




INDIAN SCHOOL DARSAIT DEPARTMENT OF SCIENCE

Subject : PHYSICS	Topic : Friction	Date of Worksheet : 02.09.2019	
Resource Person: Mrs. Sandhya Jitheesh		Date :	
Name of the Student : _____	Class & Division : VIII----	Roll Number : __	

- 1 In a tug of war, there is friction between the rope and the _____(hands/feet), and also between the ground and the _____(hands/feet). 1
- 2 a. The force of friction always act in the _____ direction to the applied force. 1
b. Friction can be increased by making a surface _____.
c. The friction force exerted by fluid is also called _____.
d. Name the device used for measuring the force acting on an object _____
- 3 What is an advantage of using rollers instead of sliding an object? 1
a. Rollers are much less expensive
b. Rolling friction is much less than sliding friction
c. Rolling friction has the advantage of being greater than sliding friction.
- 4 Can we have surfaces with zero friction? Explain your answer. 1
- 5 Frictional force is an example of -----force. 1
- 6 Name the type of friction shown in the following image: 1

- 7 Give one word for the following: 1
a. The frictional force exerted by fluids.
b. Resistance to the motion of the body when one body rolls over the surface of the other.
c. Small spherical metallic balls used between the parts of the machine.
- 8 Say whether **friction is helpful or troublesome** in the following cases. 1
a. Applying the brakes on a cycle.

- b. lighting a matchstick.
- c. Rohan uses a towel to open a tightly-closed lid of a bottle.
- d. The engine of a car becomes hot after running for some time.
- e. Soles of shoes wear out after some time.
- f. Writing on paper and blackboard.
- g. Truck tyres have grooves on it.

- 9 Tyres have grooves on their surface to :- 1
- a. decrease friction b. increase friction
 - c. decrease applied force d. equalize applied and frictional force.
- 10 A boy exerts force of 40N on a block and 60N frictional force operates in opposite direction. 1
Result will be?
- a. A force of 100N will make block move
 - b. block will not move due to cancellation of both forces
 - c. block will not move because opposing force is more than applied force
 - d. block will move with a force of 20N
- 11 An irregular surface will have :-
- a. lesser friction b. greater friction c. zero friction d. lubrication
- 12 Give reasons: 3
- a. It is easier to move a box which is already moving than one which is at rest.
 - b. Objects moving in fluids must have special shapes.
 - c. Mechanics use grease between the moving parts of the cycle.
 - d. Athletes wear specially designed shoes with spikes on the soles.
 - e. Nidhi removes her bangles by applying soap to her hands.
- 13 Why are ball bearings used and how they are helpful? 2