

CBSE Class 8 Science
NCERT Exemplar Solutions
CHAPTER – 11
Force and Pressure

VERY SHORT ANSWER QUESTIONS

9. A ball of dough is rolled into a flat chapatti. Name the force exerted to change the shape of the dough.

Ans: The shape of the dough is changed through the action of body muscles. The resulting force is called the **muscular force**.

10. Where do we apply a force while walking?

Ans: While walking, we apply a force on the ground against the force of friction.

Explanation: The force of friction acts against the movement of an object/person. A person is able to walk when it overcomes the force of friction.

11. A girl is pushing a box towards east direction. In which direction should her friend push the box so that it moves faster in the same direction?

Ans: Her friend should also push the box **towards east direction** so that the box moves faster in the same direction.

Explanation: The force applied by the friend on the box in the same direction will add to the force being applied by the girl on the box. The increase in the resultant force will increase the speed of the box.

12. In the circuit shown in Fig.11.6 when the key is closed, the compass needle placed in the match box deflects. Name the force which causes this deflection.

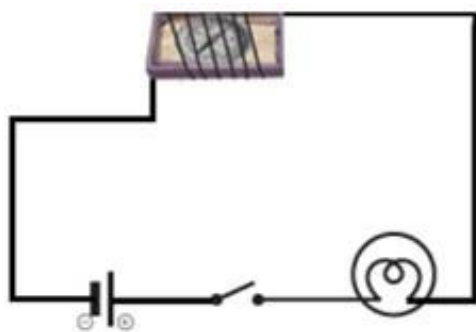


Fig. 11.6

Ans: When current is passed through the solenoid, it produces a **magnetic force** that causes a deflection in the compass.

Explanation: In the given figure, the coil rolled around the matchbox acts as a solenoid.

13. During dry weather, clothes made of synthetic fibre often stick to the skin. Which type of force is responsible for this phenomenon?

Ans: During dry weather, clothes made of synthetic fibre often stick to the skin due to the **electrostatic force**.

14. While sieving grains, small pieces fall down. Which force pulls them down?

Ans: While sieving grains, small pieces fall down (towards the Earth) due to the **force of gravity**.

Explanation: The **force of gravity** attracts every object towards the centre of the **Earth**.

15. Does force of gravity act on dust particles?

Ans: Yes, the force of gravity acts on dust particles also.

Explanation: The force of gravitation is a universal force which acts between two masses in the universe. When this force is acting between the dust particle and the **Earth**, it is known as **the force of gravity**. The force of gravity pulls all objects towards the centre of the **Earth**.

16. A gas filled balloon moves up. Is the upward force acting on it larger or smaller than

the force of gravity?

Ans: The upward force acting on a gas balloon is **larger than the force of gravity**.

Explanation: The force of gravity acts on the balloon in a direction opposite to the upward force. The force of gravity pulls the gas balloon towards the centre of the Earth. Since the upward force is able to overcome the force of gravity, the balloon moves up.

17. Does the force of gravitation exist between two astronauts in space?

Ans: Yes, the force of gravitation exists between two astronauts in space.

Explanation: The **force of gravitation** is a universal force that exists between every two objects in the **Universe**.