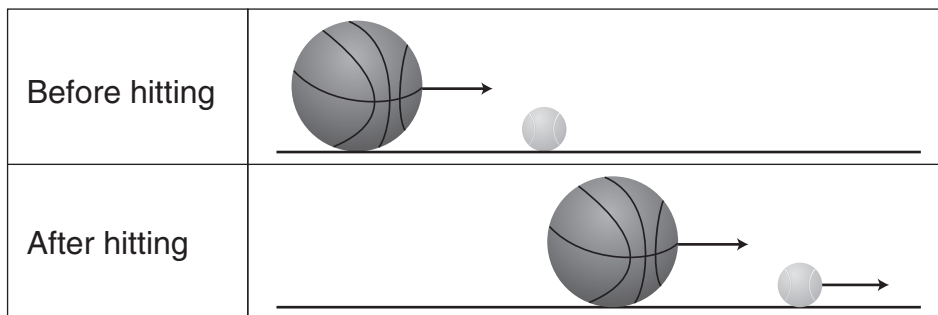


A basketball hits a tennis ball lying at rest. The two balls then roll in the same direction. The basketball has a much greater mass than the tennis ball.



- 1** What causes the tennis ball to roll?
- A** The basketball transfers its velocity to the tennis ball.
  - B** The basketball transfers some kinetic energy to the tennis ball.
  - C** The basketball transfers all its potential energy to the tennis ball.
  - D** The potential energy of the tennis ball is converted into kinetic energy.
- 2** After a short time, both balls stop moving. Why does this happen?
- A** The balls have lost all their energy.
  - B** Gravity has increased on the balls.
  - C** Friction forces have acted on the balls.
  - D** The balls have converted all their kinetic energy into potential energy.
- 3** The use of renewable energy helps to reduce emissions of greenhouse gases. Which of the following groups contains only greenhouse gases?
- A** water vapour, nitrogen, methane
  - B** oxygen, carbon dioxide, argon
  - C** water vapour, carbon dioxide, methane
  - D** nitrogen, carbon monoxide, oxygen