

### WELCOME TO THE ONLINE CLASS

**SESSION NO: 2** 

CLASS: 4

**SUBJECT: SCIENCE** 

**CHAPTER NUMBER: 10** 

**CHAPTER NAME: FORCE, WORK AND ENERGY** 

**SUB TOPIC: TYPES OF FORCES** 

**CHANGING YOUR TOMORROW** 

Website: www.odmegroup.org

Email: info@odmps.org

Toll Free: **1800 120 2316** 

Sishu Vihar, Infocity Road, Patia, Bhubaneswar-751024

# LEARNING OBJECTIVE



#### Learner will able to

- Understand the types of force and uses in daily life.
- Know to differentiate all types of force.



#### RECAPITULATION

- What do you mean by force?
- Name the kind of force used in both the pictures shown below?





• What are the various effects of force?





- Muscular force
- Mechanical force
- Elastic force
- Gravitational force
- Frictional force



#### **MUSCULAR FORCE**

- The force exerted by the muscles of our body.
- For example ,carrying a bag on your shoulders.
- To play basketball.
- In and out breathing.

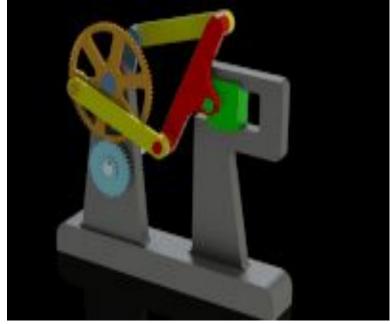




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- Various tools are used to exert the force.
- Some examples like pushing bicycle pedals.
- Hammer is used to hit a nail into a wall, both the hammer's and the hammering person's mechanical force are used.

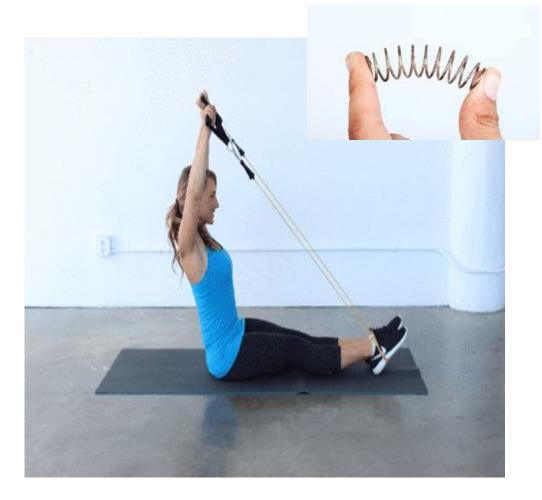




### **ELASTIC FORCE**



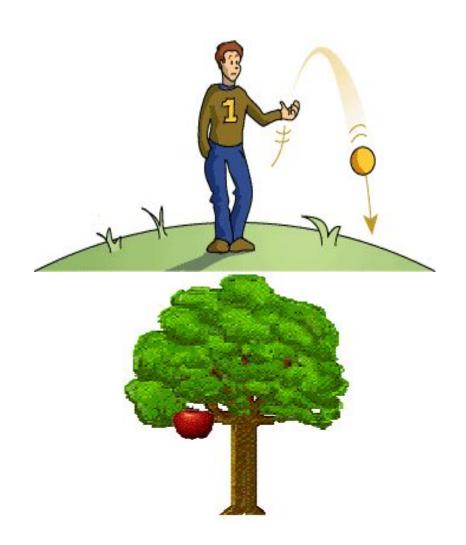
- Force which is used to move a catapult.
- Springs are one of the best examples
   of elastic force because they return
   back to their original shape .



#### **GRAVITATIONAL FORCE**



- The force by which the earth pulls an object towards it.
- Leaves and fruits fall from a tree downwards towards the ground due to the gravitational pull.







- A moving body slow down or stops on its own due to frictional force.
- For example, driving of a vehicle on a surface.
- Doing Skating.

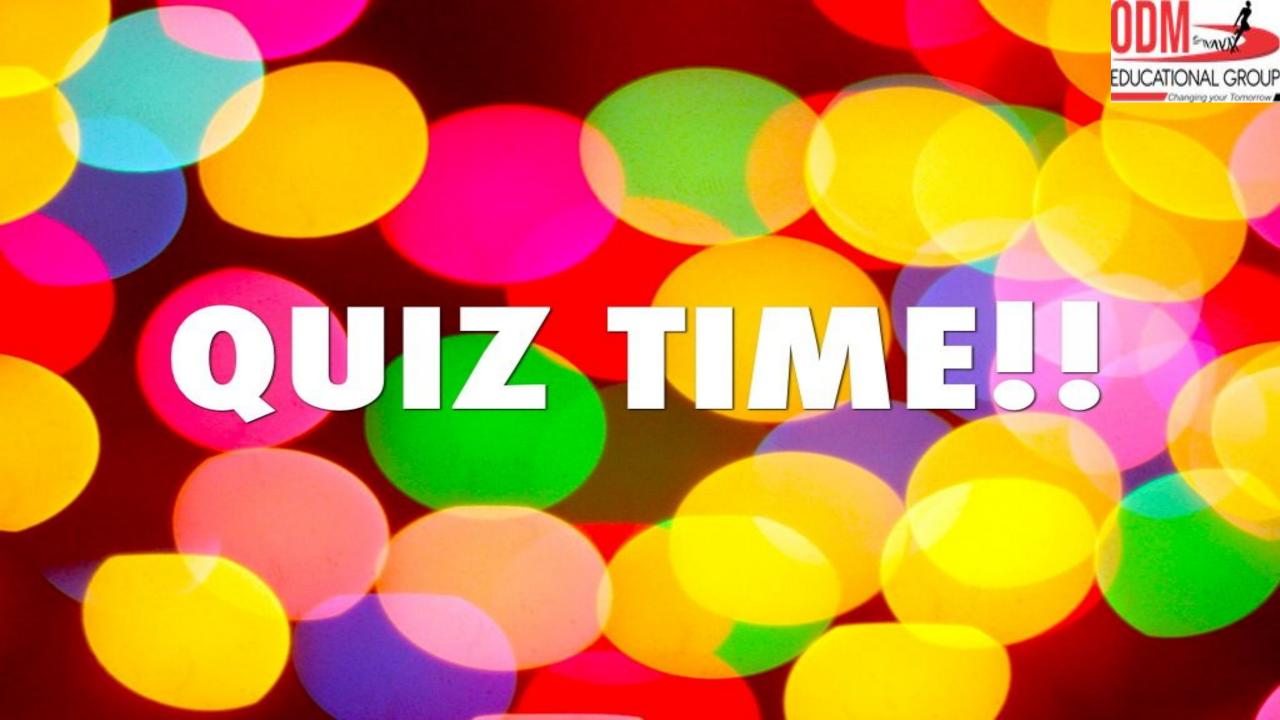




#### **SUMMARY**



- Muscular force exerted by the muscles of our body .
- Various tools are used to exert the force is known as mechanical force.
- Elastic force is used to move a catapult.
- The force by which the earth pulls an object towards it is known as gravitational force.
- A moving body slow down or stops on its own due to frictional force.





1. \_\_\_\_\_ force is used to move a catapult.

**Ans: Elastic** 



2. Various tools are used to exert the force.

**Ans: Mechanical Force** 



3. Applying a break to stop the moving vehicle is known as \_\_\_\_ force.

**Ans: frictional** 



# **HOMEWORK**



• Do the question A in your notebook.

#### **LEARNING OUTCOME**



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