Kindergarten, Unit 3: Ant Antics Lesson Plan

Driving Question: How do ants react to light, sounds, and vibrations?

Standard(s): K.P2U1.1 Investigate how senses can detect light, sound, and vibrations even when they come from far away; use the collected evidence to develop and support an explanation.

Materials:

- Slide Deck: Unit 3
- Class set: Senses Probe Activity handout
- Book: *My Five Senses* by Aliki (or read aloud on Slidedeck)
- Chart Paper
- Markers
- Light Center: Flashlight, Wax paper, Cardboard, Cardstock, Printer Paper, A book, Tissue Paper, Kleenex, Tin Foil
- Class set: Shining Light handout
- Sound Center: Brown paper bags labeled 1, 2, 3…, Bells, coins, pom-poms, buttons, etc.

- Class set: What's That Sound? handout
- Vibration Center: Drum, ten pom-poms
- Class set: What's Happening? Handout
- Vocabulary cards
- Class set: Ant Journal
- Flashlight
- Musical Instrument (ex: bells, drum, etc.)
- Class set: Ant Evaluation handout
- Crayons
- Pencil

Probe (if applicable): *Time 10 minutes*
Have students decide which child they agree with and color that child. Students will discuss their thinking. **(think-pair-share)**

Phenomena: *Time 20 minutes*
Show the ant video from the slide deck and ask students what they notice. Revisit the Wonderwall. Ask the students whether there are any wonders we have answered. Do they have any new wonders? **(Wonder Wall)**

Engage: *Time 20 minutes*
What are our five senses? How do we use them? Write the student responses on the board. Please read the story: *My Five Senses* by Aliki. Revisit the student's answers. Explain to students that they will move through different centers today, exploring their senses and recording their findings. **(solo, pair, team)**

Explore: *Time 30 minutes*

Students will rotate to 3 different centers.

1. Light (eyes detect light) - Students will use a flashlight on various objects to see if the light will pass through them. Students will document their observations on their Shining Light handout.
2. Sound (ears detect sound) - The teacher will put the following items in their brown paper bags (label bags 1, 2, 3, etc.), folding the bags closed (do not staple): bells, buttons, pom-poms, rattle, etc. Students will shake the bags and record what they believe is in their bags. After recording their answers using the What's That Sound? Handout, Students can confirm their findings by looking in the bags.
3. Touch (feel the vibration) - You need a small drum. Place ten pom-poms on the drum. The student will observe the pom-poms bouncing up and down on the drum as it is tapped lightly. Students will record their observations on the What's Happening? Handout.

Explain: *Time 20 minutes*

Call on groups to share their observations. Check for understanding in all groups. Use prompting questions and Slidedeck: Unit 3 to help guide and explain their knowledge: "Why do you think the pom-poms were bouncing? "What object was the loudest? Why?" "Why do you think light passed through some objects, not others?" **(think-pair-share)**

Introduce the vocabulary. Say the word. Have the students repeat the word. Explain the definition. Give an example.

Elaborate: *Time 30 minutes for five days*
Ant Journal: Introduce the classroom ant farm. (You can also take a nature walk around your school to locate an ant hill/colony to use for the following observations.)
Ant Farm: How do the ants respond when exposed to light, sounds, and different foods (smell)?

Students will work in small groups to observe how ants react to light, sound, vibration, and different foods. Students use a flashlight to watch how the ants respond to light. Students use a musical instrument to observe how the ants respond to sound. Students use a tapping motion to monitor how the ants react to vibration. Ongoing, try feeding your ants different foods over several days. Observe and document findings.

Evaluate: *Time 15 minutes*
Using your observations and evidence, draw and write what would happen if an ant lost its sense of sight. How would it survive? Record on the Ant Evaluation handout.