## Newton's Laws of Motion

## Newton's First Law of Motion

(Law of Inertia)

An object at rest will stay at rest and an object in motion will stay in motion unless acted on by an outside force

Example: you keep moving after hitting the brakes, feel like flying out of your seat on a roller coaster

## Newton's Second Law of Motion

Bigger things are harder to push than smaller things

- Shows how force, mass and acceleration are related
- Force = Mass x Acceleration (F=MA)

Example: Easier to slide lipgloss than a textbook

## Newton's Third Law of Motion

For every action there is an equal and opposite reaction

Example: Rocket lifting off, Rowing a boat

