

H.W

Q1. List the effects of friction.

Ans → The effects of friction are:-

- ① Friction opposes motion.
- ② Friction always acts in a direction opposite to the direction of motion.
- ③ Friction produces heat.
- ④ Friction causes wear and tear.

Q2. Explain with example how friction opposes motion.

Ans → Friction is a force that opposes motion between two touching surfaces.

- A force that occurs opposes motion between two surfaces that are in contact.
- Causes a moving object to slow down and stop.
- Occurs because the surface of any object is rough.
- Ex- When we kick a ball after sometime it slows down and eventually stops. This is because friction opposes motion acted on the body.

Q3. 'Friction always act in a direction opposite to the direction of motion.' Justify the statement by giving an example.

Ans When we move an object towards the right, friction works on left and when we move an object towards the left, friction works on right. So it is proved that 'friction always act in a direction opposite to the direction of motion.'

Q4. How can you prove friction produces heat?
Give an example.

Ans → • Friction between surfaces produces heat.

• Friction causes molecules on the surface to move faster. As the molecules move faster, the temperature increases of the object increases.

• Ex - When we try rubbing our hands together at a quick pace, we should feel heat.

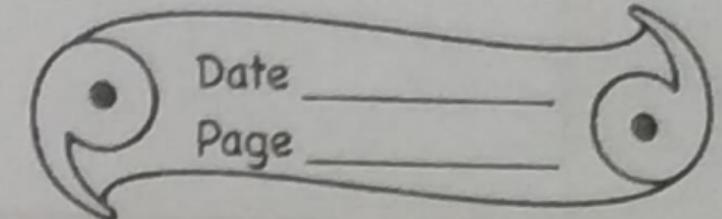
B) Short/Long Answer Questions →

13) What do you understand by the term friction?

Ans → Friction is the force that opposes the relative motion between the two surfaces in contact with each other.

14) Give an example to illustrate the existence of force of friction.

Ans → If we stop pedalling our cycle it gradually slows down and ultimately stops after some time.



travelling a certain distance. This is due to the frictional force between bicycle and ground.