

Name: _____ Student ID: _____

Oxygen Concentration Laboratory Experiment

PART 1 (15 points): Attach complete data table to this sheet. Make a time series graph of your data (measurement reading vs. time), preferably in excel, and attach it to this sheet. Do not submit a messy, hand-drawn graph.

PART 2 (10 points): Using your data, calculate the percent oxygen concentration in your air sample. Show all work, and make sure to include the original formula.

PART 3 (10 points): In 1-2 paragraphs, explain how you did this experiment. This should be written as if you are directing someone else to perform the experiment exactly as you did. Make sure to note specifics about the materials, and do not miss any steps.

PART 4 (15 points): In 1-2 paragraphs: 1) Explain what is physically occurring. This should include specific details on the chemical reaction(s) that cause rust to form on the steel wool. 2) Explain why oxygen exists in Earth's atmosphere at the concentration you measured. Include details on both physical and biological processes.

OTHER NOTES:

All written responses must be typed. Try to type the equation, including the use of Microsoft Equation Editor in Word. If you submit anything handwritten that is unreadable, you subject yourself to losing points or receiving a complete zero. Poor grammar and/or spelling will result in lost points. Staple all parts to this sheet.