Exploring Planet Earth with the 5 Senses

Objectives
- Students will be able to identify the five senses
- Students will be able to apply those senses in describing the characteristics of living and non-living things.
- Students will be able to verbally describe their own findings using cross curricular skills such as sorting like objects, identifying shapes, colors, and size/weight.
- Students will demonstrate proficiency using the rubric for this set of lessons.

Suggested Grade level
Pre-K/Kindergarten (could be adapted for Grades 1-2)

Subject Area(s)
Science
Literacy
Math

Timeline
One week, 5 class periods, small unit

Background
Teacher- Students may have knowledge of the five senses but may not be able to name them. They may also understand some of the characteristics of living and non-living things.
Students- Scientific investigation, trial and error should be understood.

Lessons

Materials for Lesson One
Orange or some object for senses discussion
Chalkboard, white board, or large paper to record discussion
Marker

Lesson One “Setting the stage for learning”
1. Vocabulary
- Senses- the way in which living things notice something through touch, taste, smell, sound, or sight
- Investigate- to check out, look into
- Taste- the flavor or description of the feeling in ones mouth
• Touch- how it feels to the skin
• Smell- the odor in the nose
• Sight- how it looks
• Hear- how it sounds and volume of the sound (loud/soft)

2. Discuss what the 5 senses are. Brain storm what the 5 senses are by giving them an example: Sample discussion: There are ways that I can tell what something is. The teacher holds up an object (it can be anything with unique characteristics such as an orange). I use my 5 senses to figure out what this is. Let’s see by describing this, is if we can find out what the 5 senses are.

3. Have students describe the object. Make a list of the things they say.

4. After a list is compiled with words and symbols so the students can see the word and also remember what was said by the symbol, ask students what part of the body they used to come up with each description. Example: For the shape, did they see it with their eyes, for the texture, did they see it with their eyes or feel it with their hands. Help students come up with the 5 senses by guiding their answers.

5. Make a list with the five senses and draw a picture next to each of the senses to illustrate it.

6. Add these to the vocabulary list

**Evaluation/ Assessment**

• Students are able to identify the 5 senses
• Students successfully participated in discussion of 5 senses
• Students successfully listed and/ or drew pictures for each sense

**Materials for Lesson Two**

5 tag board cards with eyes, hands, mouth, nose, and an ear drawn on the cards. Objects from which to pick and describe

**Lesson Two, “Application and Practice with Sight, Touch, Taste, Smell, and Hear.”**

1. Vocabulary
   • Describe- tell about in detail
   • Object- something not living

2. Have each student pick something from the classroom for the other students to describe.

3. One at a time, students bring their object to the front of the room.

4. Other students voluntarily pick one of the 5 senses cards and come up to describe something about the object they can determine with the sense on the card. For example: a student chooses the nose card and says, “this smells like play dough”.

5. Before ending the lesson, have students name the five senses as you hold up the cards.

**Extension**
Integrate literacy at the end of the lesson. Hold up a book about the 5 senses. Do pre-reading activities, ask students what they would name the book based on the cover, and ask students what they think the book is about. Read the story. Ask students what the book was about, what senses they saw in the book.

**Evaluation/ Assessment**
- Students can still name each of 5 senses
- Students were able to apply those senses in describing the characteristics of living and non-living things.

**Materials for Lesson Three**
One paper bag for each student
Four paper bags that have been filled (one each) with popcorn, peppermint candy, play dough, and lemon.
Snacks for each student to sample; popcorn, crackers, chocolate, lemon to represent salty, sweet, and sour. You may also want to include something bitter.

**Lesson Three, “Review of 5 Senses and Activity”**
1. Begin the lesson by having students review verbally what they learned about the 5 senses the day before. Ask the question, “How do we use our senses every day?” Chart the answers.
2. Activity: What is it?
3. Step one: Hand each student a paper bag. Explain that they will have 5 minutes to find an object in the room for other students to guess. Model how they will use the sense of touch to determine the characteristics of what is in the bag and the vocabulary they will use. For example: When I touch the object in this bag, it feels soft. Do not allow students to name what the object is. Other students can guess what it is by the characteristics the student describes that he/she can feel.
4. Have students hunt for one object in the classroom. When they return to their desks or circle have them trade bags with the person to the right (reading and math readiness).
5. Students take turns describing what they are feeling with the sense of touch.
6. Step two: Using the same items have students pass their bags to the next person on the right. This time the students take the items out of the bag and use the sense of sight to describe what is in the bag. Teacher should model this using shapes, colors, and numbers to describe the object. For example: “This object is made out of two
rectangles and it is blue.” Do not allow students to name what the object is.

7. Step three: Pass the bags again to the next person on the right. Tell the students you would like them to describe what is in the bag using the sense of hearing. What does it sound like when you shake it in the bag? Model this with the vocabulary, this object sounds like...

8. Step four: Pass a bag with a small amount of popcorn, peppermint candy, etc. around the classroom. Without opening the bag, have students sniff the outside of the bag without putting their nose on it (or in it). Have them describe the characteristics of what is in the bag with the sense of smell.

