

Class: IV.
Science (Term- 2)
Chapter :4.
Force, Work and Energy.

Question Answers:

Q1. How can you say that friction slows down the movement?

Ans. When we roll a ball on the floor, it Slows down eventually due to friction.

2. When do we say that work is done?

Ans. When a body moves through a distance after applying force, work is said to be done.

3. Why do we use simple machines?

Ans. We use Simple machines because they make our work easier.

Science Quiz:

Q1. Name the force responsible for the falling of ripe fruits.

Ans. Gravitational force.

Q2. Which force helps us to write on a paper?

Ans. Friction.

Q3. What is wind energy?

Ans. Energy obtained from the wind is called wind energy.

Very short answers: -

Q1. Name the force by Which the earth pulls the objects towards it?

Ans. Gravitational force.

Q2. Give an example of a wedge.

Ans. knife.

Q3. Give an example of wheel and axle.

Ans. Car steering.

Short Answers.

Q1. When is friction essential for us?

Ans. Friction is essential for -

- (i) We write on a paper.
- (ii) We walk on a Surface.

Q2. When a wall is pushed, it does not move from its place. Is any work done in this situation? Why?

Ans. No because the position of the wall is not changed. work is said to be done only when a force applied on a body makes the body move in the direction of force.

Q3. Rishabh's mother seldom uses LPG and electrical equipment, and mostly uses solar energy for Cooking and heating purposes. Rishabh has Convinced his friends and neighbours also to do so.

(a) what is solar energy?

Ans. The energy that we get from the sun is called Solar energy.

(b) What value does Rishabh's mother show by using Solar energy?

Ans. Care for the environment and conservation of electricity.

Q4. What is meant by gravitational force?

Ans. The force by which the Earth pulls the objects towards itself is called gravitational force.

Q5. What is friction?

Ans. Friction is a force that tries to stop moving object.

Long Answer Questions:

Q1. What is the difference between a lever and a pulley?

Ans. Lever is a simple machine used to cut things lift weights and open lids. Scissors, see-saw and bottle opener are examples of simple machines. Pulley is a Simple machine used to draw water from the Wells. It consists of a rope running over a wheel. The wheel is grooved to prevent the rope from slipping off.

Q2. Water is water energy? How is t related to hydroelectricity?

Ans: The energy of flowing water is called water energy or hydro energy. Energy of water falling from dam is used to rotate the turbines of the generator to generate electricity. Electricity produced by the energy of flowing water is called hydroelectricity.

Q3. Discuss the effects of force.

Ans. The effects of force are.

- (i) Force can move a resting object.
 - (ii) Force can speed up a moving object.
 - (iii) Force can change the direction of a moving object.
 - (iv) Force can change the Shape of an object.
 - (v) Force can stop a moving object.
 - (vi) Force can slow down a moving object.
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