

Newton's First Law

Lesson Notes

A statement of Newton's first law includes two claims and one condition:

Claim #1: Applies to Stationary Objects

An object at rest remains at rest.

Claim #2: Applies to Moving Object

An object in motion continues in motion with the same speed and direction.

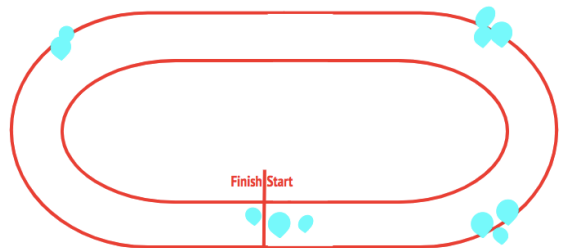
Condition

The above is true provided that the individual forces acting upon the object are balanced.

The Water Relay Race

The water spills over the rim of the pan whenever the pan is accelerated. This teaches us that ...

- Water “doesn’t like” to change the way that it is moving.
- Water, like all objects, likes to *keep on doing whatever it is doing*.
- Water likes to maintain its state of motion.
- Water has **inertia**.



Newton's First Law ... In Other Words

