Brownie Senses
Badge Activity Plan

**Purpose:** When girls have earned this badge, they'll know how they use their five senses to explore the world.

**Planning Guides Link:** Science, Technology, Engineering and Math

**Fun Patch Link:** Why Does It Do That?

**Activity Plan Length:** 1.5 hours

- Use a rotating list of helper tasks, called a ‘kaper chart’, to share responsibilities. Examples include acting as emcee of the meeting, leading an opening game, bringing a snack next meeting or taking attendance.
- At the Meeting
  - During the opening, have 1-2 girls share their answers to a get-to-know-you question.
  - Have girls fulfill their kaper chart responsibilities.
  - Try to find something in each activity that you can let girls decide or manage.

**Resources**

- This activity plan has been adapted from the Brownie Skill-Building Badge set for the *It’s Your Planet—Love It!* Senses Badge, which can be used for additional information and activities.

**Activity #1: Hole in Your Hand**

*Badge Connection: Step 1—Look around*

*Time Allotment: 5 minutes*

*Materials Needed:*

- Cardboard tubes or paper to roll into tubes (one per girl)

**Steps:**

1. Have the girls take a toilet paper tube or use a sheet of paper and roll it into a tube of a similar diameter.
2. Have the girls hold the tube up to one eye and look at something in the distance (at least 15 feet away). They should keep both eyes open while they do this.
3. Have the girls hold their other hands up flat, palm towards them, and move it slowly up to the side of the tube, all while continuing to look at the object in the distance.
4. Once their hand is next to the tube, it will look like there is a hole in their hand, through which they can still see the distant object.
5. Share with the girls the information below.
   • We use two eyes to give us a three-dimensional view of the world; information comes in from two different places.
   • Sometimes these two views seem to contradict. The eye looking through the tube sees the distant object clearly, but can't see the other hand because of the tube. The other eye knows there is a hand there, but the hand covers its view of the distance.
   • Our brain puts it together to conclude that we must have a tube through our hand.

Activity #2: Honkers
Badge Connection: Step 2—Listen to the world
Time Allotment: 20 minutes

Materials Needed:
• Sturdy plastic disposable cups (clear 9 oz. Solo cups are durable and flexible enough for this activity)
• Kitchen twine or white utility cotton string cut into 18-inch pieces
• Large paper clips, large washers or twigs
• Scissors
• Water in a bowl
• Optional: Kitchen sponges cut into small 1” squares
• Small hammers, blocks of scrap wood and large nails (16 penny or larger)

Steps:
1. Ask girls if they have seen a large speaker for a stereo or sound system. Discuss how sound is made louder with the information below.
   • Sometimes there's a grill or mesh over the front of a speaker. Behind that are dish-shaped circles.
   • The microphones used by film crews have a clear dish behind the mic with the same shape.
   • Think about what you do with your hands if you want your voice to be louder. Megaphones have the same shape and are used to amplify the sound, or make it louder.
2. Hold up a piece of string. Have everyone listen carefully. Let it hang down from one hand while you pull down along it with your other hand.
   • What do the girls hear? Probably not much. You need a dish shape behind it to act as an amplifier. You also need to make it easier to pull down on the string smoothly.
3. Give each girl a cup, a piece of string, and a paper clip.
4. Have the girls assemble their “honker” using the steps below.
   • Help each girl poke a hole in the bottom of her cup with a nail.
   • Thread the string through the hole so that a small amount of string hangs out the bottom of the cup, but most of it comes out through the top.
   • Tie the string from the bottom of the cup onto a paper clip or washer so that the string won't get pulled out of the cup.
   • Dip as much of the string as possible into the water for a minute to let it soak.
5. Girls are now ready to try their "honker," and see where the name comes from. Explain the steps below.
   • Hold the cup upside down in one hand.
   • The string, now wet, should be hanging down from the inside, and the paper clip should be on top.
   • Starting near the top, pinch the string with your other hand and pull down. You need to hold on tightly enough to create a squeaking, honking sound as your fingers move down the string. If girls can pull in abrupt fits and starts, they should be able to make it sound like a goose honking.
     o Note: Some people find it easier to pull when the string stays wet and with something else pinching the string. Get a sponge piece wet. Have girls use the sponge to pinch the string. The string will stay wet and it won't hurt their fingers.

6. Optional follow-up: The girls added the amplifier to the sound, but what about adding amplifiers to their ears? Take two of the cups and use the scissors to cut off the entire bottom piece of each. Have the girls stand still for a moment, just listening. Now, have them bring both of the hollowed cups up to their ears. Do they hear a difference? The girls can also try cupping their hands behind their ears. It can also be tried outside.

7. Optional Game: Goose honking may all sound the same to us, but each has its own voice, which it can use to find another goose in the flock. Have the girls find a partner, and agree on a pattern of honks they will use, like short-long-short, or three short, pause, short. Have the girls stand in a circle, facing out, and mix up where people are standing while they aren't looking. Tap one girl on the shoulder, who should give her goose call. The girl who thinks it's her partner turns around to see if she's right.

