Class 5th chapter 2

force, work and energy

A. Multiple choice questions

- 1. A push or a pull on an object is called force.
- 2. To move an object we need force.
- 3. A force can change the both of these.
- 4. When you throw a ball a upwards it comes down due to gravitational force.
- 5. The force produced by rubbing things with each other is called electrostatic force.
- 6. Which force slows down the movement of the objects frictional force.

Oral questions

1. what is the need of force in our life?

Ans. Force is needed to move any object ,to stop any moving object and to change the direction or shape of any object so we need force in our daily life.

2. Why do ripe fruits fall on the earth?

Ans. Ripe fruits falls on the Earth due to gravitational force.

3. Why do we need energy?

Ans. We need energy to do work.

Science quiz

1. Name two types of energy.

Ans. Sound energy and mechanical energy.

2. What type of energy is present in water stored in a reservoir?

Ans. Potential energy.

3. Name the force which slows down the movement of any object across a surface.

Ans. Frictional force.

Multiple choice questions.

- 1. The force with which any object gets attracted towards the centre of earth surface is gravity.
- 2. Solar heater uses solar energy.

Circle the odd ones give reason for your choice.

- 1. Television: others are sources of energy.
- 2. Water in a tank: it has potential energy whereas others have kinetic energy.
- 3. Washing machine: it uses electrical energy to work whereas others use solar energy.

Fill in the blanks with help of given words.

- 1. Earth's gravity keeps us and other objects on the ground.
- 2. Friction makes it hard to slide heavy objects across the floor.
- 3. Energy of an object due to its position is called potential energy.

Match the following

- 1. CFL light energy
- 2. heat from within the earth geothermal energy
- 3. energy of the sun solar energy
- 4. energy of flowing water hydro energy

Multiple choice questions.

- 1. The force produced by muscles is called muscular force.
- 2. The energy of an object due to its movement is called Kinetic energy.

Very short answer questions

1. Name the force that help us to walk.

Ans. Frictional force

2. Name a device that uses of solar energy.

Ans. Solar cooker

3. Give the name of energy generated by the energy of flowing water.

Ans. Hydro energy

Short answer questions:

1. Define energy.

Ans. The ability to do work is called energy.

2. What is meant by mechanical force?

Ans. The force exerted by machine by using energy from any external sources is called mechanical force.

- 3. Nitika sees a women trying to repair her torn clothes with the sewing machine. The woman finds it very Difficult to move the wheel of the machine. Nitika asks the women to do oiling of machine.
- (a)How is the oiling of machine helpful?

Ans. Oiling of machine helps to reduce friction and help it to move smoothly.

(b.) what do you learn from Nitika?

Ans. We learnt to apply scientific concepts in daily life and be helpful to others.

Long answer questions

1. when is work said to be done?

Ans. Work is said to be done only when the applied force causes a change in the position of the object in the direction of the applied force.

2. Describe different types of energy.

Ans. There are following types of energy:

- 1. heat energy:- energy that we get from heat.
- 2. light energy:- energy that we get from light.
- 3. kinetic energy:- energy of an object due to its movement.
- 4. potential energy:- energy stored in a body due to its position.
- 5. mechanical energy: energy in an object due to its position and movement.
- 6. electrical energy:- energy that we get from electric current.
- 7. solar energy:- energy from the Sun.