1. A ball is thrown upward at 30 m/s.
    a) How long does it take to get to the top?
    b) How long does it take to come back down from the top?
    c) How high up did it go?

2. The Toy Projectile Launcher shoots a ball. It takes 2 seconds to get to the top, and 2 seconds to fall back down.
    a) How fast did it shoot?
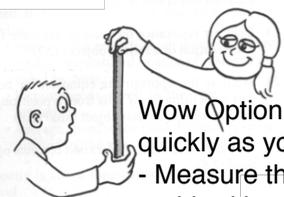   b) How fast is it going when it comes back down?

Wow Options

Wow Option 1. An armadillo is scared and leaps directly upward. It lands 2 seconds later. How fast did it leap?
(Hint: 2 seconds is for the up and down combined.)

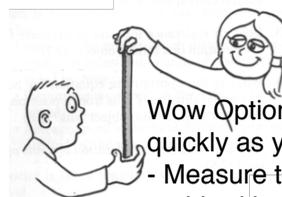*Idea and drawing credit: Paul Hewitt, Conceptual Physics.*

Wow Option 2. When the other person drops the ruler, grab it as quickly as you can. FOR A FAIR TEST, DO NOT GRAB EARLY.
- Measure the number of centimeters that dropped before you grabbed it.
- Convert those centimeters to meters (divide by 100.)
- Use the distance equation to calculate your reaction time.

Wow Option 3. How fast would Superman have to throw something upward so that it takes an entire day (24 hrs) to come back down?
(Hint1: How many seconds are there are in one day?)
(Hint2: An entire day is for the up and down combined.)