

St Mary's coed school harda

Class VIII

Subject science

Chapter 7 FORCE AND PRESSURE

Q1 fill.in the blanks

- 1 Friction
- 2 Pascal
- 3 Equal
- 4 Fluid
- 5 300km
- 6 Machanical
- 7 Attraction
- 8 Kilogram

Q2 MCQ

- 1 push or pull
- 2 all of these
- 3 frictional force
- 4 Newton
- 5 contact force
- 6 frictional force
- 7 force/area
- 8 muscular.force
- 9 barometer
- 10 gravitational force

Q3.matching

- 1 contact force
- 2 increase in pressure
- 3 atmospheric pressure measuring insrument
- 4 repel
- 5 international.unit of force

NCERT exrecise fill.up

- 1 Apply force
- 2 Attract
- 3 push or pull
- 4 repel

SHORT ANSWER

(1 answer)Push or pull is called force its sl.unit is Newton



(2.answer) Effect of force are

Force stop a moving object or make a stationary object move

Example catch a ball or hit the ball

Force change the direction example a goalkeeper applies force to stop a football

Force change the shape of object like press a sponge

(3 answer) The force which arise due to physical contact is contact force

The force which arose without physical contact is non contact force

(4 answer) Force in which muscle from different parts of body involve

(5 answer)

If two forces act on an object in the same direction, the net force is equal to the sum of the two forces. This always results in a stronger force than either of the individual forces alone.

19:47

(6 answer)

When two forces are applied in the opposition direction on an object, the net force will be the difference between the two forces.

19:47

(7 answer) force applied per unit area and its sl.unit is Pascal

(8answer)

The pressure exerted by a liquid is small just under the surface of the liquid. But as we go deeper in a liquid the pressure of liquid increases. As the depth of liquid increases the weight of liquid column pushing down from above increases and hence the pressure also increases.

19:47

NCERT QUESTION

(A)

Give two example each of situation in which you push or pull to change the state of motion of object.

Answer

Examples of situations in which you push or pull to change the state of motion of objects.

1. Pull situations

a) In order to open a drawer, we have to pull it. This action changes the state of motion of the drawer.

b) To draw water from the well, the rope is pulled. This action changes the state of motion of the bucket.

2. Push Situations

a) A football is pushed by the foot of a player. This action changes the state of motion of the ball.

b) In order to change the place of the heavy box from one room to another, we have to push it. This action changes the motion of the box.

★ 09:51

Ncert 1) Ans. ★ 09:51

(QB) Give two example of situation in which applied force causes a change in the shape of an object.

Answer

1 Make chapati from dough

2 Squeeze an empty bottle

(QD) In the following situation identify the agent exerting the force and object on which it acts state the effect of force in each case

Answer

a) We make a muscular force to extract the juice of the lemon by squeezing it. As a result, the shape of the lemon gets changed.

b) To take out paste from the toothpaste tube we use our muscular force. This muscular force acting on the toothpaste tube leads to a change of its shape.

c) Here, the suspended load exerts a force on the spring and pushes the spring downwards. As a result, the spring gets stretched. Hence, its shape gets changed.

d) The feet of the athlete exert the muscular force on the ground, which pushes the ground. This allows him to jump over the bar. As a result, his state of motion gets changed.

★ 09:53

Ans. D ★ 09:53

(Q E)A blacksmith hammers a hot piece of iron while making a tool how does the force due to hammering affect the piece of iron?

Answer

He uses muscular force to change piece of iron in desired shape.

(Q F)An inflated balloon was pressed against a wall after it has been rubbed with a piece of synthetic cloth it was found that the balloon sticks to the wall what force might be responsible for the attraction between balloon and the wall.

Answer

When an inflated balloon is rubbed with a piece of synthetic cloth, it becomes charged. A charged body attracts an uncharged body. When this charged balloon is pressed against a wall, it sticks to the wall. Thus, the electrostatic force acts between the charged balloon and the wall.

★ 09:53

(Q G)Name the force acting on a plastic bucket containing water held above ground level in your hand discuss why the force acting on the bucket does not bring a change in its state of motion?

Answer

For holding the bucket of water above the ground, we use muscular force. This muscular force acts against the force of gravity that pulls the bucket towards the ground. The two forces are equal in magnitude but opposite in direction. Therefore, the net force on the bucket is zero. Hence, there is no change in the state of motion.

★ 09:54

(Q H) Rocket has been fire about to launch a satellite in its Orbit name the two force acting on the rocket immediately after leaving the launching pad?

Answer

The force of gravity is the one which acts on the rocket to pull it towards the ground and the other one is the force of friction due to earth's atmosphere, which opposes its motion.

★ 09:54

(Q I)

Answer

a) Due to the atmospheric pressure, there is a rise of water in the dropper.

When all the air escapes from the nozzle, the atmospheric pressure which is acting on the water forces the water to fill the nozzle of the dropper.

★ 09:55

HoTS

(2 answer)

As we apply the front brake the weight of the cycle shifts forward applying more pressure on the front contact path allowing us to apply more brake

Hots 3

(Answer3)

pace bowling are usually known as fast bowlers, ,pacemen or seam bowler, a swing bowler who can swing it to reflect the predominant characteristic of their deliveries.

Spin bowlers aim to get batsmen out by using the wrists and the fingers to impart revolutions on the ball as it leaves the hand. This causes the ball to change direction when it hits the pitch

★ 10:56

