**Projectile Motion Scientific Argument Rubric**

**Question and Claim:  /20pts**

-correct question provided (+10)

-claim answers question fully and accurately based on the evidence given (+10)

**Evidence:  /35pts**

-Speed, height, and angle data is organized in tables (+5)

-Speed, height, and angle data is graphically analyzed (+10)

-tables and graphs are formatted properly with titles, category/axis labels that include variable names and units, correct type of graph is used (+10)

-written summary of data is specific and explains trends or relationships seen in the data (must refer to numerical data from tables/graphs) and how those trends/relationships support the claim (+10)

**Justification/Reasoning:   /30pts**

-reasoning is well developed and accurately states the scientific reasons (scientific concepts/theory/law/mathematical relationships) for WHY the evidence supports the claim.  (+20)

-Student uses appropriate scientific terminology and includes mathematical relationships in their justification (+10)

*(Clarification: a discussion about projectile motion that includes both vertical and horizontal motion is included as well as the role speed, height and angle have on X displacement is explained.)*

**Writing Quality/Organization:   \_\_\_/15 pts**

-writing is well developed, clear and easy to follow (+5)

-the report is well organized, and the information is in the correct locations/sections of the report (+5)

-outside sources used in the justification are cited properly with in text citations and source citation if applicable (+5)

**Total Score:   /100 points**