

Senses—Super Sleuths



Big Science Little Hands II: Community Connections

Together, the Nanaimo Science and Sustainability Society (NS3) and Science World BC worked with Early Childhood Educators to complement the original *Big Science for Little Hands* activity book, with additional hands-on science resource materials. Our goal is to make science fun, hands-on, accessible to educators and to provide examples on how to link science concepts to the local community. We hope that these resource materials complement what you are already doing and offer additional ideas for making local connections.

The activities described in this book were designed with the help of nine Early Childhood Educators on Vancouver Island. Activities were tested at 54 pilot programs with 484 young children.

Support for program development was provided by the Vancouver Foundation, Woodgrove Chrysler, Nanaimo Insurance Brokers and VMAC.

Special thanks to Lorna McCrae, Barb Mjolsness, Jen Borzel, Sheila Grieve, Shawna Hassard, Odette Herr, Chris Peters, Melissa Burke, Corinne Dunn, Carly Foster, Becky Manson and the staff at Ladysmith Friends and Family, for allowing the NS3 to test 54 pilot programs at their early childhood education centres and gather student feedback! Their participation was invaluable!

For more ideas and activities check out scienceworld.ca/bslh

Introductions—Introduction activities are low-preparation, low-mess activities that can set the stage for the topic to be explored and work well for large groups.

Explorations—Explorations are an opportunity to discover, explore and get little hands dirty. Explorations involve open-ended activities that are appropriate for smaller groups and have questions associated with them for enhanced learning.

Make This—Children take their experiences home for further exploration, with this make-and-take activity.

Community Connections—Connect your explorations to the environment around you! Community Connections provide guides on how to connect these activities to the world around you.

All Together—This group activity makes a great wrap up to your topic of exploration.

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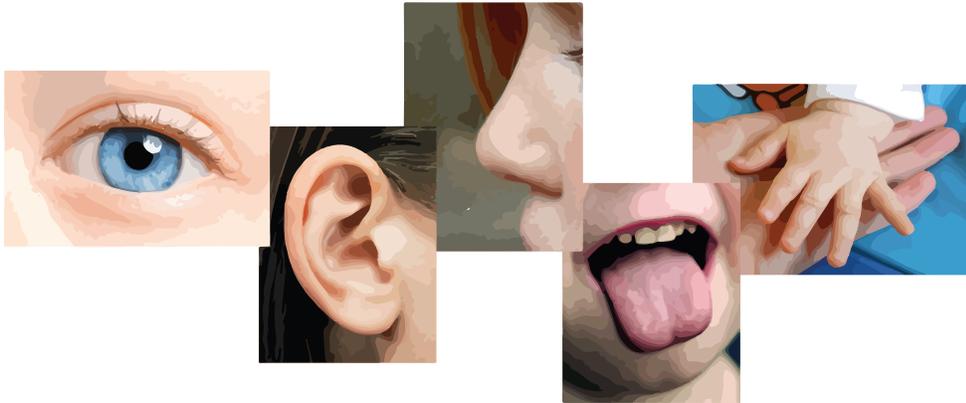
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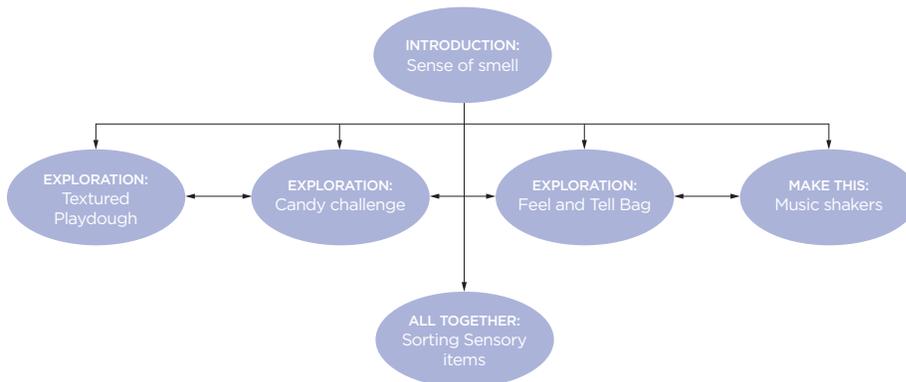
Big
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A path through Senses

Here's one possible way to put the activities in this resource together:

- Do an *Introduction* at circle time in a large group.
- Have the children try out the *Explorations* and *Make This* in smaller groups at stations around the room.
- Try *All Together* just before the end of the school day, or at the end of a few days on the topic.



