

Name:

## Pokémon Go and biogeography

Students will:

- Learn how to interpret a graph
- Create a graph of species collected over time
- Create a species accumulation graph
- Use Pokémon Go as a proxy for collecting/observing species out in the world
- Demonstrate their understanding of the limitations of species accumulation curves and how best to use them?

Pokémon Go is a virtual reality based game that encourages players to capture and collect Pokémon living in our world. This involves a smart phone app, and the superposition of Pokémon on our world via the camera on the smart phone.



In the following activity, you will go in pairs to collect Pokémon in the south loop. You will collect Pokémon for 30 minutes and then return to the classroom. Do not go to the nearby PokeGyms and fight Pokémon.

The class will be split into two experimental groups 1) Walking 2) PokeStop. If you are in the walking group you need to walk and collect Pokémon for 30 minutes without stopping/sitting at PokeStops. You are allowed to use incense while walking. If you are in the PokeStop group - go pick a local PokeStop and collect at that location for the half hour. We will be comparing the two sampling methods. You are welcome to use Lures on a PokeStop.

**However, please make note of any lures or incense that you use to collect your Pokémon.**

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**Pre-Lab Questions**

1. What are we collecting today?
2. What are they a proxy for?
3. We have two sampling methods in the class - 1)Walking and 2)PokéStop. What is your hypothesis regarding the two sampling methods? Which one do you think will be more effective? Why?
4. What's a rare Pokémon?
5. In the SimUText chapter, sampling was determined by the number of photos. What is your sampling interval? What other factors are we looking at in this lab?
6. What should go on each axis? Etc.

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**The Lab itself:**

1. Add a Pokémon buddy to get the distance walked during the activity.
2. What is your sampling group (circle)
  - 1) Walking
  - 2) PokeStop
3. Please write below where exactly you walked and if any lures or incense was used in your 30 minutes.
4. Make any observations about the collecting experience below.
5. Return to the classroom.

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**THE DATA**

6. Enter in the following chart the species or Pokémon collected - go into the Journal. You'll need to look up the type from the Pokedex - do that afterwards.

What level was your Pokémon Trainer? \_\_\_\_\_

Start Time:

End Time:

Name of Pokémon	Time	CP	Type

Name:

**Analysis Questions:**

Print separately and give out after the active collecting part of the exercise

First: Enter your data in the spreadsheet on the computer at the front of the room. The instructor will have a spreadsheet set up so we can look at the data from the whole class at once.

1. Make a graph of individual Pokémon (species) collected over time for the data that your group collected.
2. Compare your graph with another group. What's similar? What's different?
3. Do you need to change your graph? If so- change it below.

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4. Draw the Pokémon (species) accumulation curve by time for the data that the class collected - there should be one line for each group. We will project this on the screen.

5. When should you stop collecting Pokémon?

6. Did you collect any Pokémon more often than others? Why or Why not?

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7. Were any of these Pokémon that you collected rare? Why or Why not?
  
  
  
  
  
  
  
  
  
  
8. How does this activity compare to the sampling within the SimUText chapter.
  
  
  
  
  
  
  
  
  
  
9. On the screen we can compare the various collection trips in the class. Please make some observations about what is different across groups.
  
  
  
  
  
  
  
  
  
  
10. Now let's compare our results by group. Which sampling method worked better? Why? Compare to your hypothesis.

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11. How would you do this experiment differently if you had to do it again?

12. What was the best part of this exercise? Honest feedback will not hurt your grade.

13. What was the worst part of this exercise? Honest feedback will not hurt your grade.