History Connection for Double Ball Bounce:

My project largely deals with the scientific ideas of momentum and kinetic energy. As I was working on my project I began to wonder about the history behind the science. So I did some research.

Momentum:

Momentum was discovered a long time ago in about 530 A.D. John Philoponus, a Byzantine philosopher working in Alexandria, developed a concept of momentum in his commentary to Aristotle's *Physics*. He went against Aristotle`s claim that when a ball is thrown, the air movements keeps the ball in the air. Philoponus pointed out the absurdity of this and suggested that an impetus was acting upon the ball as a result of throwing it. Philoponus' idea and claim evolved over the centuries in what we now know as momentum. Rene Descartes helped the idea to evolve by suggesting that the total "quantity of motion" in the universe is conserved, where the quantity of motion is understood as the product of size and speed.

Kinetic Energy:

The adjective *kinetic* has its roots in the Greek word kinesis meaning *motion*. The idea stems from aristotle's original theory of actuality. It evolved later in classical mechanics by Gottfried Leibniz and Johann Bernoulli, who described kinetic energy as the *living force*.
Gaspard-Gustave Coriolis first outlined the actual mathematics of kinetic energy in 1829. And finally the term "Kinetic Energy" came about starting in the 1850's.