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Big Science for Little Hands supports the learning goals outlined in the British Columbia Early Learning Framework, particularly those in the area of Exploration and Creativity.

To promote exploration and creativity, adults provide an environment where young children can do the following:

- Explore the world using their bodies and all their senses
- Build, create and design using different materials and techniques
- Actively explore, think and reason
- Identify and try possible solutions to problems in meaningful contexts and situations
- Be creative and expressive in various ways
- Develop a sense of wonder for natural environments
- Express a zest for living and learning

(BC Early Learning Framework: bced.gov.bc.ca/early_learning/)

Share with us!

Help us to improve Big Science for Little Hands by submitting feedback:
scienceworld.ca/bslh/feedback

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Introduction



Sense of Smell

Put your nose to the test and guess these everyday scents!

What you need

- Small, opaque containers (travel containers with pop tops are ideal)
- 5–10 common items with distinctive smells (coffee, cinnamon, vinegar, lemon, vanilla, garlic, mint, etc.)
- Laminated pictures of each common item

Hands on

1. Place items in containers.
2. Gather in a circle.
3. Smell each item. Squeeze the container to get more of a smell.
4. Match the smell to the appropriate picture.

HINT: This activity could be set up as a station. If doing this activity with the whole group, ask that children do not shout out their guesses, until everyone has had a turn.

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Exploration



Textured Playdough

Make a variety of no-cook playdough, to provide a variety of tactile experiences.

What you need

- 500ml flour
- 250ml salt
- 15ml of vegetable oil
- 125ml–250ml warm water
- Food colouring
- Sand
- Small pebbles
- Glitter

Hands on

1. Place flour and salt in a bowl.
2. Add oil and water.
3. Add food colouring.
4. Mix well and knead.
5. Make several (3–4) balls with your playdough.
6. Add different amounts of sand or glitter to each.
7. Store in plastic bags

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Exploration



Candy Challenge

Use coloured candies, such as M&Ms or Smarties, as a way to engage all five senses.

What you need

- Coloured candies
- Clear cups
- Water

HINT: Be aware of food allergies in your group. Smarties are nut free, but M&Ms are not. You can also use other coloured candies.

Hands on

1. Use your sense of touch to feel and describe the shape and texture of the candies.
2. Use your sight to sort the different colour candies into their own clear cups.
3. Rattle the candies in their cups and listen to the sound.
4. Add water to the cups and stir. Listen to the change in sound of the cup as you stir.
5. Smell the cups.
6. Eat some of the candies from the package.

HINT: Add small amounts of water, so that the colour doesn't become too dilute.

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Exploration



Feel and Tell Bags

Use your sense of touch to try to guess what is hidden inside the opaque bags.

What you need

- Fleece
- Needles
- Thread
- String
- Objects to place inside the bag (toy animals, toy cars, blocks, safe kitchen implements, LEGO bricks)

Hands on

Instructions for making fleece bags:

1. Cut fleece into squares.
2. Take two pieces of fleece, place right sides together and sew along three sides.

HINT: Socks could be used in place of fleece bags.

3. Place an object in the bag and tie the top closed with string.
4. Take turns feeling the object in the bag.
5. Guess what is in the bag.

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Make This



Music Shakers

Allow your sense of sound to help you create a unique music shaker!

What you need

- Recycled plastic bottles of various shapes and sizes
- Collection of small objects of different sizes, shapes and weights (e.g. dried peas, beans, corn, pebbles, sensory beads and paperclips)

Hands on

1. Put a handful of your small objects in your bottle and seal.
2. Shake your bottle and see what kind of sound it makes.
3. If you like, add more or less to your shaker to make a different sound.
4. Experiment with making different sounds with your music maker.

Questions to ask

1. Do different materials make different noises? Why?
2. Can you guess what is in a friend's shaker?

What's next?

- Play a matching game: Cover or paint the bottles, so the objects cannot be seen, then try to match the shaker to a picture of what's inside, using your sense of hearing only.

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All Together



Sorting Sensory Items

You use your senses to learn about the world around you.

