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| Subject: | Farm | Grade: | 4 | Duration: |  |

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| Big Ideas: | Summative Assessment: |
| * All living things sense and respond to their environment (Science)
 | Students will make observations about farm animals and their habitat in the local environment.  |

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| Unit Understandings: |  | Content: |
| * Use their senses to make observations in the environment
* Connect to place and understand their role and responsibility as stewards of the environment.
 |  | * 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
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| 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, respond, and adapt to stimuli in their environment?
* How do my senses compare to the senses of animals?
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|  | Concepts: |  |  | Curricular Competencies: |
|  | * Senses
* Interactions
 |  |  | * Demonstrate curiosity about the natural world
* Observe objects and events in familiar contexts
* Safely 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
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| 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:**FPP: Students will use patience and take time to learn about bird behavior and they will learn about how they are connected to their ecosystem.  |  |
| Core Competencies: |
| **Communication:** * I ask and respond to simple, direct questionsI 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 and group activities to improve the classroom school,
* community, or natural world
* I can identify how my actions and the actions of others affect my community and the natural environment and can work to make positive change
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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 animals using their senses?
* Do all these animals use their senses in the same way?

**Possible leading questions to discuss with class prior to visit:** * What is a farm? What role does a farm play in their community? Do they know where the closest farm is located to where they live?
 | **Websites:*** Growing Minds – Farms to School: <https://growing-minds.org/category/level/grades-3-5/>
* Grow BC – A guide to BCs Agricultural Resources: <https://www.bcaitc.ca/resources/grow-bc-guide-bcs-agriculture-resources>
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| **Please see ‘during visit connections’ below for more ideas to explore before your students’ visit ODS** |  |

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| During visit connections: | Resources: |
| **The Farm Lab classroom:** is a good location to begin the Farm Field Study. Here you can orient the students to the components of the farm and explain that it is a teaching farm, not a working farm. This is also a good time to do any planned lessons or activities you have prepared for your visit. For example, this is a great time to ask them to share their names and their favourite animal. You can ask students to identify which animals are domestic and which ones are wild. What is the difference?  | **Resources at Cheakamus Centre:*** Body parts of pigs cards and examples of products derived from pigs
* Bee hives trays
* Bee Keeper Helmet/Gloves
* I notice, I wonder, It reminds me of cards
* Stethoscope and brushes for goats.
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| **Station 2. Chickens:**There are two teaching areas for the chickens. The first is the chick habitat in the “Farm Lab” upstairs in the barn. Here you will find: · An egg washing station and instructions · An egg incubator with eggs in development · Several instructional posters · A projector to candle eggs · A fridge and egg log for non-incubated eggs · An egg scale The second location is the hen nesting area in the barn, located downstairs in the doors called “Le Palais des Poules”. Start upstairs in the farm lab. Here you can explain about the development cycle of a chick using the poster on the wall for visual reference. There are usually several eggs in the incubator. They should have two dates on them. The top date is the date it was harvested from the hen area. The bottom date is 21 days from when the egg was harvested. Turn off the ceiling lights, turn on the projector beside the incubator, and hold up a more recently harvested egg up in front of the light. The egg will look fairly translucent and have little shading. Then take a few more eggs out of the incubator, each getting progressively older, and hold them up to the light so the students can see how the chick development compares between each egg. Be sure to replace the eggs with the wide round end up (air pocket!). If there are chicks in the cage, students can each hold the chick. Have the students sit in a semi-circle on the floor, so students can pass the chick gently around the circle. Then take the class downstairs to visit the hen nesting area and harvest some eggs. On the grass outside, go over behaviour expectations with the students. Inside the hen nesting area, students should be quiet and gentle when reaching into the hen beds. Take the students inside and explain about the lighting. Chicks usually lay eggs in the spring and summer and the lighting is left on to simulate the longer daylight hours. Students can then reach in and take some eggs. If it’s the morning field study, only take half of the eggs so there are some for the afternoon field study to use. Take the eggs back upstairs. The warmest egg should go in the incubator. Using the pencil on the fridge, write the current day’s date on the egg. Using the calendar on the wall, count ahead 21 days and mark that date on the egg as well. Gently place the egg in the incubator, pointy-side down and round-side up. This will ensure the developing chick has access to the air sac inside the egg. The other eggs should be washed and placed in the fridge. Washing instructions are printed out on the wall above the sink. To wash the eggs: * Use very hot water
* Wash eggs individually under running water. Scrub off surface dirt using the green plastic scrubber kept beside the sink.
* Sanitize with bleach and water solution (instructions are located on the bucket beside the sink along with the bleach). Dip eggs in solution and let air dry in egg crates.
* Once dry, date eggs and place in fridge.
* Record the numbers on the chart on the fridge door.

