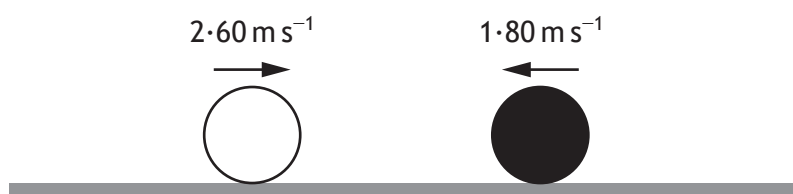


2. A white snooker ball and a black snooker ball travel towards each other in a straight line.

The white ball and the black ball each have a mass of 0.180 kg .

Just before the balls collide head-on, the white ball is travelling at 2.60 m s^{-1} to the right and the black ball is travelling at 1.80 m s^{-1} to the left.



After the collision, the black ball rebounds with a velocity of 2.38 m s^{-1} to the right.

- (a) (i) Determine the velocity of the white ball immediately after the collision.

3

Space for working and answer

- (ii) The collision between the balls is inelastic.

State what is meant by an *inelastic collision*.

1

