WELCOME TO THE ONLINE CLASS

SESSION NO: 3

CLASS: 4

SUBJECT: SCIENCE

CHAPTER NUMBER: 10

CHAPTER NAME: FORCE, WORK AND ENERGY

SUB TOPIC: WORK

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LEARNING OBJECTIVE

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Learner will able to

- **understand and give examples of work done.**
- **Know the formula of calculating work.**

RECAPITULATION

- Various tools are used to exert the force is known as _____.
- Name the type of force used for carrying a bag on your shoulders.
- Which kind of force can be applied to do skating.
- Why do leaves from tree falls on the ground? Give reason.

WORK

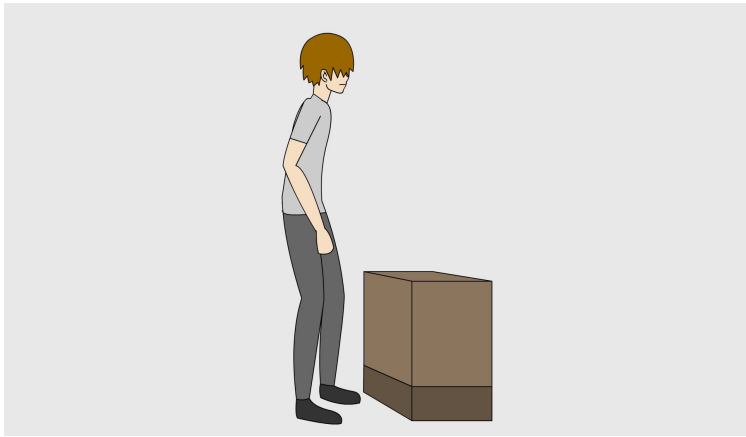
- When we use force on an object and the object moves through a distance, we say that work is done in an object.

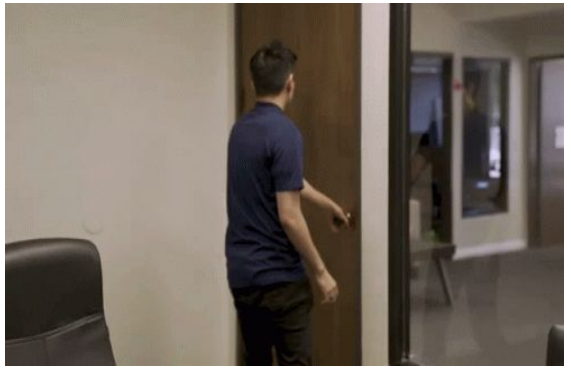
WORK IS NOT DONE

- We don’t do any work if we stand at a place with a load on our head, even for whole day, as there is no movement of the load.

WHEN WORK IS DONE

- Work is done when a load is lifted.
- When a door is opened.
- When a nut is cracked.
- When a flag is hoisted.



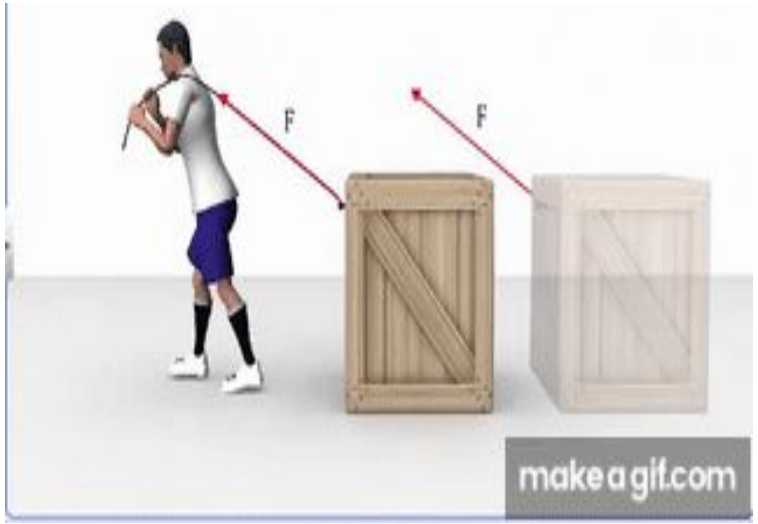


FORMULA FOR CALCULATING WORK

WORK DONE = FORCE APPLIED ON AN

OBJECT X DISTANCE MOVED BY THE

OBJECT



EXAMPLES OF WORK DONE

SUMMARY

- When we use force on an object and the object moves through a distance, we say that work is done in an object.
- Work is done when a load is lifted ,when a door is opened , when a nut is cracked or when a flag is hoisted.
- *WORK DONE = FORCE APPLIED ON AN OBJECT X DISTANCE MOVED BY THE OBJECT*

NAME THE KIND OF FORCE USED IN EACH CASE

- Arun bowled the fifth ball of the over. Ajay hit it to the boundary for a four. Muscular Force
- The doorbell rang. Stella run to the door. Muscular Force
- The cup fell from Shann's hands and broke into pieces. Gravitational Force
- The stone rolled down the slope and fell into the river. Frictional Force
- Ali dropped the bat. It fell on the floor with a thud. Gravitational Force
- Granny cut a piece of cloth into two with a pair of scissors. Mechanical force


QUIZ TIME!!

1. When force is applied on a body to make it move through a distance is known as _____ done.

Ans: Work

2. Work is done when load is lifted (true / false).

Ans: True

3. Formula to calculate work .

Ans: WORK DONE = FORCE APPLIED ON AN OBJECT X DISTANCE MOVED BY THE OBJECT

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NO HOMEWORK

LEARNING OUTCOME

Learner will able to

- **understand and give examples of work done.**
- **Know the formula of calculating work.**

THANKING YOU

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