Sketching in the Garden

While you might think of sketching as a classroom activity, we use sketching in the garden as a way to focus children’s attention on the world around them. Careful observation and recording are tools all scientist use, helping them to discover the patterns and relationships in the natural world.

Science Sketching vs. Making Pretty Pictures
Tell your students that the sketching they will do is of real things that they see around them. When we do science sketching, we only draw what we really see in front of us. If we see a red flower, we draw a red flower. If we see a round leaf, we draw a round leaf. When we are making pretty pictures, we might draw a rainbow or a butterfly or a robot just because we like it, even if it’s not really there. That’s not what we’re doing today though!

Before We Sketch, We Look
The goal of science sketching is to look carefully and to record information so we can remember it later. So before we draw, we look carefully and ask:

How many do we see? Petals, legs, spots, leaves?

What shapes do we see? Circles, ovals, triangles, squares?

What lines do we see? Round, pointy, straight?

What patterns do we see? Stripes, spots, zig zags?

What is a “Good” Sketch?
A good sketch records details that a child has noticed after careful observation. With young children you may not be able to recognize what they drew, so ask! Variation in development of hand/eye coordination means different children will have different skill levels. What matters is not how “pretty” the picture is, but how accurate in recording information.

Good feedback for children: “I like the way you drew that part of the leaf/the way you noticed those little spots/how you showed the pattern on the stem”

Not so great feedback: “Wow, that’s a pretty butterfly!…oops, you mean it’s not a butterfly?”
**Sketching Activity Rubric**

Effective assessment of a sketching activity can be done using a simple rubric, tailored to your specific project. While the focus is on the sketch, students should be encouraged to use words as well to record information about the object. Tell your students which of the following their page should contain. You can then keep students on task and assess their work by seeing that they follow the specific guidelines you have given them.

Every sketch should have:

___ Today’s date
___ An image of the object you are observing

Your sketch should also show (teacher chooses 3 to 5 of the following):

___ Sketch of the whole object
___ Close-up detail of part of the object
___ Color or notes about color
___ The name of the object
___ Labels of the parts of the object
___ Notes and descriptions of the object
___ Indication of size of the object
___ Indication of parts of sketch that are life-sized
___ A question about what you see
Comparing Leaves

Objective – children recognize the diversity of leaves

When children are asked to draw a leaf, they generally draw a green oval shape. Through careful observation they will notice that leaves vary in many different ways and will begin to wonder why.

1. Review with students why plants have leaves – to make food.
2. Do a short garden exploration looking for big leaves, small leaves, rough leaves, smooth leaves – have each child show you what they find.
3. Gather students in the activity area and explain that they will look very closely at two leaves. At this point you can decide whether you wish to choose the leaves for them, allow them free choice within a limited area, or allow them to pick two leaves smaller than their hands from throughout the garden to bring back.
4. Distribute the journals, pencils, and clipboards.
5. Remind children that this is “science sketching” which means they will draw only what they see, looking for lines, patterns, and shapes.
6. Tell children that their journals should include the following:

   - the DATE
   - sketches showing the SHAPE of two leaves
   - details of the EDGES of each leaf
   - the VEIN PATTERN of each leaf
Change over time – a plant

Objective – children recognize that plants change

Ongoing observation makes it possible to see that plants are living things which grow and change. Use this same activity for multiple visits to the garden.

1. Review with students the basic life cycle of a plant and a plant’s basic needs. Ask students to explain how and why a plant can change.
2. Explain that they will observe the same plant on each of their garden visits to see how it changes over time.
3. Help students select a plant to observe. They can all observe the same one, or choose a different plant for each student. Good choices are fruit trees and berry bushes.
4. Distribute the journals, pencils, and clipboards.
5. Remind children that this is “science sketching” which means they will draw only what they see, looking for lines, patterns, and shapes.
6. Tell children that their journals should include the following:
   - the DATE
   - a sketch of the WHOLE PLANT showing its structure
   - a sketch of one LEAF
   - labels of the PARTS OF THE PLANT
   - a PREDICTION about how the plant will change
Change over time – the environment

Objective – children recognize that the environment changes with the seasons

Ongoing observation allows children to observe seasonal changes in an area. Use the same activity for multiple visits to the garden.

1. Review the passage of seasons with students. What sorts of changes do they expect in the coming months? How might those changes affect the garden?
2. Explain that they will observe one area on each of their garden visits to see how it changes as the season progresses.
3. Help students select an area to observe. The pond, native garden, or butterfly garden are good areas to observe.
4. Distribute the journals, color pencils, and clipboards.
5. Remind children that this is “science sketching” which means they will draw only what they see, looking for lines, patterns, and shapes.
6. Tell children that their journals should include the following:
   - the DATE
   - the WEATHER
   - a sketch of the area showing the COLORS they see
   - a PREDICTION about how the area will change
Plant parts

Objective – children recognize the parts of a plant

Children observe a plant from the garden and label the parts which they see.

1. Review the basic parts of a plant and their jobs.
2. Do a short garden observation and look at the variety of plant parts.
3. Pull up a weed, with roots, and observe closely with students. Which parts of the plant can they identify? Remember, not all plants have all parts (i.e. flowers, fruit) at the same time.
4. Distribute the journals, pencils, and clipboards.
5. Remind children that this is “science sketching” which means they will draw only what they see, looking for lines, patterns, and shapes.
6. Tell children that their journals should include the following:

   - the DATE
   - a sketch showing all the PARTS of the plant
   - LABELS of the parts that they see
Measuring in the garden

Objective – children measure objects using their bodies

Children can use their bodies to measure objects in their environment. Hand spans are a suggested unit, but feel free to use whatever is appropriate for the plants you are observing.

1. Review the concept of measurement with children.
2. Demonstrate how your hand span can be used to measure a nearby object, then let children compare with their own hand spans.
3. Briefly explore the area, asking children to measure plants, plant parts and objects in the garden with their hand spans. Challenge them to find one plant or plant part that is the same size as their hand span.
4. Distribute the journals, pencils, and clipboards.
5. Remind children that this is “science sketching” which means they will draw only what they see, looking for lines, patterns, and shapes.
6. Tell children that their journals should include the following:

   - the DATE
   - a life size sketch of their HAND SPAN (tracing is fine)
   - a sketch of one thing they MEASURED in the garden
   - a NOTE OF THE SIZE of the object, in hand spans

11/6/07

Hand tall