

**Manchester College
Education Department**

LESSON PLAN by Kristen Davidson

Lesson: Ant Farm

Length: 40 minutes

Age/Grade Intended: 3rd grade

Standards: 3.4.6 Explain that people need water, food, air, waste removal, and a particular range of temperatures, just as other animals do.

Performance objectives: Given an observation chart, the students will fill it out the venn diagram while including at least 4 characteristics in each of the three parts.

Assessment: Observation Chart

Advanced Preparation by Teacher: The teacher will need to gather observation sheets and venn diagrams.

Procedure:

Introduction/Motivation: Engage: To engage the students, tell them a story about how you have recently been noticing a lot of ants around your house. You especially noticed a large group of them when you dropped a piece of food on the ground at a picnic. How did all those ants find the food so quickly?

Step-by-Step Plan:

1. **Explore:** Ask the students to get into their science groups. Ask one of the students in each group to be in charge of filling out the information sheet while groups walk out to the playground and observe the ants. Look around garbage bins, windows, vacant lots, flower beds, and on trees. (Bloom's Application, Gardner's Bodily Kinesthetic and Visual Spatial and Interpersonal)
2. Observe the ants for approximately 20 minutes while reminding the students not to kill the ants while they are observing them. Also, be sure to cue the students to get with their groups and fill out the chart.
3. **Explain:** Bring the students back together and ask them to describe what they saw in the ant's behavior. Why did the ants walk in a straight line? Why did they walk in lines side by side but in opposite directions? Guide the discussion to answer the questions for the students. The ants walk in a straight line to stay on the right path and they walk in opposite directions to keep a continuous line back to their home. (Bloom's Comprehension)
4. **Collaborate:** Most importantly, ask the students why the ants do these things? Guide the conversation towards the goal of survival. What do the ants need to survive and how could their actions help in their survival attempts? (Bloom's Analysis)

Closure: Evaluate: Ask the students if they know of any other animals or insects that have certain actions to survive. Guide the conversation towards humans. What do humans do to survive? How do they accomplish survival on a day to day basis? Ask the students to fill out the venn diagram individually back in the classroom. Allow them to discuss possibilities for each of the three parts with one science partner. (Bloom's Evaluation, Gardner's Intrapersonal)

Adaptations/Enrichment: If a student is struggling with this activity, the teacher could show a youtube.com video on ant survival. The link can be found at <http://www.youtube.com/watch?v=UMSCIRRIzrs>. This link will help students who learn better visually to understand more information. For a student who is excelling with this project, the teacher could ask them to make a quick chart about how the ants meet each survival necessity.

Self-Reflection:

Did the students like the ant observation time? Were we able to find ants? Should you have dropped food on the ground in the morning before the lesson so ants would gather? Would you do this again? Was it too hectic to keep the students in order?

Ant Observation Chart

Names of group members: _____

<p>What are the ants doing?</p>	
<p>In what order are they walking/how far are they from the other ants? At what speed are the ants going?</p>	
<p>Are the ants holding anything?</p>	
<p>Where are the ants going?</p>	

