

Ans 1 Wheels are made circular to reduce friction.

Ans 2 It will stop due to friction between the book and the table.

Ans 3 Examples of smooth surface -

- 1 Marble slab
- 2 mirror surface
- 3 Glossy tiles

Examples of rough surface -

- 1 Sand paper
- 2 Cement road
- 3 Nail file

Ans 4 Reduce

Ans 5 It can be minimised by giving special shape called streamlined shape to the which move through fluid.

Ans 6 Friction as foe.

- 1 Wear and tear of soles of our shoes is due to friction.
- 2 It causes damage to the parts of machine.

Friction as friend

- 1 Friction allows us to grip and catch different objects.
- 2 It helps us to walk comfortably on a surface.

Ans 7 Causes of friction are

- 1 Molecular adhesion
- 2 Surface roughness
- 3 Ploughing effect

Ans 8 Objects moving in fluid must have special shape called streamlined shape to reduce the fluid friction.

Ans 9 Rolling friction is less than static friction because in rolling friction the surface area in contact is least.

Ans 10 The water on a wet marble floor fills the microscopic irregularities on the surface and hence present lesser friction. Therefore it is difficult to move on a wet marble floor.

Ans 11 Properties of frictional force are:-

- 1 Frictional force are caused due to intermolecular interaction between the bodies.
- 2 Frictional force always decrease the relative motion between 2 surfaces.
- 3 Frictional force are more for rough surface and lesser for smooth surfaces.

Ans 12 If friction was absent, the chalk deposits would not stick to the board and no mark would be left behind. This would have made it impossible to write with chalk on the blackboard.

Ans 13 Fluid friction is a force that resists the movement ~~egh~~ either within itself or of another medium moving through the liquid.

The factors of fluid friction are -

- 1 Nature of fluid
- 2 The shape of the body
- 3 The surface area of the body
- 4 Speed of the body