

HOMEWORK

Ex - B. 1, 2, 3, 4, 5

Answers

Ex - B. 1. A- Work said to be done when a force moves an object through a distance in its own direction.

2. A- Energy: The ability or capacity to do work is called energy.

3. A- Machine: A machine is a device that allows us to do work with less effort. Machines make our work easier to do. Machines have made our lives comfortable and easier.

4. A- Principle of machine: The work output of a machine is equal to the work input.

5. A- Various functions that a machine can perform are:

1. Changing the direction of applied force
- Example: When a flag is hoisted with the help of a pulley.

2. Changing the magnitude of applied force - Example: Bottle opener multiplies the applied force and much less effort is required to open the cap.

3. Applying force at a convenient point - Example: ~~Bottle opener~~ In a pair of scissors, the input force is applied at the handle of the scissors, which cuts the paper ~~at~~ at the other end of the blade.

4. Changing the speed of an object - Example: While riding the bicycle, force is applied on pedals which multiplies the speed.