9. Step five: Pass out snack to students one snack at a time. Have students use appropriate vocabulary to describe the characteristics of the taste of the snack. Have students draw the snack and draw a second picture what the snack tastes like.

**Extension**

Literacy component: While students are eating their snack, read another book about the 5 senses. Review the days activities by having students identify the 5 senses in the story. What happened at the beginning, middle, and end of the story?

**Evaluation/ Assessment**

- Students are able to successfully chose and describe their object
- Students are able to successfully draw their snack’s sense

**Materials for Lesson Four**

One paper bag for each student
Two 4-inch tubes made from empty paper towel rolls cut in half or empty toilet tissue rolls
Construction paper
Glue
String
Paper punch

**Lesson Four, “Using the 5 senses to Observe the Environment of our Planet”**

1. Vocabulary
   - Environment- what’s around us or what we’re studying
   - Planet- Object that circles around the sun, like Earth
   - Glasses- what we put up to eyes to see something better
   - Observe- watch closely
   - Focus- to think about or close in on
• Living Things- things need water, air, nutrients to grow/ live

2. Have students imagine they are just landing on the planet earth. Have students pretend they have field glasses by holding up their hands to make binoculars in front of their eyes. What sense are we using?

3. Step One- Art extension “Making field glasses”

4. Demonstrate the making of “field glasses” to help students focus and find evidence about what the planet earth is like.
   • Glue the two tubes together side by side.
   • Glue a piece of construction paper on the top and bottom to reinforce the field glasses and to add a place to decorate.
   • Punch a hole in the side of each tube on the outside.
   • Add string so the students can hang the field glasses around their necks.

5. Step Two- Discuss with students what things they might see on a walk in the school yard.
   • Will we find signs of living things in our environment?
   • What might they be?
   • What are living/non-living things?

6. Students predict what they will see, hear, smell, and touch. Brainstorm and make a chart of words that describe living and nonliving things.

7. What do living things need, air, and food, water?

8. What do plants need, soil, sun, and water?

9. Step Three- Hand each student a bag and have him or her write their name on it.

10. Explain that we are looking for signs of nature in our environment. Instruct the students not to touch any plants that are green or green/red until they have asked the teacher. Also, discuss that even though taste is one of the 5 senses, students are not allowed to put anything in their mouths.

11. Take a nature walk around the schoolyard or in a park.

12. Make sure students are listening and looking for signs of living things.

13. Students find as many things as they can to represent the environment of the planet and put them in their paper bag.

14. Students wash their hands before or when they return to the classroom.

15. Step Four: Without taking anything out of their bags, students use the 5 senses to describe what evidence they found of living things. Let the students choose one thing in their bag and describe it using the 5 senses without taking it out of the bag. Students guess what it is and if it is from a living or nonliving thing.

16. Step Five: Instruct students in the use of a hand lens to magnify their samples of nature.

17. Have students draw what they see.
**Evaluation/Assessment**
- Students successfully gathered objects on the walk
- Students could describe objects using the 5 senses
- Students could recognize a living vs. non-living object
- Students participated in discussion of guessing objects

**Materials for Lesson Five**
Floor or table space
Paper to make a graph on, each student or group

**Lesson Four, “Sorting and Classifying”**
1. Vocabulary:
   - Color- the description of the look of an object by tone
   - Texture- the feel of the object
   - Shape- the description of the drawing of an object, circle, square, rectangle, triangle, like a diamond, etc.
2. Review the characteristics of living and non-living things. Have students sort the things they have found in their bags into living and non-living things.
3. Have them make a simple graph of the number of living/non-living things by placing their items in two separate columns on a page.
4. Have students explain why they placed the items in the living or non-living category.
5. Sort items again with similar characteristics of the students own choosing. For example: color, location, feel, shape etc. The student must be able to articulate what attributes they used to sort. Was it one of the 5 senses? Which one? Were there other ways they could have sorted the items. If there is time, have students switch bags and do the same thing.

**Extension**
Read *Brown Bear, Brown Bear, What Do You See?* Discuss the pattern of the story; discuss the illustrations by Eric Carle in the book.

Also read *Polar Bear, Polar Bear, What do you see?* Discuss the pattern in the book again.

Have the students write their own story using an animal and one of the other senses; hearing, smelling, touching, or tasting. Students should illustrate the story using bright colors and a style similar to Eric Carle. Teachers can scribe the story as the student tells it.

**Evaluation/Assessment**
- Students successfully made graph of living/non-living things
- Students could explain using senses descriptors their objects
Rubric for successful mastery of the unit:
Verbal assessment with the teacher for each student

Proficient: student identifies the 5 senses.
Partially proficient: student identifies 3-4 of the senses.
Not proficient: student identifies less than 3 of the senses.

Proficient: student identifies 5 characteristics of living and nonliving things.
Partially proficient: Student identifies 3 characteristics of living/nonliving things.
Not proficient: Student identifies less than 3 characteristics of living/nonliving things.

Resources

Earth Systems Science, Graduate Course, Space Foundation.
Fountain Creek Nature Center.


