

Mass versus Weight

These are often used interchangeably but they are not the same.

Mass: How much matter is in an object.
 - measured in Kilograms (kg)

Weight: How much Force is exerted on a mass.
 " " " " " by one mass on another.
 - measured in Newtons (N)

On EARTH - acceleration due to gravity ($g = 9.8 \frac{m}{s^2}$)

$$F_g = mg$$

Weight (N) mass (kg) ($\frac{m}{s^2}$)

$$g = \frac{F_g}{m}$$

$\frac{N}{s^2} = \frac{kg}{kg}$ **UNITS**

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