

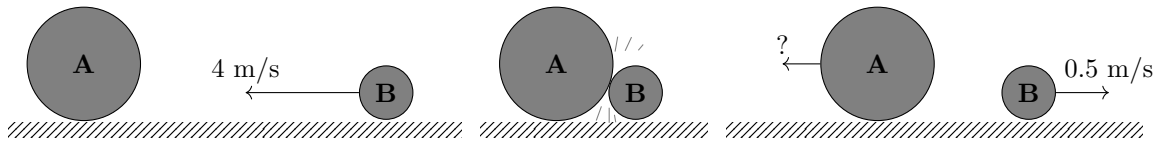
Name: _____

Date: _____

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Conservation of Momentum Consolidation.

1. Consider the following objects that collide on a frictionless surface. If $m_A = 4$ kg and $m_B = 1$ kg, what is the final velocity of object A?



2. A 1500-kg truck traveling at 15 m/s rear-ends a stationary 900-kg car. After the collision, the two vehicles stick together. Before friction has a chance to take effect, what is the speed of the cars?
3. A 900-kg cannon fires a 5-kg cannonball at a speed of 30 m/s. What is the speed of the cannon's recoil?