<u>Name:</u> Date:

1) State the law of conservation of energy, the definition of kinetic energy and the definition of potential energy.

For questions 2 -5, recall the example in class with the pendulum

- 2) At what position was the kinetic energy the greatest?
- 3) At what position was the potential energy the greatest?
- 4) What was the source of this kinetic and potential energy?
- 5) Describe the relationship you found between the potential and kinetic energy as a pendulum swings. Will the pendulum swing forever? Why or Why not?