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Introduction	This ball drop activity demonstrates how potential energy is impacted by a loss of energy with the collision with the ground.
Target grade	Grades 8-12
Time	45 minutes
Lesson Preparation	Need three balls (tennis, golf and rubber balls) for each group Meter sticks Chart to record results
Prior Knowledge Required	Students should have a basic understanding of potential and kinetic energy.

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mills, as the energy created by the falling water moves through the mill's power-transfer system. As the energy moves through belts, gears, and machines, energy is lost to friction and other causes is demonstrate in heat, vibration and noise.

This lesson draws from a teacher lesson by the Museum of Science and Industry Chicago.

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Ball Drop Rebound Test

Hypothesis: What do you anticipate the result to be for ball return height? _____

Drop the golf ball, the same way, for all five trials. For each trial, the measurer should tell the recorder the rebound height of the first bounce. After your group has completed five trials for the golf ball, calculate the average rebound height. Repeat for Tennis Ball and Rubber Ball

100 cm Drop Height

	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5	Average Rebound Height	Average Difference between Rebound and Drop
Golf Ball							
Tennis Ball							