



WEEK 8, Day 3

**Math Center: Soil Sort and Count**  
 Children find items within soil to sort and count.

<b>Big Ideas</b>	<p>Children will:</p> <ul style="list-style-type: none"> <li>● communicate mathematically through multiple forms of expression.</li> <li>● persevere in solving questions with a growth mindset.</li> <li>● solve mathematical problems using a variety of strategies.</li> <li>● make sense of the world around them through mathematics.</li> <li>● connect math to other learning and real-world examples.</li> </ul> <p>A strong, interdependent math community has qualities, such as:</p> <ul style="list-style-type: none"> <li>● shared responsibility, collaboration and support for each other.</li> </ul>
<b>Guiding Questions</b>	<p>What does it mean to be a member of a math community?                  How do you use math tools?                  How do you most effectively communicate your mathematical thoughts and ideas?                  Why is collaboration and listening to the ideas of others important?</p>
<b>Vocabulary</b>	<p><b>total:</b> a whole or complete amount; altogether; in all  <b>decompose:</b> breaking down numbers into parts  <b>expression:</b> a combination of numbers showing a mathematical operation, like addition or subtraction.</p>
<b>Materials and Preparation</b>	<ul style="list-style-type: none"> <li>● soil (collected by children or store bought) in a smaller container, separate from the Discovery Table</li> <li>● materials to search for added into the soil, for example rocks, roots, sticks, toy insects, leaves</li> <li>● sorting tools such as tweezers, scoops, bowls, plates</li> <li>● ten frames</li> <li>● <a href="#">Counting Sheets</a>, on clipboards</li> <li>● writing tools</li> </ul>
<b>Intro to Centers</b>	<p><i>As we finish up our unit on construction, we will continue to explore</i></p>

	<p><i>soil. In the Math Center, we will look at soil with a mathematician's eye.</i></p> <p>Show the container of soil, a bowl and tweezers.  <i>We will look for items in the soil and will sort them into their various categories. Then we will count the total number of objects we find in the soil.</i></p> <p>Model how to explore the soil, taking care in keeping the soil in the container. Natural items can be fragile so model being aware of how to move things around.</p> <p><i>When we have found all of the items, we can count the total number in each collection. Here is a recording sheet to write down your findings.</i></p> <p><i>I also want to see if we could find combinations of items and add them together. For example, what if you put the bugs and the sticks together in a container- how did the number change?</i></p> <p>Before sending children to Centers, remind children about how to clean up and model taking care of any spills with a broom or other cleaning materials.</p>
<b>During Centers</b>	<p>Children explore the soil for various items. They sort the various items, count, and then record what they find,</p> <p>Follow the children's lead when exploring the soil. Support children to use precise mathematical vocabulary to narrate what they are doing. Direct their attention to count and then write numbers for each group of counters. Children might add items together.</p> <p>Notice if children are combining items and articulate with them what the number sentence could be. Use the back side of the recording paper to record any combinations and show them how to find the total.</p> <p>Take observational notes about children's exploration and language.</p>
<b>Facilitation</b>	<ul style="list-style-type: none"> <li>● Check for understanding by inviting children to share their counting strategies out loud.</li> <li>● How do you know there was this amount in this group?</li> <li>● Which materials have you counted already? How do you know?</li> <li>● How can you keep track of the materials that you've counted so that you count each material one time?</li> </ul>

	<ul style="list-style-type: none"> <li>● What is something that has been challenging for you? What did you do? How was your partner or group able to help you?</li> <li>● When you work in Centers, do you prefer to work by yourself, with a partner, or in a group?</li> </ul>
<b>Standards</b>	<p><b>Addressing:</b></p> <p><b>QR.C.1</b> Know the number names and the count sequence.</p> <ul style="list-style-type: none"> <li>● <b>K.CC.A.3</b></li> </ul> <p><b>QR.C.2</b> Count to tell the number of objects.</p> <p><b>AR.C.1</b> Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.</p> <ul style="list-style-type: none"> <li>● <b>K.OA.A.5</b></li> </ul> <p><b>Building Towards:</b></p> <p><b>AR.C.1</b> Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.</p> <ul style="list-style-type: none"> <li>● <b>K.OA.A.1; K.OA.A.3</b></li> </ul> <p><b>Standards for Mathematical Practice: 1-8</b></p>

**Notes**