



Environmental Observation Guide: At Home

Complete the following observation in your neighborhood. You may have access prior knowledge, or information you already know to complete this observation guide. For example, you might have to think back to the last time it rained. After getting permission, walk around your block, making observations to answer the questions below. If you can't go out today, answer the questions about what you can see by simply looking out the window or one step outside your door!

I live in _____ neighborhood.

Water

Describe your observation area. (example: I am making observations in a neighborhood from my front porch)

1. The average shower head uses about 2 gallons of water per minute. For one week, track how many total gallons of water you use for all your showers. You can do this by timing your shower and multiplying the number of minutes you were in the shower by 2 gallons per minute. For example: a 5 minute shower use 10 gallons of water (5 minutes x 2 gallons of water per minute = 10 gallons)

_____ total minutes in the shower x 2 gallons of water per minute = _____ total gallons of water

Bonus: How much water does your whole household use on showers every week?

2. While brushing my teeth, washing my hands or doing the dishes I...
 - a. leave the water running the whole time.
 - b. turn it on full blast only when I need it and off when I don't.
 - c. turn it on just enough for what I need and off when I don't.
3. Rainwater falling on nearby buildings drains into mostly:
 - a. well vegetated trees and shrubs or un-mowed grass
 - b. mowed grass
 - c. bare soil or impervious surface
 - d. directly into storm drain
 - e. entirely onto impervious surface, then into a visible storm drain

4. Look for patches of bare soil and signs of erosion such as areas where rainwater has carved out ditches or washed out vegetation. The community has:
 - a. very little erosion and few patches of bare soil
 - b. several patches of bare soil or areas where soil is eroding
 - c. mostly bare, exposed soil or impervious surfaces

5. Does your community have any of these run-off control systems:
 - a. Rain Garden
 - b. Rain Barrel
 - c. Meadow
 - d. Wetland
 - e. Forested buffer zone (More than 50 feet wide)

6. Where does rain water drain after hitting the streets or parking spaces?
 - a. highly vegetated area
 - b. mowed or slightly vegetated drainage ditch
 - c. storm drain marked to indicate to where the water flows
 - d. unmarked storm drain

Biodiversity

Complete the following observation in your neighborhood. This can be completed by taking a walk around your block, or if you can't go out today, by simply by taking a look out the window or one step outside your door! Answer the questions based on what you can see from wherever you are. Be sure to include observations about plants on balconies or porches. Pollinators don't discriminate!

Describe your observation area. (example: I am making observations in a neighborhood from my front porch)

1. By counting the different types of leaves or bark, how many different types of trees are there in your observation area?
 - a. 10 or more
 - b. 7-9
 - c. 4-6
 - d. less than 4

2. By counting the different types of leaves and berries, how many different types of shrubs are there in your community/backyard/area?
 - a. 7 or more
 - b. 4-6
 - c. less than 4

3. Below are examples of habitats for animals. Which of the following apply to your community? Circle all that apply.
- a. woodlands with many layers of plants and trees
 - b. tall grassy fields/meadow
 - c. thick brush and brambles or a brush pile
 - d. dead standing trees or rotting logs on the ground
 - e. streams with forested buffers
 - f. native plant or pollinator garden
 - g. bird houses and/or feeders
4. Describe the vegetation planted in the ground in your community:
- a. Trees and bushes cover a significant part of the community
 - b. Trees and bushes dot the landscape
 - c. There are few or no trees
5. How much of the grass and vegetated areas in your community are being mowed?
- a. less than 50 %
 - b. between 50% and 80%
 - c. over 80%
 - d. there are no grassy or vegetated areas to mow
6. How is the vegetation in your community fertilized?
- a. Grass clippings are left on the grounds as natural fertilizer
 - b. Lawn fertilizer is used according to a formula after doing soil tests
 - c. Lawn fertilizer is used according to instructions
 - d. Lawn fertilizer is applied randomly
 - e. I am not aware of how the vegetation is fertilized
7. Describe the vegetation in the lowest lying part of your community:
- a. well vegetated with trees and shrubs
 - b. vegetated with unmowed grass
 - c. mowed grass
 - d. bare soil, pavement, or concrete
8. Other notes about biodiversity in your community. You can include notes about wildlife you observed or other places plants and flowers are present such as balconies or porches.

Energy

Make observations from a window or sidewalk that faces the street.

Describe your observation area. (example: I am making observations in a neighborhood from my front porch)

1. Observe vehicles driving by. Are they:
 - a. mostly occupied by one individual
 - b. mostly occupied by more than one individual
 - c. not enough vehicle traffic to make an assessment

2. When observing nearby traffic, which of the following do you observe?
 - a. Mostly cars
 - b. Public transportation
 - c. People utilizing bicycles or non-motorized vehicles for transportation
 - d. People on foot
 - e. Other: _____

3. Does your community have access to any of the following?
 - a. Bus Stops
 - b. Train/Metro
 - c. Bike Share
 - d. Commuter Lots
 - e. None of the Above

4. Does your **family** have any initiatives that encourage **you** to reduce energy (for example: rewards/incentives or signs reminding individuals to turn off lights and appliances)?
 - a. Yes
 - B. No

5. Do the lights in your home have motion-sensor lights?
 - a. Yes
 - b. No

6. Find out where the energy that powers your home comes from:

Visit this EPA (Environmental Protection Agency) website: [Energy Profiler](#). On the left-hand side of the webpage where it say "Power Profiler" type in your zip code. The result will be two bar graphs. One bar graph is titled "national" (this shows the national average of energy sources). The second bar is titled with four uppercase letters. That is the graph you want to read! The two bar graph compares your region with the National average. The different colors represent different kind of energy sources. As you scroll over the colors, a percentage will pop up. Record the top three (highest percentages) energy sources for your region.

Most used energy sources for my region:

1. Type: _____ Percentage: _____

2. Type: _____ Percentage: _____

3. Type: _____ Percentage: _____

Does your home's energy come from mostly renewable or non-renewable energies?

Waste

Describe your observation area. (example: I am making observations in a neighborhood from my front porch)

1. In the kitchen, how does your family clean up a mess?
 - a. a reusable sponge or cloth
 - b. Environmentally friendly paper products (100% post-consumer recycled content)
 - c. Paper towels
 - d. cleaning wipes
2. What does your family do with food waste?
 - a. Compost
 - b. Garbage
3. What are your cups/flatware/plates made of?
 - a. They are re-usable items.
 - b. One time use items that are biodegradable.
 - c. One time use items made of plastic or Styrofoam.
4. Are recycling bins present? If yes, pre-sorted or single-stream recycling?
 - a. Yes, recycling is collected for three or more categories (paper, plastic, cans, etc.)
 - b. Yes, for one or two categories only
 - c. No
5. Are recycling bins present?
 - a. Yes, and they are easy to get to
 - b. Yes, and they are in a place that is hard to get to
 - c. No

6. How are school/classroom newsletters, announcements, field trip information, meeting information, etc. disseminated to parents?
- a. Mostly e-mail/website
 - b. Some electronic, some paper
 - c. Printed paper

Data Collection Projects:

How much food waste did our family make each day?

For three days, write down any food related items that are thrown away after meals or snacks.

	Breakfast	Lunch	Dinner	Other
Day 1				
Day 2				
Day 3				

How much trash does our family make each day?

For three days, write down what goes into the trash each day. If you can, weigh the trash each day and compare.

Write down description of items	Number of items	Weight
Day 1		
Day 2		
Day 3		

How much plastic does our family use each day?

For three days, write down every time your family uses plastic. If you can, weigh the plastic each day and compare.

Write down description of items	Number of items	Weight
Day 1		
Day 2		
Day 3		

Is there anything I recycled that I could have reused?

For three days, look at what goes into the recycling each day. Describe how you could reuse the item.

Items in recycling	How I could have reused them
Day 1	
Day 2	
Day 3	

Where did my food come from and how long did it take to get here?

For one day, write down any foods that your family eats and look at the labels to find out where it came from. Look under the ingredients where it says an address or something like “Distributed and Sold Exclusively By: store name, address. Produce often has a sticker that says where food came from. Use google maps to find out mileage from where your food was made to your house.

What we ate	Where did it come from?	How many miles is that from here?	Calculate carbon footprint of food
Example: mac and cheese	Made in Batavia, IL	711	$711 \times ??? =$

Looking through our environmental Lens...

What are some things your family or community is doing well?

What are some things your community could do better?

How do you contribute to the strengths of your community?

Think about your environmental lens.

After completing your community environmental observations, are there things you would add to the inside or outside of your environmental lens?