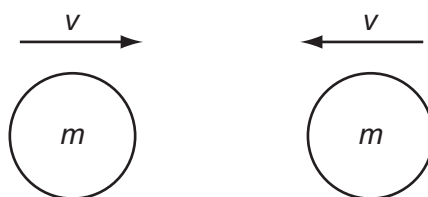


11 Each option gives a correct word equation involving force.

Which option gives the definition of force?

- A force = energy divided by displacement
- B force = mass \times acceleration
- C force = pressure \times area
- D force = rate of change of momentum

12 Two similar spheres, each of mass m and travelling with speed v , are moving towards each other.



The spheres have a head-on elastic collision.

Which statement is correct?

- A The spheres stick together on impact.
- B The total kinetic energy after impact is mv^2 .
- C The total kinetic energy before impact is zero.
- D The total momentum before impact is $2mv$.

Space for working