

Scoring Rubric for Drops on a Penny Lab Activity

Name _____

Date _____ Per. _____

Statement of Problem and Hypothesis

- 4 Hypothesis Statement has all three parts and is well written: If . . . then . . . because . . .
 - 2 Hypothesis Statement has two of the three parts
 - 1 Hypothesis Statement has one of the three parts
 - 0 Hypothesis Statement is absent
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Experimental Design

- 3 Variables were controlled well & procedures were followed correctly (consistent data)
 - 2 Variables were somewhat controlled and procedures were somewhat followed
 - 1 Variables were poorly controlled and procedures were poorly followed
 - 0 Variables were not controlled and procedures were not followed
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- 4 All four controlled variables were correctly identified
 - 2 At least two of the four controlled variables were correctly identified
 - 1 At least one of the four controlled variables were correctly identified
 - 0 Controlled variables were incorrectly identified or absent
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- 3 Results were analyzed correctly
 - 2 Results were partially analyzed correctly
 - 1 Results were analyzed incorrectly
 - 0 Results were not analyzed
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- 4 Independent and Dependent Variables correctly identified
 - 2 Independent or Dependent Variable correctly identified
 - 0 Independent and Dependent Variables incorrectly identified or absent
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- 3 Importance of controlling other variables is adequately described
 - 2 Importance of controlling other variables is somewhat described
 - 1 Importance of controlling other variables is poorly described
 - 0 Importance of controlling other variables is not described
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Data Presentation

- 3 Data Table is complete with averages calculated correctly
- 2 Data Table is complete with averages calculated incorrectly
- 1 Data Table is partially complete
- 0 Data Table is absent

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- | | |
|---|----------------------------------------------------------------------------------|
| 3 | Title of Graph: The Effect of the Type of Liquid on the Number of Drops on Penny |
| 2 | Title of Graph: The Effect of . . . incorrect independent or dependent variable |
| 1 | Title of Graph is present but has incorrect format |
| 0 | Title of Graph is absent |
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- | | |
|---|--------------------------------------|
| 4 | Accurate scale is present |
| 2 | Scale is present but is not accurate |
| 0 | Scale is absent |
-

- | | |
|---|--------------------------------------------------------------------|
| 4 | Labels include types of liquids, independent & dependent variables |
| 2 | Labels include two of the three |
| 1 | Labels include one of the three |
| 0 | Labels incorrect or absent |
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- | | |
|---|-----------------------------------------------|
| 3 | Data Bars: All three accurately drawn |
| 2 | Data Bars: Two of three bars accurately drawn |
| 1 | Data Bars: One of three bars accurately drawn |
| 0 | Data Bars: Drawn inaccurately or are absent |
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- | | |
|---|------------------------------------------------------------------------------------------------------------------------|
| 4 | Neatness: numbers/words legible, proper spelling/grammar, width of bars & spacing consistent, ruler used for axes/bars |
| 3 | Neatness: three of the four above expectations displayed |
| 2 | Neatness: two of the four above expectations displayed |
| 1 | Neatness: one of the four above expectations displayed |
| 0 | Neatness: none of the four above expectations displayed |
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Conclusion Paragraph

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|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8 | Conclusion includes all four parts: <ul style="list-style-type: none">- Summarize results (What did you learn?)- Is hypothesis correct with an explanation?- Evidence that includes data (Use numbers from data table)- Reliability of results (How well were variables controlled?) |
| 6 | Conclusion includes three of the four parts |
| 4 | Conclusion includes two of the four parts |
| 2 | Conclusion includes one of the four parts |
| 0 | Conclusion is absent |

Total Points _____ =
50