

Unit 8 Investigation

Using the Collision simulation on the Unit 8 – Momentum Files page investigate the following and record data for each trial. You should record the speed of each sphere before and after the collision, the mass of each sphere, direction of travel before and after collision, other stuff before and after the collision.

Two equally massed spheres collide – Types of collisions to investigate – 1 sphere is stationary, both spheres are moving the same direction front car is slower and collide, spheres are moving opposite directions and collide.

One light sphere and 1 heavy sphere collide (vary masses with each type of collision) – Light sphere stationary, heavy sphere stationary, light sphere and heavy sphere are moving same direction with light sphere in front, repeat with heavy sphere in front moving same direction, spheres moving from opposite directions (same speed, light sphere faster, heavy sphere faster)

Investigate each type of collision as an elastic collision, and inelastic collisions.

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