

SPARK Science Lab Worksheet

SPARK Hybrid Education Center | Upper Oct Lab Wk4: Mendelian Genetics

Student Name: _____

Date: _____

Purpose

Investigate: Mendelian Genetics

Materials

- * Materials for advanced mendelian genetics lab
- * Protective equipment
- * Data sheets
- * Calculator

Procedure

1. Review background: Mendel's laws; dominant/recessive; mono and dihybrid crosses
2. Form a detailed hypothesis with expected data ranges.
3. Conduct lab: Punnett square problems: 10 crosses; calculate phenotype rat
4. Record quantitative data with units.
5. Calculate results and determine percent error where applicable.

Data / Observations Table

Trial/Sample	Independent Variable	Dependent Variable M	Calculated Value	% Error

Analysis Questions

1. What was the quantitative result of this Mendelian Genetics lab?

2. Was your hypothesis supported? Cite specific data values.

3. Calculate the percent error if an accepted value is known.

4. What systematic error might affect these results? How would you eliminate it?

Conclusion

In my own words, what did I learn from this lab?