Name: _____ Period: _____ Date: _____

WHAT CAN CHANGE THE PERIOD OF A PENDULUM?

Background Information

- Control
- Variable
- Pendulum
- Period

Prediction/Hypothesis

1. The heavier the pendulum, the longer/shorter its period, or its period will remain the same.
2. The longer the string, the longer/shorter its period, or its period will remain the same.

Trial	Weight of pendulum	String length	Time for 10 cycles	Time for 1 cycle = Period	Average Period
1 2 3	Standard (large)	75 cm	_____ s _____ s _____ s	_____ s _____ s _____ s	_____ s
1 2 3	Light (small)	75 cm	_____ s _____ s _____ s	_____ s _____ s _____ s	_____ s
1 2 3	Heavy (large + small)	75 cm	_____ s _____ s _____ s	_____ s _____ s _____ s	_____ s
1 2 3	Standard (large)	100 cm	_____ s _____ s _____ s	_____ s _____ s _____ s	_____ s
1 2 3	Standard (large)	50 cm	_____ s _____ s _____ s	_____ s _____ s _____ s	_____ s

Summary Questions

1. Which pendulum had the longest average period? _____

2. Which pendulum had the shortest average period? _____

3. What are the two variables that we changed in this experiment?

   _____ and _____

4. Which of these variables seems to be most important in controlling the period of the pendulum?

   _____

5. Which of these variables seems to have very little effect in controlling the period of the pendulum?

   _____

6. What is the purpose of changing only one variable at a time?

   _____

   _____

   _____

   _____

7. Was your 1st hypothesis correct? Yes/No Give proof.

   _____

   _____

   _____

8. Was your 2nd hypothesis correct? Yes/No Give proof.

   _____

   _____

   _____