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| Subject: | Forest | Grade: | 4 | Duration: | 2 hours |

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| Big Ideas: | Summative Assessment: |
| All living things sense and respond to their environment (Science) | Students will explore and make observations in a coastal temperate rainforest. |

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| Unit Understandings: | | |  | Content: |
| * Living things have senses that detect and respond to changes in their environment * Anything that causes a living thing to react is called a stimulus | | |  | * Sensing and responding: humans, other animals, plants * Biomes (are regions grouped by similar temperature and precipitations (e.g., climate: long-term weather patterns) as large regions with similar environmental |
| Transfer: | | |  | Essential Questions: |
| * Connect to place and understand their role and responsibility as stewards of the environment * Using your senses to make observations in the environment | | |  | * How do living things sense and respond to their environment? * How do my senses compare to the senses of other plants and animals? |
|  | Concepts: |  |  | Curricular Competencies: |
|  | * Senses * Interactions |  |  | * Demonstrate curiosity about the natural world * Observe objects and events in familiar contexts * Safety use appropriate tools to make observations and measurements, using formal measurements and digital technology as appropriate * Make simple inferences based on their results and prior knowledge * Express and reflect on personal or shared experiences of place |
| First People’s Principles of Learning: | | |  |
| Learning is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place).  **Cheakamus Centre Principles:**  **Place:** Students will develop place-based knowledge about the coastal temperate rainforest, learning and building upon aboriginal knowledge and other traditional knowledge of the coast Salish people.  **Personal Connections:** Place-based learning provides the basis for an intuitive relationships with the natural world, connections to the rainforest ecosystem and sense of relatedness that encourages life-long harmony with nature. | | |  |
| Core Competencies: | | | |
| **Communication:**   * I ask and respond to simple, direct questions * I am an active listener; I support and encourage the person speaking * I can recount simple experiences and activities and tell something I learned   **Thinking:**   * I can ask open-ended questions and gather information * I get ideas when I use my senses to explore   **Personal and Social Emotional Learning:**   * I can participate in classroom schools, community, or natural world * I can identify how my actions and the actions of others affect my community and the natural environmental and can work to make positive change | | | |

Field Study Planning:

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| Pre-visit connections: | Resources: |
| **Five senses Mind-map:** Ask students to think about their senses and the important information they provide. The following sequence of questions and discussion is a guide:   * What senses do you have? What sense organs do you use for each one? * Why is it important to have these senses? * Living things use their senses to survive. What are some examples of trees and plants using their senses? * How do the senses of the forest compare to yours? * How do we depend on forests?   **Leading questions to discuss with class prior to visit:**   * What is a coastal temperate rainforest? * What are the characteristics of a coastal temperate rainforest? * What organisms live in B.C.’s coastal temperate rainforest? | **Website:**   * Sierra Club BC: Eco Map of BC   <https://sierraclub.bc.ca/ecomap/>   * Science World Resources:   <https://www.scienceworld.ca/resources/activities/old-growthtrees>  **Books:**   * ‘Project Learning Tree’ Curriculum Guide * ‘Project Wild’ by Habitat Conservation Trust Foundation * ‘Forest Bathing Retreat’ by Hannah Fries and Robin Wall Kimmerer. * ‘A Place for Wonder’ by Georgia Heard and Jennifer McDonough |
| **Please see ‘during visit connections’ below for more ideas to explore before your students’ visit ODS** |  |

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| During visit connections: | Resources: |
| **Warm-up**  Sensory Wake-up Circle (Get Outdoors!) Walk and Talk Question: Which sense could you give up? Which sense could you not live without?  Solo Sensory hike: Space the students out 10-20 seconds apart on the Moss Trail. Walk for 2-3 minutes. Circle up at the end of trail in a clearing. Ask students to share an ‘I notice’. | Beetles: [I notice, I wonder, It reminds me of...:](http://beetlesproject.org/resources/for-field-instructors/notice-wonder-reminds/)  **Books**:  “Get Outdoors – An Educators’ guide to Outdoor Classrooms in Parks, School grounds and other Special Places’.  **Apps:**  Plant Snap  **The following resources can be found onsite at Cheakamus Centre**:   * West Coast Rainforest Tree ID Cards * Culturally modified tree picture and cedar prayer * Measuring tape * Biodiversity scavenger hunt cards * Rainbow chips * Hand Held Lenses * Ethnic Plant Guide book * ‘The Tree in the Ancient Forest’ book. * ‘The Great Blanket of Moss’ book * Egg cartons * Teacher resource pack with activities taken from ‘Get Outside BC’ |
| **Main Activity (Example)**  Tiny Treasures  Opportunity: Collect & Share some of the tiny treasures that inhabit this place…in a very sensory way!  Gear up! Hand lens, clipboard, pencils, egg carton (1 per pair), camera (optional)  Explore & Discover: What tiny objects can you discover if you look very closely in every nook and cranny of this place?  Make it happen: Collect 12 little objects to fill each hole in your egg carton. Try to find a diverse and varied sampling of many tiny treasures that people seldom notice unless they look very carefully.  For the record: Photograph or draw, (optional: colour), & label your Tiny Treasures on the record sheet  Share your work: Invite others to experience your Tiny Treasures by asking them to close their eyes and use their other senses to guess each item you put in the palm of their hand. |  |
| **Reflection**   1. How successful were you as a Tiny Treasure Collector? Why? 2. What were the three best things about this experience? Why? 3. What can you say you learned during this activity? Explain. 4. What were your favourite three treasures? Why? |  |
| Closing  Storytelling Circle |  |
| **Other sensory activities:**  **Sight:**  Rainbow Chips (Get Outdoors!) – Hand each participant a rainbow chip, telling them that every colour of the rainbow exists in nature all around us, and send them off to match their colour chip as closely as possible with something natural. Ask them not to pick their matched items if it is alive, but to show it to someone close by. Once they have found a match, give them another chip to match. Q: What surprised you the most about this activity? What colours were hardest to find?  **Instant Cameras:** (See Get Outdoors!)  **ABCs We See:** Pair students up and send them outside with an alphabet checklist. Their challenge is to find and list (or draw) something in nature for each letter on the list. Could use digital cameras, and create a digital slideshow.  **Digital Photo Sensory Shoots:** Students work in 2-3s. Ensure each group has a camera. Give each group a sensory theme (colour, texture, smells, sounds, etc.) and have them take photos to put together a slideshow.  **Back and Belly Observations:** I notice, I wonder, It reminds me.  **Hearing**  Sound Mapping (Get Outdoors!)  Mindfulness Walk  Solo sit  **Touch**  Blind walk (Hug a Tree)  **Smell**  Forest Cologne (Get Outdoors!) |  |

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| Post-visit connections: | Resources: |
| * Organize a bioblitz event in your schoolyard or in nearby nature. * Develop a plan of action to address a selected environmental problem or issues related to forest systems. * Challenge your class or school to get involved in a meaningful action project that encourages forest stewardship. * My special place (Get Outdoors p. 59) students choose and explore a special natural place in their schoolyard, park or other area. They describe the local environmental using sensory details; they reflect on its importance, and they discover their own connections to it. Suggested Reading List about special places and connections (p.63) | **Books:**  “Get Outdoors – An Educators’ guide to Outdoor Classrooms in Parks, School grounds and other Special Places’.  ‘Coyote’s Guide to Connecting with Nature’ by Ellen Haas, Evan McGown and Jon Young.  **Websites:**  <http://bioblitzcanada.ca/>  <http://www.lynncanyonecologycentre.ca/>  <http://kbee.ca/handbook/> Page 7 - ‘Thinking Trees’ |