

Citizen Science Saturdays- Observe

All scientific progress begins with observation. Citizen science offers people of all ages the chance to recognize the importance of looking closely, slowing down to notice details, identifying patterns, and making connections. Over time as you make observations and gather data, you can be guided to think critically about your findings and begin to ask questions.

Practice your observation skills:

Sight Experiment:

Place various objects on a piece of paper or tray. Have your child use their sense of sight to describe the color and shape of each object. Next, blindfold your child's eyes while you remove one object. Have your child try to remember what they saw and tell you which object went missing. Take turns being the one blindfolded.



Zooming into Nature:

Set-up: Visit the site you will be investigating before taking your child there. Be sure there are no hidden bees' nests, prickly plants, poison ivy or other hazards. You are looking for a space with plants and insects for your child to investigate. There could be a tree in the middle of it, grass, leaves, clover, etc. Children will be counting the different types of plants and creatures found in their focus space and observing all they find there.

Materials: Something to define the work/focus space. A hula hoop works really well or a piece of string about 6 ft long and laid on the ground in a circle.

Options: Bring a jar to collect insects, field guides, paper and markers so children can draw what they see.

Introduction: In this activity, children are going to be scientists and work on their observation skills. It is easy to get overwhelmed trying to observe EVERYTHING, so for this activity we are going to focus all of our attention on a very small area. Discuss the following with your child to help them better understand what to expect and what questions they should think about answering after the activity.

- This is a good time to introduce or review habitats with children. What does an animal need in their habitat? (Food, Water, Shelter and Space)
- Do they see evidence of any habitat needs in their focus space?

- What do they see in the focus space?
- Are there living and non-living elements there?
- Have children count or tally the different types of plants and animals they find in their focus space.
- Have children draw in great detail their favorite thing from their focus space.
- If children collected insects to observe, have them release them when you are finished.

Once children have engaged in the previous questions ask them to look around the rest of the space, your yard or park. Does it look similar to their focus space? Can they find similar plants or animals? Explain that their focus space could be a habitat for a very small creature and the rest of the yard could act like an ecosystem. Sometimes scientists have to go small or very focused to better understand the larger picture of what they are studying. It is also helpful to learn good observation skills by focusing small at first, then observing over larger spaces.



Uncommon Objects Trail:

Set up a short walking trail in your back yard or along your side walk. It only need to be 8 to 10 yards long. You can use chalk, paper signs or string to show the path and where it starts and finishes. Along the path you will hide 4 to 6 uncommon objects and ask children to walk the path and see if they notice them. As children get better at using their observation skills, less objects will go unnoticed.

Materials: path signage like string, paper signs or chalk, 4 to 6 uncommon objects like random things around your home that don't belong outside. (an umbrella, plastic eggs, safety scissors, etc.)

You can try to camouflage the uncommon objects a little but still make them viewable from the path. Take turns hiding objects for each other to spot!