Investigation #3 Rubric

Check all that apply.

Aspect	Meets Expectations	Fails to Meet Expectations
Uses proportional relationships to calculate percentages and funds awarded.		
Effectively uses variable to set up and solve proportional relationships.		
Adds, subtracts, multiplies and divides with accuracy.		
Make sense of problems and persevere in solving them.		
Uses quantitative and abstract reasoning.		
Uses appropriate tools strategically.		
Develops a system for granting stipends within a budget.		
Discuss, compare, and negotiate methods used, results obtained, and explanations among groups of students conducting the same investigation.		
Explain the difference between an experiment and an investigation.		
Write arguments to support claims with clear reasons and relevant evidence.		

Standards Addressed

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others
4. Use appropriate tools strategically.
5. Attend to precision.
6. Look for and make use of structure.

- CCSS.Math.Content.7.RP.A.3 Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.

- CCSS.Math.Content.7.NS.A.3 Solve real-world and mathematical problems involving the four operations with rational numbers.
- CCSS.Math.Content.7.EE.B.3 Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies.
- CCSS.Math.Content.7.EE.B.4b Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. *For example: As a salesperson, you are paid $50 per week plus $3 per sale. This week you want your pay to be at least $100. Write an inequality for the number of sales you need to make, and describe the solutions*.
- SC.6.N.1.4: Discuss, compare, and negotiate methods used, results obtained, and explanations among groups of students conducting the same investigation.
- SC.7.N.1.1: Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.

- CCSS.ELA-Literacy.W.7.1 Write arguments to support claims with clear reasons and relevant evidence.
    - CCSS.ELA-Literacy.W.7.1a Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically.
    - CCSS.ELA-Literacy.W.7.1b Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.
    - CCSS.ELA-Literacy.W.7.1c Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence.
    - CCSS.ELA-Literacy.W.7.1d Establish and maintain a formal style.
    - CCSS.ELA-Literacy.W.7.1e Provide a concluding statement or section that follows from and supports the argument presented.
- CCSS.ELA-Literacy.SL.7.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.