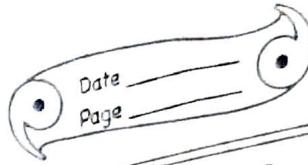


### Ch-3 - force

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Q:- What is friction? What are the effects of Friction?

- Friction:- The force which slows down the motion of a moving body in contact with the surface of another body, is called the frictional force or the force of friction. This force always opposes the motion. While pushing a heavy box, the force of friction opposes the motion and makes it difficult for us to push it.

Thus we can define friction as a force that opposes the relative motion between the two surfaces in contact with each other.

#### Effects of friction: →

- i) Friction opposes motion:- Friction is a force which opposes motion. For example :- If we roll a ball on the ground, it gradually slows down and after travelling a certain distance, it stops. The reason is that the force of friction between the ball and the ground opposes the motion of the ball and brings it to stop.

3) Friction always acts in a direction opposite to the direction of motion:- If we move the box to the right, the friction acts towards the left and if we move the box to the left, the friction acts towards the right.

3) Friction produces heat:- It is our common experience that if we rub our palms, they become warm. Similarly it is due to friction that the moving parts of a machine get warm (or heated). Thus, friction produces heat.

4) Friction causes wear and heat: In our daily life, we have noticed that the tyres of a bicycle, rickshaw, car and other vehicles gradually wear out when they are continuously used due to friction between them and the ground.

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