**QUESTIONS TO HAND IN – EXPERIMENT 20**

**NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**LAB INSTRUCTOR\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_LAB DAY/TIME\_\_\_\_\_\_\_\_\_\_ \_ \_\_**

**1.** A simple pendulum with a 50 gram bob is observed to have a period of 2 seconds. What is the period if the mass is doubled to 100 grams?

**2.** What property of the pendulum can you change to alter the period?

**3.** A pendulum is observed to have a period of 2.5 seconds in Ohio. It is taken to Denver, where the acceleration of gravity is lower. Do you expect the period to (circle one) **increase/decrease/stay the same**?

**4.** If the length of a pendulum is cut in half, by what factor does its period change?

**5.** Find the period of a pendulum that is 1 meter in length. Take *g* to be equal to 10 m/s2.