Unit 1 Objective Work 2020       Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per \_\_\_\_\_

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| Objective | Notes (Defn, practice problems, questions, etc.) |
| 1. Evaluate personal study skills and set measurable goals for their study habits.  Learner Profile |  |
| 2. Measure length, volume, and mass with correct accuracy and precision using a variety of measuring devices.  Degree of Freedom, Significant Figures, Uncertainty, SI Units, Metric Prefixes (kilo, centi, milli), % error, Standard deviation |  |
| 3. Compare and contrast random errors and systematic errors, giving examples and how to prevent if possible.  Calibration |  |
| 4. Convert between measures (both US and metric) using dimensional analysis. |  |
| 5. Represent/interpret data using different graphical representations (i.e. graphs, tables, charts, etc.).  Graph components (title, axis labels, uncertainty, units, trendline)  Table components (see above) |  |
| 6. Design and conduct a personal investigation. (Explained in the IB Mark Scheme. See Mark Scheme Rubric for more details.)  Scientific process, Independent variable, Dependent variable, Controlled variable, Research question |  |
| 7. Explain the nature of science including key components of the scientific method.  Hypothesis, Theory, Law, Research |  |