

Effects of Force

Chapter 5: Exploring Forces · Topic 2

Key Concept

Kicking a stationary ball applies force that changes its speed (from rest to moving) and can also change its direction if kicked at an angle. Squeezing a rubber ball or stretching a spring changes its shape through applied force, and if the force is removed, elastic materials often return to their original shape — this property is called elasticity. Understanding the effects of force is fundamental to fields like engineering, sports science, and even understanding natural events like earthquakes.

Quick Revision Notes

- Force can change an object's speed, direction of motion, or shape.
- A single force can cause more than one effect at the same time.
- Elastic materials return to their original shape after a deforming force is removed.
- Understanding force effects is important in engineering, sports, and natural sciences.

Practice Questions

- 1 Give an example where force changes the shape of an object.
- 2 Explain the term 'elasticity' with an example.
- 3 Describe a situation where a single force changes both the speed and direction of an object.