**Rubric: Rooftop Garden Kit**

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| --- | --- | --- | --- |
| Criteria | Score | | |
| Missing or Unacceptable | Needs Improvement | Meets Expectations |
| Shows calculations: Linear equation (cost of fertilizer) (#1,2) | 0 | 1 | 2 |
| Shows understanding of data through plotting: fertilizer (#3) | 0 | 1 | 2 |
| Verbally communicates results effectively (#6) | 0 | 1 | 2 |
| Makes and labels a graph using the data collected: Graph title, x-axis, y-axis, slope, y-intercept (#3) | 0 | 1 | 2 |
| Obtains a linear equation from the graph (#1) | 0 | 1 | 2 |
| Predicts plant growth at “X” number of days (from fertilizer data) (#2) | 0 | 1 | 2 |
| Correctly labels “genotype” and “phenotype” (#5,10,11) | 0 | 1 | 2 |
| Predicts the phenotype through a test-cross (# 10,11) | 0 | 1 | 2 |
| Correctly crosses genotypes in a Punnett square (#10,11) | 0 | 1 | 2 |
| Identifies the independent and dependent variables (#4, 5) | 0 | 1 | 2 |
| Poster contains all appropriate information: Graph, linear equation, prediction, phenotypic outcome, genotypes, Punnett square, x vs. y labeled, Hardy-Weinberg population equation. (#1-12) | 0 | 1 | 2 |
| Poster is aesthetically pleasing | 0 | 1 | 2 |
| Crosses and displays at least two types of seeds using Punnett squares (#7,8) | 0 | 1 | 2 |
| Crosses and displays at least two possible types of bugs (#7,8) | 0 | 1 | 2 |
| Crosses and displays at least one flower (#7,8,9) | 0 | 1 | 2 |
| Solves for p or q in a Hardy-Weinberg problem (#10) | 0 | 1 | 2 |
| Uses data to interpret a Hardy-Weinberg population problem (#10, 3) | 0 | 1 | 2 |
| Predicts the most cost efficient: seeds, fertilizer (#12, 13) | 0 | 1 | 2 |
| Lists all materials and their costs that will be in the kit (#6) | 0 | 1 | 2 |