

**Lab Report Writing Teacher Notes**

Materials needed:

- 24 Meter Rules (1 per student)
- 24 rulers (1 per student)
- Graph Paper

This is a simple exercise that leads the students through taking some data, tabulating it, and assessing errors in the data acquisition. You need to move actively around the classroom making sure everyone knows what they're supposed to be doing, and supervise how the measurements are being done. Give advice, and help them to better understand how well something can be measured.

The students are then asked to propagate their errors, and you may have to take some time explain the standard equations given in the lab script. I have not bothered to include the differential form, since this would be lost on them. Make sure they're propagating their errors correctly.

They are also introduced to graphing, and this needs to be reinforced. They will be graphing their data almost weekly. They need to get this right and get it right fast. Make sure you inspect all graphs before students leave. However, encourage them to start work on their lab reports while still in the classroom so they can ask questions of you. We want to discourage the early bailing problem we have had in previous years.

Throughout all of this emphasize neatness, attention to detail and careful note-taking. These are the qualities that make a good experimenter.