**Activity #3: Teaming up Our Senses**
Badge Connection: Step 4—Take a taste test and Step 3—Put your nose to work
Time Allotment: 20 minutes
Materials Needed:
   • Small paper cups
   • Gourmet jelly beans in a variety of flavors

Steps:
1. Divide jelly beans by flavor and put into separate cups. Write the flavor of each bean onto the side of the cup.
2. Explain to the girls that, while they have their snack, they're going to put their taste buds, and their noses, to the test by trying to identify different jelly bean flavors with and without their sense of smell.
3. If you have a large troop, divide into smaller groups with an adult for each group. Explain to the girls that while they think they're just tasting items, they're also smelling them at the same time. They're going to try to identify flavors using only their sense of taste, and then with their sense of taste and smell.
4. Have girls take turns trying to identify jelly bean flavors. The girl should close her eyes and plug her nose. The adult will put the jelly bean into her free hand and she will chew it and take a guess at what flavor it is. If she is wrong, the adult will give her another been of the same flavor to identify. This time, she will keep her eyes closed, but can unplug her nose.
5. Keep taking turns until each girl has had at least 2 flavors of jelly beans.
6. Give girls more jelly beans or an alternative snack. While enjoying snack, here are some things for girls to talk about:
   • Was it hard to determine what the flavor was for each bean? Would it have been easier if you could see them?
• Did smelling the bean make it easier to identify the taste?
• Can you taste the food better when you can smell it? Could you still taste it when you couldn't smell?
• Does smelling food ever make you hungry? When has this ever happened to you?

**Activity #4: Touch It, Draw It**

*Badge Connection: Step 5—Touch and feel*

*Time Allotment: 15 minutes*

*Materials Needed:*

- Variety of objects with varied edges or shapes (for example: kitchen or maintenance tools, natural objects or toys with no dangerous or sharp edges.)
- Pencils
- Paper
- Optional: Photographs, magazines, or calendar images

*Steps:*

1. Introduce girls to the sense of touch with the information below.
   - In order to draw something, a person usually looks at the object and then draws it. But sometimes we draw only what we think we see, what we saw before or we think we should have seen. This time, we are going to draw what we touch.

2. Have everyone choose an object to draw.

3. Before girls hold the object, set it out in front of them. Ask girls to hold up their pointer finger and, without touching the object, trace the outline of it in mid-air. Questions to ask girls:
   - Is the outside curved, straight, jagged or some combination?
   - Could you tell what it was if you just saw its outline or shadow, or do you need to see the inner details?
   - If you think one of the other sides will be more interesting, turn your object around and trace the outline again.

4. Now, have girls run their fingers around the edge of the object. Encourage girls to forget about what the object is (an egg beater, a snail shell, a crescent wrench, a doll, etc.) and ask them to think about the shapes their fingers are tracing: circles, hexagons, crescents, arrows, stripes and so on. After they've traced the outside, have them trace other details, including pieces that stick out or designs painted or drawn on the side.

5. Give each girl two pieces of paper. One is for drawing and the other is a guard sheet. Have the girls take the sharp end of a pencil and poke it through the middle of the guard sheet. They will draw without looking at what they are doing; the focus will be on remembering the shapes they traced.

6. Have the girls look underneath the guard paper just to see that their pencil is on the drawing paper and is in a starting place they like. Ask the girls to start to draw their objects, trying to move their hands in the same way they did when tracing the object. They can stop to re-trace part of the object, and then check that they are once again starting the pencil where they like. Other than that, no peeking!

7. After the girls have drawn their objects, ask the questions below:
   - Does your final drawing look like what you would have drawn if you were looking?
   - Did you focus on different places than you might have if you had used your eyes?
   - What surprised you? What seemed to work easiest? Did you leave anything out?
   - Do you think someone who hadn't seen your object before would be able to pick it out from the drawing?

**More to Explore**
• Field Trip Ideas:
  o Visit a store specializing in tea and tea blends. Compare aromas and try an herbal tea.
  o Go to a grocery store or restaurant offering foods most of the girls have not tried before.
• Speaker Ideas:
  o Invite someone to share their knowledge of Braille or American Sign Language.
  o Invite a musician to share her music.

Customize It!: If your group wants to expand work on this badge or simply try different activities, go for it! There are many ways to earn this award, including: Completing the activities as listed in the Brownie Skill- Building set for It's Your Planet—Love It!, completing this activity plan, attending a council-sponsored event or customizing activities. Pick the one(s) that work best for your group. Girls will know they have earned the award if:
  • They have investigated different environments in the world around them.
  • They have used all five senses in new ways.
  • They have shared what they learned with others.

Family Follow-Up Email
Use the email on the next page as a template to let families know what girls did at the meeting today. Feel free to add additional information, including:
  • When and where you will be meeting next
  • What activities you will do at the next meeting
  • Family help or assistance that is needed
  • Supplies or materials that girls will need to bring to the next meeting
  • Reminders about important dates and upcoming activities

Hello Girl Scout Families:

We had a wonderful time today exploring the many ways we experience the world and we earned the Senses Badge.

We had fun:
  • Learning about how our eyes work and how they can be fooled.
  • Amplifying sound and learning how animals use sound.
  • Comparing how our senses of sight and touch affect how we experience the world.
  • Learning about how our sense of smell and sense of taste work together.

Continue the fun at home:
  • Practice observing things around your home. For example: compare moon phases over the course of a week, plant some seeds and watch them grow, or set out a bird feeder and see which birds are the most common.
  • Help your Girl Scout look for things at home that change sound, whether by making it louder, softer or different.
  • Look through the Girl’s Guide to Girl Scouting with your Brownie to find other activities you can try at home.

Thank you for bringing your Brownie to Girl Scouts!

This activity plan was adapted from Girl Scouts River Valleys.