field strength