

- 15** A cannon-ball of mass 3.50 kg is fired at a speed of 22.0 ms^{-1} from a gun on a ship at a height of 6.00 m above sea level.

The total energy of the cannon-ball is the sum of the gravitational potential energy relative to the surface of the sea and the kinetic energy.

What is the total energy of the cannon-ball as it leaves the gun?

- A** 206 J
- B** 641 J
- C** 847 J
- D** 1050 J

- 16** An aircraft travels at a constant velocity of 90 m s^{-1} in horizontal flight. The diagram shows some