After you have finished with the eggs, you can go outside and feed the chickens. The feed is located downstairs in Le Palais des Poules. There is a bucket on top of the feed container. Fill the bucket up to the fill line on the outside of the container. This is not the chickens’ main meal for the day; it is only a snack. Note: If there are two groups doing Farm Field Study at the same time, they should share the amount of feed. This will prevent the chickens from being overfed throughout the day.When feeding the chickens, students should lay their hand out flat and let the chickens peck the feed from them. If at any points students are afraid, they can drop the feed and walk away. If children are nervous, they can try feeding the hens first, as they are usually more gentle. When you are finished, direct the chickens back into the pen where they came from. |  |
| **Station 3. Goats**The goat section of the barn is labelled “La Grange”. Immediately inside the door are some supplies for use for your activity:* Goat feed and measuring bucket
* Brushes (6) in basket
* Stethoscope (1)

Start by taking the students into the goat barn and showing them the facilities. The feed container is located inside the door on the left-hand side. Fill the bucket up to the fill line on the outside of the container. This is not the goat’s main meal for the day; it is only a snack. *Note:* If there are two groups doing Farm Field Study at the same time, they should share the amount of feed. This will prevent the goats from being overfed throughout the day.The goats are extremely enthusiastic to receive the feed. To help keep things manageable, don’t take the feed bucket into the goat pens. Hand out the feed to the students at La Grange and put the bucket back on top of the feed barrel before heading over to the field. Instruct students to cover the feed with their hands as the approach the gate, then walk directly into middle of the field before feeding the goats. If there is a bottleneck at the gate, the goats will crowd the students and some may leave the pen. When in the goat pen, students should remain standing at all times.When feeding the goats, students should lay their hand out flat and let the goats take the feed from them. If at any points students are afraid, they can drop the feed and walk in the opposite direction of the goat. The goat’s interest will be with the feed.Students can also groom the goats using the brushes in the basket. There is also a stethoscope in the basket. One at a time, students can place it on the side of a goat and try to hear a baby goat’s heartbeat inside. Both of these are good activities for students who may be afraid to feed the goats but still want to interact inside the pen. |  |
| **Station 4. Pigs**The pig house is called “Capitol’s Place”. The pens each have an inside area that can be accessed through the barn door and an adjoining outside pen for viewing. All of the pigs can be petted except for Capitol in the first pen. The pigs are fed during daily chores, so they do not need to be fed during the Farm Field Study. |  |
| **Wrap-Up**Once you have visited all the stations at the farm, go back upstairs to the Farm Lab and have students wash their hands. There are two sinks. Students can place used paper towels in the compost bin in the classroom.**Possible Closing Circle Questions:**1. What is a farm? 2. How did I notice (observe) the senses of the farm animals? 3. What did I notice (observe) in this field study? 4. How do goats, pigs and chickens sense and respond to their environment? 5. What animal sense surprised you the most?6. What questions do I still have about these animals that live in the farm? |  |

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| Post-visit connections: | Resources: |
| * Build a wild or edible garden in your school/community that can also be enjoyed by bees, butterflies and hummingbirds.
* Reduce waste in your school by setting up a composting project
* Support and encourage urban agriculture development and growth by signing up for a classroom gardening and cooking program with ‘Growing Chefs’.
* Consider starting a chick-hatching project.
 | **Websites**:<http://www.schoolgrounds.ca/projects/wildlife.html><http://www.schoolgrounds.ca/projects/ediblegarden.html><https://www.growingchefs.ca/> |