

- 10 The diagram shows the masses and velocities of two trolleys that are about to collide.

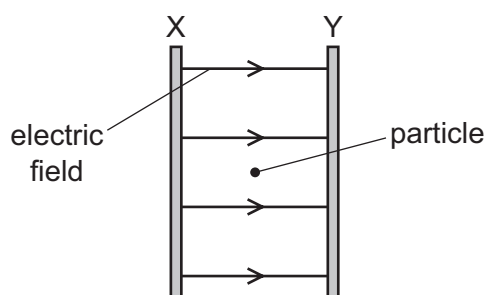


After the impact they move off together.

What is the kinetic energy lost in the collision?

- A** 4 J **B** 6 J **C** 12 J **D** 14 J
- 11 A particle is situated at rest between two metal plates X and Y.

A potential difference (p.d.) is then applied across the plates and produces the electric field shown.



The particle moves towards plate X when the p.d. is applied.

What could be the particle?

- A** alpha-particle
B electron
C neutron
D proton