

NEWTON'S 1ST LAW OF MOTION NOTES



Newton's 1st Law of Motion

- An object at rest will remain at rest and an object in motion will remain in motion until an outside force acts upon it.
- **Inertia**- the tendency of an object to resist change in its motion.



Force: is a push or pull.

Friction: is the force that acts to resist sliding between two touching surfaces.

- **Static (starting) Friction**: is the type of friction that prevents an object from moving when a force is applied.
- **Sliding Friction**: while static friction keeps an object at rest, sliding friction slows down an object that slides.
- **Rolling Friction**: the friction that occurs when rolls over a surface.

Is Friction Useful or NOT?

- Without Friction:
 - It would be hard to walk-like on ice.
 - You couldn't light a match.
 - It would be really hard to drive a vehicle
 - We are usually trying to increase it!

