

Tiny Green World



Tiny Green World Grade 1/2 (Year 1)

Learning Outcomes

Grades K-1 Life Science:

- describe the characteristics of a variety of plants
- describe the diversity of plants within the home and school environment

Grades 2-3 Life Science:

- plants in the environment

This excursion creates an awareness and appreciation of local plants in the environment, but it does not meet the specific learning outcomes.

When:

In May or June. Fall is a good option too, if you modify the Hummingbird Nests activity so that students save the collected nest materials over the winter to put out for the birds to find in spring.

Total Materials List

- bottle of bunjibab sap
- berry basket with ribbon
- tiny paper cups
- micro-trails yarn and toothpicks



1. Waken Your Senses

Where:

Schoolyard, just outside the door next to the multipurpose room

Time: 5 min

Why:

This activity introduces sensory observation skills, focuses attention on environment. This activity also collects the class under your leadership at the outset to remind them that this is schoolwork, not recess.

Materials: none

How:

Form a circle, and begin to rub your hands together. Ask students to do the same. "Faster! Harder! Now take your hands apart, and then bring them almost, but not quite, together. Can you feel that tingling feeling between your hands? That's your sense of touch. We'll be using this sense today to investigate nature and plants. Now take that tingling feeling and put in on your ... eyes! Right, Jason. We'll be using our eyes today too. What else?" ... and continue through the other senses, smelling the air together, and tasting it (but that's the only thing we're going to taste today) and listening.

Next Stop:

Take a few steps to the right to the clump of tall plants and bushes at the end of the rocky bank.

2. Bunjibab Sap



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Where:

The rocky bank behind the school. If this is too steep for your preferences or if the nearby garbage bin smells, choose a section of the forest trail.

Time: 15 min**Why:**

In this activity, students practise observation skill (sense of smell), discover differences between plants.

Materials:

Tiny bottle of Bunjibab Sap (water with food colouring)

How:

This is a story-based activity, so have some fun with it. Ask the parent helpers if they remembered to bring the Bunjibab Sap, and make a fuss about finding it and holding it up.

"I'm so glad I haven't lost my Bunjibab Sap. I only have a little bit left, and I've been saving it for today to share with you. Bunjibab sap is very special. It comes from the rare Bunjibab tree in deepest darkest Africa. It has amazing powers." Open the bottle and sniff it. "Bunjibab sap has no smell, but if you put one drop on your nose, your sense of smell gets ten times stronger." Demonstrate by putting a drop of bunjibab sap on your finger, and touching it to the tip of your nose. (Make some loud sniffing noises; look surprised and then delighted). "Who would like to try it?" Some children will step back, but just tell them that that's OK, as you have so little left ... they almost always decide to try.

"Everyone that wants to try it can line up in front of me and hold your noses up. I'll put a drop on your nose."

When you have finished, call the group around you for further instructions. Their task is to find three different amazing plant smells.

Sniffing Hint: The best way to smell plant leaves is to rub them gently between your fingers then sniff them while they are still attached (remind them about no picking). Flowers they already know how to sniff.

Set your boundaries (e.g., "from this clump to just across from the end of the school, no more than half way up the rocks") and let them go.

Look for:

The clump of tall plants at the end of rock wall currently contains a cut-leaved plant with a distinctive herbal scent (tansy), and a green-branched shrub that sometimes smells like peas (scotch broom).

A very small plant with ferny, finely cut leaves like dill that often (but not always) grows below the rocks at the edge of the pavement. It smells of pineapple—it's pineapple weed.

Mingle and admire as students find smells, and suggest leaves, flowers or stems to sniff. When a distinctive scent is found, let the class know—"Sheila's found a great smell on some dead leaves! Come on over and she'll show you." When most children appear to have finished, gather the class to discuss their discoveries.

Key Point: Different kinds of plants have different smells.

Background:

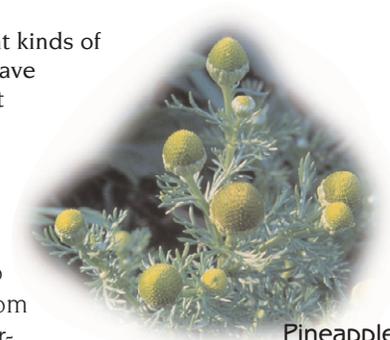
Why do plants have so many smells? Mainly to keep creatures from eating them (deer-repellent), to attract bees and butterflies or even flies (for pollination of flowers) and because of the different chemicals inside their sun-catching factories. Some characteristic smells can be used to identify plants.



