

Momentum Quiz

1. Write down as many formulae as you can that include momentum.

2. Estimate the momentum of

a) a bee flying as fast as it can

b) Usain Bolt sprinting

c) a car driving down a street

3. A big ball of plasticine (mass 1kg) travelling horizontally at 5m/s hits a wall and comes to a stop in 0.1 seconds.

a) what is the change in momentum of the plasticine?

b) what is the average force of the wall on the plasticine?

c) what is the average force of the plasticine on the wall?

4. A bouncy ball of mass 0.05kg is travelling to the right at 8m/s. It bounces off a wall and moves off at 6m/s to the left. What is the change in momentum of the ball?