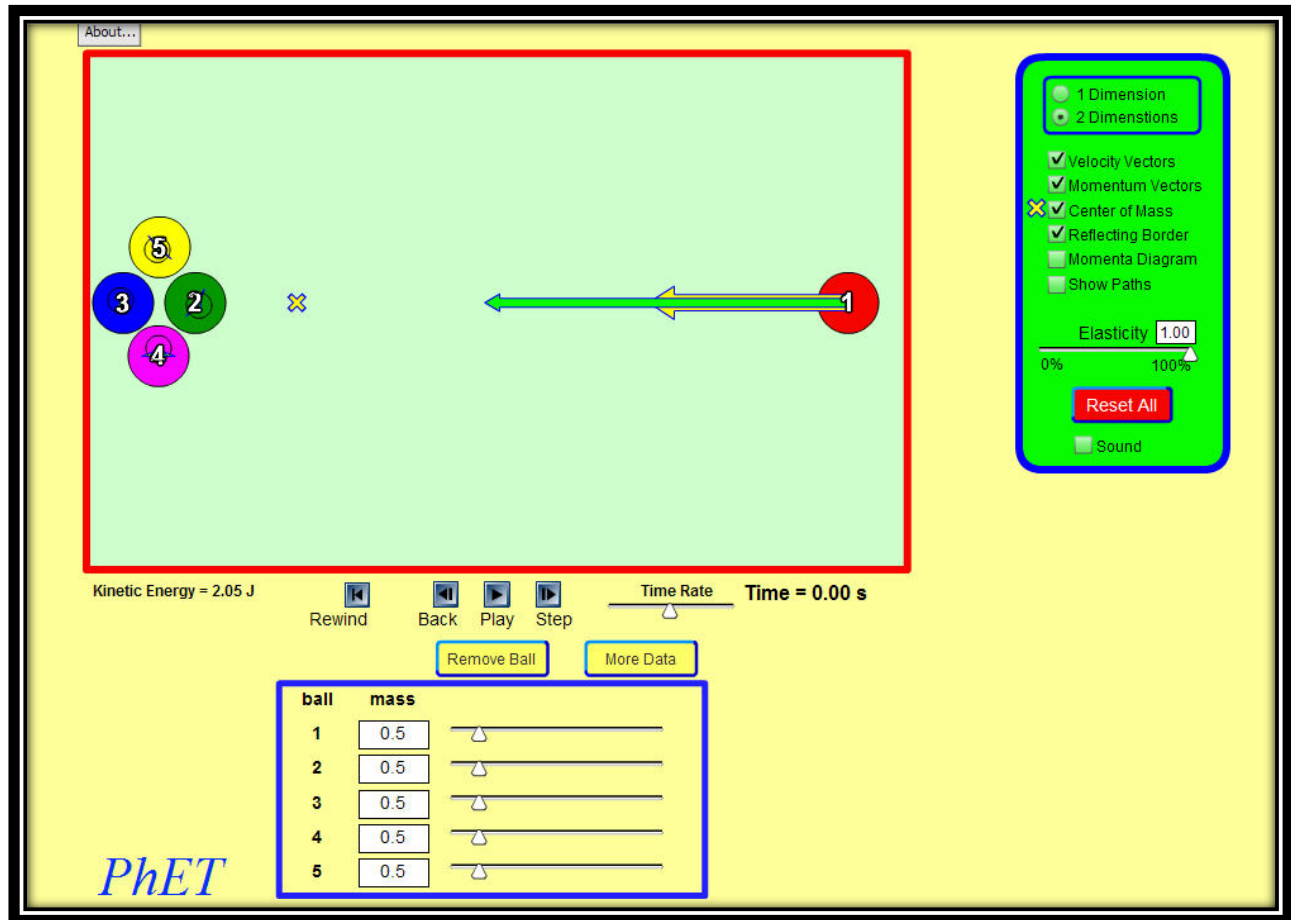




COLLISIONS

<http://phet.colorado.edu/en/simulation/collision-lab>



Part 1 setup:

1. Set up the collisions simulation EXACTLY like the picture above.
2. Click the play button and let it run continuously.
3. Observe the collisions and answer the questions for part 1.

Part 1 questions:

1. When two balls collide, what happens to their direction?

2. When two balls collide, what happens to their velocity (green arrows)?

3. When two balls collide, what happens to their momentum (yellow arrows)?

Part 2:

Now play with the simulation (change the settings) to answer these questions:

4. How do the collisions change when one ball is made very large (massive)?

5. How do the collisions change when 4 balls are made the maximum mass and 1 is left at .5?

6. How do the collisions change when the elasticity is set to 50 %?
Set to 0%?

Part 3:

Play with the simulation some more. What else can you discover about collisions?