



Grade 7

Science

Unit : 16 Force and Motion

i. The standard international unit of measuring mass and force respectively are

- i. kg and N
- ii. Kg and N
- iii. N and kg
- iv. g and N

ii. What is the instrument used to measure force?

- i. Pan balance
- ii. Table balance
- iii. Electronic balance
- iv. Newton balance

iii. What is the effect of force when pulling a rope?

- i. Change the speed of an object
- ii. Moving object can be stopped
- iii. Direction of motion can be changed
- iv. None of the above

iv. What is the weight of a man whose is having mass of 50 kg ?

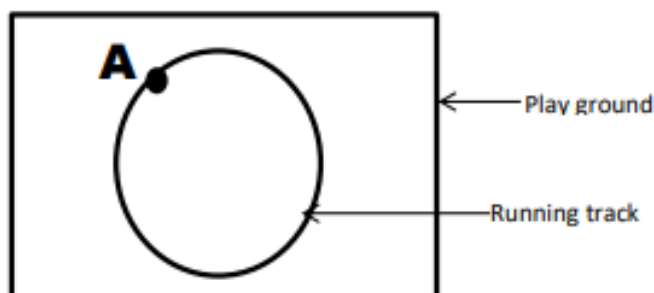
- i. 500N.
- ii. 50N.
- iii. 5N.
- iv. 5000N.

v. The incorrect statement about force is,

- i. Force has a magnitude and a direction
- ii. Pulling and pushing can be done by applying
- iii. Direction of motion can be changed by applying force
- iv. Pulling only can be resulted by applying a force.

2x 5 =10 marks

2. This diagram shows a playground, with a 400m running track

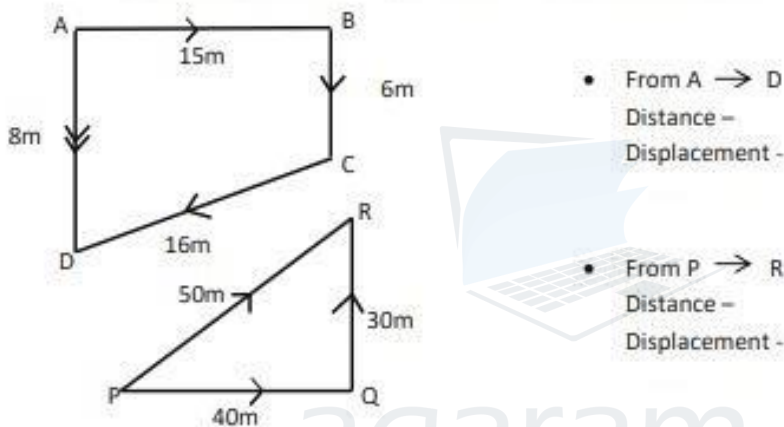


- i. A student started and finished the race from place A
  - a) What is the distance he traveled?
  - b) What is the displacement?
- ii. What is the difference between distance and displacement?
- iii. What is the SI unit of distance?
- iv. Name other two units of measuring distance.

3. i.

- a) Write 2 effects of a force
- b) Draw 2 examples for each

ii. Find the distance and displacement of following instances.



iii) There are some instances given below, where a force is applied. Mention whether it is a pull or a push for each instance



(a)



(b)

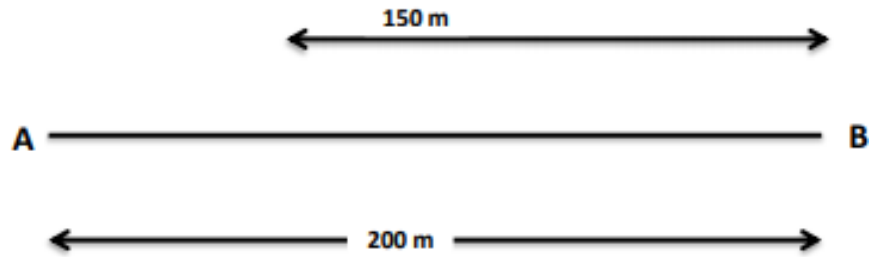


(c)



(d)

4. A man walked 200m to the east along a straight road from A to B



- i. What is his displacement?
- ii. What is the distance travelled by him?
- iii. If he turned back at B and walked 150 m along the same road,
  - (a) Find the total distance travelled by him.
  - (b) Find his displacement.
- iv. Write a difference between the distance and the force.



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