

# Project 1: Report



The purpose of this project is to explore the relationship between two variables within a single species of Pokémon®. In this stage, you will present your report. This report should be written in the past tense and be **2-3 pages** in length, including data, calculations, at least one **graph** and at least one **Venn diagram**. The report should be written in the style of a technical or scientific report which includes the following **four sections with headings**:

A) Introduction. What is the question you are investigating? What is your hypothesis?

B) Methods. How was the experiment conducted? Include enough detail that your instructor could repeat the experiment exactly as you did it.

C) Results. The data you collected and your analysis of that data. Your presentation of your data should include at least one Venn diagram, and at least one graph (line, scatter or bar). These can be generated easily using Excel and then copied and pasted into your report. If you don't know how to use Excel to make a graph, see if you can find out from Google!

D) Discussion. Your interpretation of your findings. Here are some examples of what you can discuss: What do your results mean? Did they match your hypothesis? This project is about understanding an example of sets and functions. What are some interesting sets you found? Comment on any relevant subsets, unions, intersections, or complements. Is one variable a function of the other? Why or why not? Think carefully about the definition of a function. If you do have a function, is that function invertible? What did you learn from your calculation?

## Grading

The report is worth a total of 30 points.

6 Points are for the Introduction.

0-2 Points	Severely incomplete or difficult to read. Does not include a clear discussion of the question to be investigated.
3-4 Points	Mildly incomplete. Contains grammatical or typographical errors. May not include a clear statement of hypothesis.
5-6 Points	Complete, easy to read and clearly sets the stage for the rest of the report.

6 Points are for the Methods.

0-2 Points	Severely incomplete, lacking critical components or difficult to read. Insufficient description of methods, experiment could not be repeated.
3-4 Points	Somewhat incomplete, lacking important details. Contains grammatical or typographical errors.
5-6 Points	Complete, easy to read, contains sufficient detail that experiment could be repeated.

10 Points are for the Results.

0-3 Points	Severely incomplete. Missing major components or difficult to read. Contains major mathematical errors.
4-7 Points	Somewhat incomplete. Contains grammatical or typographical errors. Venn diagram and graph clear and labeled.
8-10 Points	Complete and easy to read. Includes all required analysis. Figures easy to understand with labels and legends.

8 Points are for the Discussion.

0-2 Points	Severely incomplete. Missing major components or difficult to read. Missing or incorrect discussion of sets and functions.
3-5 Points	Somewhat incomplete. Contains grammatical or typographical errors. Discussion of sets and functions not well developed.
6-8 Points	Clear and easy to read. In depth analysis of relationship of variables. Demonstrates understanding of sets and functions.