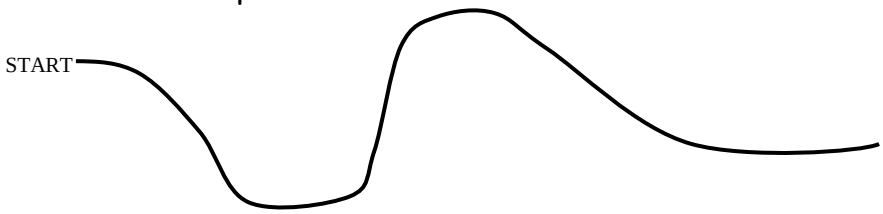
Name _____

Law of Conservation of Energy Worksheet

After reading Ch. 5 sec. 2 answer the following questions.

1. State the law of conservation of energy.

2. A rollercoaster is designed as shown below. If the roller coaster starts at the top of the first hill from rest, describe what will happen to the rollercoaster. How could you fix this problem?



3. When you are on a swing, where is your potential energy the greatest?

4. When you are on a swing, where is your kinetic energy the greatest?

5. Imagine you're standing on a stepladder and you drop a basketball. The first bounce will be highest. Each bounce after that will be lower until the ball stops bouncing. Describe the all energy changes that take place, starting with dropping the ball.

6. If energy is never lost, why does the basketball you dropped eventually stop?

7. A lot of discussion has focused on the need to conserve energy (drive more efficient cars, use less electricity, etc.). If the law of conservation of energy is true, why are people worried?