

Lab – Mass of a Wire

Purpose: To find a relationship between the mass of a wire and its length.

Materials:

- Two groups of six wires of one type (12 wires total, 6 of each type)
- Ruler
- Triple-beam balance

Instructions:

1. Measure the length and mass of each wire.
2. Create a data table that shows the wire length and its mass for each grouping of six wires.
3. Graph the mass of the wire (y-axis) versus the length of the wire (x-axis) for both sets of wires. Draw the best-fit line for each graph. Calculate the slope of each best-fit line. You may draw two separate graphs or plot both data sets on the same set of axes.
4. The standard lab conclusion should be used.