

**Grade 4  
Science**

# Force, Work and Energy

**A Fill in the blanks.**

1. A \_\_\_\_\_ is a wedge, while a \_\_\_\_\_ is a lever.
2. \_\_\_\_\_ use the force of fast flowing water to generate electricity.
3. A \_\_\_\_\_ is made from a wheel and a rope.
4. \_\_\_\_\_ energy is generated with the help of wind mill.
5. A moving body slows down or stops due to its \_\_\_\_\_ force.
6. A \_\_\_\_\_ force pulls all objects towards the centre of Earth.

**B Name the kind of force being used in each case.**

1. Raj lift a brick from ground. \_\_\_\_\_
2. The doorbell rang. Sheetal ran to the door. \_\_\_\_\_
3. The cup fell from Shaan 's hands and broke into pieces. \_\_\_\_\_
4. The stone rolled down the slope and fell into the river. \_\_\_\_\_
5. A rubber band changes when stretched. \_\_\_\_\_

**C State true or false.**

1. Machine makes our work easier. \_\_\_\_\_
2. A slide is an example of pulley. \_\_\_\_\_
3. Non living things need energy to do work. \_\_\_\_\_
4. Force applied by our muscles is called magnetic force. \_\_\_\_\_
5. The electricity generated by water is called hydroelectricity. \_\_\_\_\_

**D Give two examples for each of the following.**

1. Complex machines:- \_\_\_\_\_
2. Lever:- \_\_\_\_\_
3. Wedge:- \_\_\_\_\_
4. Wheel and axle:- \_\_\_\_\_
5. Inclined plane:- \_\_\_\_\_
6. Pulley:- \_\_\_\_\_
7. Simple machine:- \_\_\_\_\_
8. Screw:- \_\_\_\_\_
9. Fuels:- \_\_\_\_\_
10. Source of energy:- \_\_\_\_\_

**E Find the odd one.**

1. Coal, Petrol, Water, Oil.
2. Candle, Bulb, Fan, CFL.
3. Hammer, Nutcracker, Scissor, Knife.
4. Bottle cap, Hammer, Nutcracker, See-saw.

**F Match the following.**

Column 1	Column 2
1. Coal	a. Muscular energy
2. Solar energy	b. Elastic energy
3. Fishing reel	c. Sun
4. Pole vault	d. Fuel
5. Muscle	e. Wheel and axle

## Answers

- A.
1. hammer, knife
  2. Dams
  3. pulley
  4. Wind
  5. frictional
  6. gravitational
- B.
1. Muscular force
  2. Mechanical force
  3. Gravitational force
  4. Frictional force
  5. Elastic force
- C.
1. True
  2. False
  3. False
  4. False
  5. True
  6. False
- D.
- |                          |                                 |
|--------------------------|---------------------------------|
| 1. Crane, Sewing machine | 2. See-saw, Hammer              |
| 3. Forks, Knives         | 4. Fishing reels, Dough rollers |
| 5. Slide, Ramp           | 6. Elevators, Sailboats         |
| 7. Lever, Wedge          | 8. Jar lids, Bottle caps        |
| 9. Coal, Petrol          | 10. Sun, Wind                   |
- E.
1. Water
  2. Fan
  3. Knife
  4. Bottle cap
- F.
- |      |      |      |      |      |
|------|------|------|------|------|
| 1. d | 2. c | 3. e | 4. b | 5. a |
|------|------|------|------|------|