

• What is a force?

A push or pull that occurs when two or more objects interact

Causes acceleration

Example the force of gravity occurs when two objects interact (you + earth)
Earth pulls down on you (you pull up on Earth)

• Units of Force Newtons [N]

$1\text{ N} = 1\text{ kg} \cdot \frac{\text{m}}{\text{s}^2} =$ force to accelerate 1 kg
of mass $1\frac{\text{m}}{\text{s}^2}$

• Force (\vec{F}) is a vector

• 2 types

Contact Forces

When objects "touch"

- Friction
- Tension
- Applied
- Normal
- Spring
- Air-Resistance

Field Forces

When objects interact at a distance

- Gravity
- Electric
- Magnetic