

Name: _____ Date: _____

Force and Pressure

Q1. Explain why the walls of a dam are thicker near the bottom than at the top.

Ans. _____

Q2. Give three examples of non-contact forces.

Ans. _____

Q3. A rocket has been fired upwards to launch a satellite in its orbit. Name the two forces acting on the rocket immediately after leaving the launching pad.

Ans. _____

Q4. What is meant by gravitational force (or force of gravity)? Give its one example.

Ans. _____

Force and Pressure

Q1. Explain why the walls of a dam are thicker near the bottom than at the top.

Ans. The walls of a dam are much thicker at the bottom than it is at the top.

This is because the pressure of the water is much greater deeper down and the dam needs to be thick at the bottom so that it is strong enough to withstand this larger pressure.

Q2. Give three examples of non-contact forces.

Ans. The examples of non-contact forces are:

- i. Magnetic force
- ii. Electrostatic force
- iii. Gravitational force

Q3. A rocket has been fired upwards to launch a satellite in its orbit. Name the two forces acting on the rocket immediately after leaving the launching pad.

Ans. The two forces acting on the rocket are the force of gravity, which pulls the rocket towards the ground, and the force of friction due to earth's atmosphere, which opposes its motion.

Q4. What is meant by gravitational force (or force of gravity)? Give its one example.

Ans. Every object in the universe, whether small or large, exerts a force on every other object. This force is known as the gravitational force.

Example: Water begins to flow towards the ground as soon as we open a tap.