

Static Electricity Notebook - Scoring Rubric

Your notebook will be collected at the end of class on _____/_____/_____. The following items should be in your notebook. They should be clearly organized and easy to find. Use an organizational system and label all work. Each lab will be graded separately. Seven Static Electricity lab grades will be entered into the gradebook. An overall notebook grade will be determined based on your use of the notebook as an organized and effective record-keeping tool which documents your engagement in the learning cycle during classtime and labtime.

Name: _____

Period: _____

Item	Score
<p>SE1. Action at a Distance Lab</p> <ul style="list-style-type: none"> ___ Included, labeled and organized all parts of the lab report. ___ Data section includes clearly documented observations of interactions between the objects. ___ Conclusion correctly and completely answers the <i>question</i> from the Purpose. The charges on the top <i>triangle</i> tape and the bottom <i>rectangle</i> tape are accurately stated; the supporting evidence is discussed. 	<p>_____/4 (Lab score)</p>
<p>SE2. Sticky Tape Experiments Lab</p> <ul style="list-style-type: none"> ___ Included, labeled and organized all parts of the lab report. ___ Data section includes the provided table; observations are reasonably accurate and the conclusions regarding the charge are consistent with the observations. ___ Conclusion/Discussion provides a complete ranking of the materials studied. Evidence from the Data section is discussed to support all rankings. Suspicious and/or inconsistent results are discussed. 	<p>_____/5 (Lab score)</p>
<p>SE3. Pop Can Induction Lab</p> <ul style="list-style-type: none"> ___ Included, labeled and organized all parts of the lab report. ___ Data section includes diagrams showing the steps involved in the induction charging process of two connected pop cans; the charge on the object being used to polarize the system is shown; labels are given to the cans for the sake of a clear discussion. The test used to determine the charges on the cans are noted and the resulting charge is indicated. Documentation reveals a strong ability to experiment. ___ Conclusion/Discussion thoroughly, accurately and clearly describes the induction process and the result of the process. Reveals understanding. 	<p>_____/6 (Lab score)</p>
<p>SE4. Charging by Induction Lab</p> <ul style="list-style-type: none"> ___ Included, labeled and organized all parts of the lab report. ___ Data section includes diagrams for each of the induction charging process; sufficient detail is included in the diagram. The tests used to determine the resulting charge is also included. ___ Conclusion answers the <i>question</i> posed in the Purpose; <i>answer</i> is correct. ___ Discussion of Results uses the observations from the Data section to explain the supporting evidence for the conclusions. 	<p>_____/5 (Lab score)</p>
<p>SE5. Electric Field Simulation</p> <ul style="list-style-type: none"> ___ Included, labeled and organized all parts of the lab report. ___ Data section includes a table of data with column headings and units. Documentation reveals the ability to conduct a controlled experiment in order to measure the potential outcome of one variable on a target variable. ___ Conclusion answers the <i>question</i> posed in the Purpose; <i>answer</i> is correct. ___ Discussion of Results makes explicit reference to specific data in order to describe the supporting evidence for the effect or non-effect of each variable upon the electric field intensity. 	<p>_____/5 (Lab score)</p>
<p>SE6. Coulomb's Law Lab</p>	

<ul style="list-style-type: none"> ___ Included, labeled and organized all parts of the lab report. ___ Data section includes an informative and well-labeled diagram of the experimental setup. Calculations of the force, the charge and the number of electrons are shown; work is systematic, labeled and organized; rationale behind each step is briefly identified; work is accurate. ___ Conclusion answers the <i>question</i> posed in the Purpose; <i>answer</i> is correct. 	<p>___/5 (Lab score)</p>
<p>SE7. Electric Field Lines Lab</p> <ul style="list-style-type: none"> ___ Included, labeled and organized all parts of the lab report. ___ Data section includes at least six electric field line diagrams – for a positive charge, a negative charge, a configuration of two identically and two oppositely charged objects, and two other multi-charge configurations. Diagrams have a sufficient number of lines to provide a sense of the pattern; arrowheads are placed on each line to indicate the direction of the field. ___ Conclusion/Discussion describes the general principles which characterize each pattern. 	<p>___/5 (Lab score)</p>
<p>SE8. Use of Notebook as a Record-Keeping Tool</p> <p>Ideally, a student would use the notebook to record notes from class lectures, post-lab sections, textbook readings, etc. Answers and discussions of opening questions are provided. The notebook is a record of the involvement of a scientist/student in both class and lab. A blank or even sparsely-used notebook with little evidence of involvement in class is not a sign of a student who has used the notebook to document and record their involvement in class. A diligent student keeps careful records which subsequently become an effective and useful learning tool.</p>	<p>___/10 (HW score)</p>