

What Lives There?

A real data webquest · mrsajdak.com/webquest · Data: iNaturalist.org · © Ryan Sajdak · CC BY-NC-SA 4.0

Name _____

Date _____

Period _____

On iNaturalist, people post photos of living things they find. Each photo is an **observation**. Scientists use these sightings to see where living things live. You will compare life in our biome with life in two other biomes.

- ☐ I can read real sightings data on a website. ☐ I can compare the living things in different biomes. ☐ I can explain why the data has limits.

How to work: Keep this sheet next to you. Open mrsajdak.com/webquest and tap **What Lives There?** Each place has its own button. If a "verify you are human" box shows up, wait a few seconds. It goes away on its own.

Part 1. Home: Erie County, New York (about 7 minutes)

SEP 4 Analyzing and Interpreting Data

Buffalo is in Erie County. Our biome is **temperate deciduous forest**: trees that drop their leaves in fall.

1. Tap **Erie County**. Near the top of the page, find the numbers for **Observations** and **Species**.

Observations: _____ Species: _____

2. The list shows the species with the most sightings first. Fill in the top three.

#	Name	What kind? (plant, bird, mammal, insect...)	Sightings
1			
2			
3			

3. Tap **Erie County plants**. Plants show a biome best, because they cannot move away. What is the number one plant? _____

Part 2. Two other biomes (about 10 minutes)

CCC Patterns

4. Pick **two** places. Tick them. Tap each one, then its plants button.

- ☐ Saguaro National Park, Arizona (desert) ☐ Denali National Park, Alaska (tundra and taiga)
☐ Amazonas, Brazil (tropical rainforest)

	Place A:	Place B:
Observations		
Species		
Top 3 species (all kinds)		
Number one plant		

5. Look at the top species in all three places. Name one thing that is different about the kinds of living things in each place.

Part 3. A close look (about 6 minutes)

6. Click on one living thing from Place A or Place B. Look at its photos.

Name: _____ Place: _____

a. Describe what it looks like in a few words.

b. Name one **adaptation** (a body part or behavior) that helps it live in that climate. Explain how it helps.

c. Its page has a **map** of every sighting. Does it live in New York too? ☐ Yes ☐ No Why do you think so?

Part 4. Count with care (about 7 minutes)

iNaturalist only counts what people found and posted. Here is how big each place is.

Place	Erie County	Saguaro National Park	Denali National Park	Amazonas, Brazil
Size (square miles)	1,227	143	9,450	602,000

7. Amazonas is about **490 times** bigger than Erie County. Compare their numbers of observations from your data. What does that tell you about where people post sightings?

8. Scientists say a square mile of Amazon rainforest holds far more kinds of living things than a square mile of Erie County. Why might iNaturalist not show that?

9. Does climate change how many kinds of living things a biome can hold? Answer in three parts.

Claim

Evidence Use the species numbers or the top species from your tables.

Reasoning Think about warmth, rain and the growing season.

Done early? Visit the third place. Find one living thing there that is a lot like one in Erie County (the same kind of animal or plant). How is it different?

Environmental Science, Chapter 6: Biomes (ES.2.6.1). SEP 4 = Analyzing and Interpreting Data, CCC = Crosscutting Concept. iNaturalist observations are posted by the public and checked by other users. Sizes: Erie County total area (US Census), park areas (National Park Service), Amazonas state (IBGE).