Tansy



Scotch Broom



Pineapple Weed

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Next Stop:

Walk down the service road and turn right to enter the Snake Field (actually, snakes are not commonly found here).

3. Hummingbird Nests



Where:

Edges of Snake Field and sometimes in the field, depending on how recently it's been mowed.

Time: 15 min.

Why:

This activity sets students' focus on plants. They practice sensory observation, and see an example of interconnectedness.

Materials:

- berry basket with red ribbon
- class set of tiny paper ketchup cups or equivalent, one per child or pair. If bigger cups or more berry baskets are to be used, say "birds" instead of "hummingbirds" and adapt the activity, incorporating sticks and dead leaves too.

How:

"Who here has seen a hummingbird? Wow, lots of you have! What did the one you saw look like, Jeffrey?" Ask students about how big their hummingbirds were, what they were doing, and what they might eat (nectar, mostly, from plants). "Hummingbirds come back to Bowen when the salmonberry bushes begin to bloom with their big pinkish-purple flowers—hungry hummers think they are delicious. The hummingbirds stay here to raise their babies over the summer. They depend on plants for raising their babies too. Has anyone seen

a hummingbird nest?" Explain that the nest is made of soft, fluffy bits of plants woven together with spider silk by the hummingbirds' long bills. It needs to be thick and soft to keep two tiny eggs—each the size of a child's fingernail—warm and safe. Bits of mosses and lichens are used to decorate the outside, making a hummingbird nest very hard to find!

"Who would like to help a hummingbird make a nest?" Hand out the cups, and ask students to find and collect light, soft and fluffy bits of plants that a hummingbird would use.

Look For:

- Mosses and lichens to camouflage the outside



- Seeds and fibers from dead leaves, grasses or bark to line the nests with



- Spider silk to weave it all together into a soft, warm cocoon





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"Make sure that everything you collect is soft and fluffy, and that it's not green and living. Tiny bits is probably all you will find, but that's OK, because hummingbirds are small. Let's see what kind of nest-builders you are!" Set boundaries (e.g. no more than 5 steps into the forest) and let them go. Tell them to look especially around the edges of the field where the wild plants grow taller.

Mingle and admire. When the time is right, ask students to form a circle to talk about and show their nest materials. Collect it all in a berry basket from around the circle, and tuck it into a bush so that the hummingbirds can find it. They will investigate the red ribbon thinking it might be a big flower, and will find the collected plant fluff.

Key Points: Hummingbirds need plants for food, nesting material, and nest sites. It's hard work to build a nest.

Next Stop:

Walk into forest from the far upper corner of the field. Take the right-hand fork to follow the trail until you can see plenty of big logs on your left.

4. Micro-Trails

Where:



To your left along the trail where you can see plenty of big logs.

Time: 20 min

Why:

Students will apply plant knowledge, build awareness and focus.

Materials:

- 4 craft sticks or toothpicks
- 60–100 cm length of yarn per pair of students

How:

Here's another activity that engages the imagination. Ask students to imagine that some students have been shrunk to the size of an ant, as in *Honey I Shrunk the Kids* or *Magic School Bus* videos. The shrunk students want to learn about plants.

Real students will work in pairs to lay out the yarn to trace a teaching trail for the shrunk students to follow. The sticks are used to mark the beginning and end of each trail, plus the bends in it.

"Good luck, everyone! Don't forget to make the trails interesting and surprising for the shrunk students by taking them past cool plants and places where they can see how plants live."



Moss
and
tiny
Mushrooms

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Spots and Features to Include:

- Places where the spores of mosses and ferns can be seen.
- Hills are fun for shrunk students to climb, and they like to go under things too.
- Are there special beauty spots?
- Seeds, cones, roots, and colourful stems.
- How about smells, sounds and touches?
- Places where dead plants are helping live plants.

“What will your shrunk students learn that no other shrunk students will?”

Set your boundaries (use the logs) and let them wander as they choose the spot to make their micro-trail. After 5 minutes, call out that everyone

should have picked a spot and have at least put in a stick to mark the start of the trail. As you roam around, ask, “what will the shrunk students learn about plants on your micro-trail?” As pairs finish, ask them to take another pair of real students for a walk on their trail, and then switch.

Once others have visited everyone’s trail, call the class together to discuss some examples of some of the things that shrunk students saw and learned.

Now head back to the school. That’s it for the Tiny Green World Teaching Trails excursion. Have fun!



Rain drops on Huckleberry Leaf



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