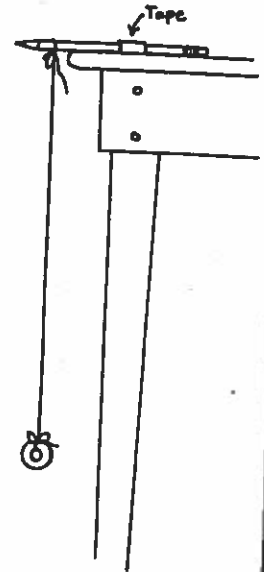


# CONTROLLING VARIABLES

1. Tape the pencil to the table so that it hangs over the edge. Hang the longest pendulum from the pencil. Hold the pendulum even with the top of the table and release it.
2. Count how many times it swings back and forth in 15 seconds and record the number of swings in the chart below. Use the metric tape measure to measure the length of the pendulum. Repeat this procedure with the other five pendulums.



Length of Pendulum  
in cm

Number of Swings Back  
and Forth in 15 Seconds

Length of Pendulum in cm	Number of Swings Back and Forth in 15 Seconds

3. Which variable did you change? \_\_\_\_\_
4. Which variable responded to the change (what did you count)?  
\_\_\_\_\_
5. Which variables were kept constant? \_\_\_\_\_
6. How does the length of the pendulum affect the number of times it swings in 15 seconds? \_\_\_\_\_  
\_\_\_\_\_

**Directions:** Using the data table on the previous page, make a graph of your data.  
Remember all your graphing procedures.

