

3. If a ball is on a slanted surface and you let go, gravity will make it roll down slope. It has inertia, and if there is a level area at the bottom of the slope, it will continue moving.
4. When the ceiling fan is switched off, the blades of the fan still rotate until the air friction acts on them.

⇒ Some Examples of Inertia of Direction

Inertia of Direction:-

1. We tend to fall sideways while we are sitting in a bus and it makes a sudden sharp turn.
2. Moon is moving around earth with changing its direction because of force acting on moon by earth towards center.

⇒ Sir Isaac Newton :- Developed the laws of motion based on the idea of force as cause of change in velocity of a body.

1. Law of Inertia :- The First Law of Motion
2. Law of Momentum :- The Second Law of Motion
3. Action - Reaction Force :- The Third Law of Motion.

Newton's First Law of Motion

⇒ It states that, "If a body is at rest, it will remain at rest and a body with uniform motion will remain in uniform motion, until an external unbalanced force is applied."