**Physics 3 Unit 9– SHM and Rotation Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**4.1 Pendulum Worksheet**

1. Describe how you would make a pendulum with a period of 1.0 sec.

2. What would be the period of a pendulum that is 1.0 m long?

3. Imagine you could travel to the moon where the acceleration due to gravity is 1.6 m/s2. What would be the period of a pendulum that is 1.0 m?

4. A trapeze artist wants a period of 3.8 s. How long should the cables be? (Do not consider the height of the trapeze artist.)

5. Is it more fun on a swing with low or high amplitude? Explain.