

1. Use the materials provided to construct a pendulum like the one in the diagram.



2. Start your pendulum swinging to measure time.
3. To help your pendulum measure the same each time you use it, you will need to:
  - make sure you hold the pendulum in the same place each time you release it
  - make sure you let the weight go rather than push it
  - count the number of swings carefully from the highest place in the swing each time.
4. Estimate the time it will take for the pendulum to swing 5, 10, 15 and 20 times. Record your estimates on a table.

Number swings	Estimated time taken	Measured time taken
5		
10		
15		
20		

5. Measure the time taken for the pendulum to swing 5, 10 15 and 20 times. Record your measurements on a table.
6. Experiment with your pendulum and the way it measures time.
  - What happens if you make the string longer?*
  - What happens if you make the string shorter?*
  - What happens if you use a heavier weight?*
  - What happens if you use a lighter weight?*
  - Can you make your pendulum measure 1 minute accurately?*
  - Can you make your pendulum measure 5 minutes accurately?*