What you need

- Random items to sort (e.g. spools, small plastic animals, fabric scraps, pipe cleaners, sponges, crayons)
- Containers (trays or shoeboxes)
- Picture cards (tongue, hand, ear, nose, eyes)

Hands on

1. Place the containers on the tables.
2. In groups of two, have the children sort the items into the correct containers.
3. Be sure to place the picture cards next to the containers so that children will know where to place the items.

Questions to ask

1. What other things from the mystery table can you sort? Discuss it with your partner.
2. Can some of the items be in more than one group?

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Teacher Resources

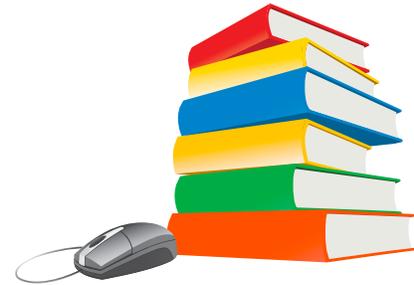
- *My Five Senses* by Aliko
- *Sniff, Sniff: A Book about Smell* by Dana Meachen Rau
- *5 Senses* by Nuria Roca and Rosa M. Curto
- *Small Senses: What Can I Smell?* (Ages 0–2) by Annie Kubler
- *Kevin’s Big Book of the 5 Senses* by Liesbet Slegers
- *Small Senses: What Can I Feel* (Ages 0–2) by Annie Kubler
- *Senses at the Seashore, Gr. PreK–2* by Shelley Rotner
- *I’m Exploring with my Senses* by Laura Purdie Salas
- *The Ear Book* by Al Perkins
- Dr. Seuss Books (*The Foot Book*, *The Eye Book*)

Literature for Children

- *FIVE SENSES (Green Start)* by IKids
- *I’m Exploring with my Senses* by Laura Purdie Salas
- *Kevin’s Big Book of the 5 Senses* by Liesbet Slegers
- *Senses at the Seashore, Gr. PreK–2* by Shelley Rotner

Online Resources

- Find videos and games by Sesame Street such as *Ernie Explores the Senses* (sesamestreet.org/videos?vid=1439).
- Three activities with instructions and videos of children explaining the activity at *Peep and the Big Wide World* (peepandthebigwideworld.com/en/parents/activities/search/).
 - Create noise makers and guess their contents. Find under “Hunting for Sounds.”
 - Guess smells and take an adventure walk. Find under “Guessing that Smell.”
 - Use counting to equally share food at a lunch. Found under “Tasty Sharing.”
- In this animated senses game, children identify the object that has the properties being described by *Sid the Science Kid*, PBS (pbskids.org/sid/isense.html).
- An open-ended animation game where children can explore different objects, using a magnifying glass, a magnet and a ruler at *Sid the Science Kid*, PBS (pbskids.org/sid/collectionjar.html).
- Instructions to make a kaleidoscope (minieco.co.uk/kitchen-roll-kaleidoscope/).
- Learn about senses with *Curious George* (pbslearningmedia.org/resource/cg9-sci-5senses/curious-george-five-senses/).



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Songs

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I Use My Eyes

Tune: *The Farmer in the Dell*



I use my eyes to see, I use my eyes to see,
and when I want to see a star, I use my eyes to see.
I use my nose to smell, I use my nose to smell,
and when I want to smell a flower, I use my nose to smell.
I use my tongue to taste, I use my tongue to taste,
and when I want to taste a peach, I use my tongue to taste.
I use my ears to hear, I use my ears to hear,
and when I want to hear a bird, I use my ears to hear.
I use my hands to touch, I use my hands to touch,
and when I want to touch a cat, use my hands to touch.

Five Senses I

Tune: *BINGO*



There are five senses we all have;
can you guess what they are?
See, hear, taste, touch, smell
See, hear, taste, touch, smell
See, hear, taste, touch, smell
And these are our five senses.

Five Senses II

Tune: *Where is Thumbkin*



Five senses, five senses
We have them. We have them.
Seeing, hearing, touching,
Tasting and smelling.
There are five. There are five.

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Songs



I Like To

Tune: *I Like to Eat Apples and Bananas*



I like to touch, touch, touch, touch things with my skin.
I like to smell, smell, smell, smell things with my nose.
I like to taste, taste, taste, taste food with mouth.
I like to hear, hear, hear, hear sounds with ears.
I like to see, see, see, see things with eyes.
I have five, five, five, five senses!

Notes for next time:

