

Forces – I Newton's First Law – The Law of Inertia

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

Isaac Newton – schmöt guy



- Discovered/ Authored the three laws of motion

- First Law
 - Known as the law of inertia

- **Inertia** – the tendency of an object to resist being moved or if moving to resist a change in speed or direction until an outside force acts on it

Inertia

- ▶ The Idea of Inertia is closely related to mass.
- ▶ Inertia is measured in kg
- ▶ Which has more inertia?



Seat Belts

- ▶ Inertia is one of the major principles behind the invention of seatbelts.



Compare Inertia and Use



Baseball



Bowling Ball