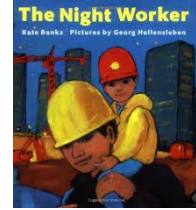


Unit 3: Construction



WEEK 4, Day 3

**Math Center: My City Buildings**

Children collaborate to count cubes and construct buildings in a city.

<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>array:</b> like objects arranged in a neat way</p>
<b>Materials and Preparation</b>	<ul style="list-style-type: none"> <li>● Unit Question Chart</li> <li>● connecting cubes</li> <li>● <a href="#">Connecting Cube</a> cards</li> <li>● <a href="#">My City</a> templates</li> <li>● 10 frame</li> </ul>
<b>Intro to Centers</b>	<p>Refer to the Unit Question Chart.</p> <p><i>We have been thinking about this question, “What processes help people construct structures, ideas, and works of art?” What processes helped us construct ideas and math stories these past few weeks?</i></p> <p>Provide 1 minute of quiet think time. Invite children to think about math</p>

	<p>stories as works that involve processes of construction. Share any new thinking in response to the question and add it to the chart. Some emerging ideas might include: people connect math to other learning by thinking about real-world examples; people can make sense of the world around them through mathematics; listening to others' ideas gives us new ideas and strategies.</p> <p><i>This week at the Math Center, I invite you to construct a city using connecting cubes. You will select a card with an <b>array</b> of cubes. Count the correct number of cubes, matching the color. You may use the 10 frame to help you, if you like.</i></p> <p>Demonstrate how to complete this step. <i>Once you have your cubes, use them to build part of your city.</i></p> <p>Show children how to stack the cubes and arrange them on the city template. <i>When you finish with one array card, select another one, and add to your city!</i></p> <p>Describe the expectations for cleaning up and leaving the area when finished. <i>When you are finished at the Math Center, put your supplies back where they belong so they are ready for the next person to use.</i></p> <p>Show where the math tools belong when they are put away.</p>
<b>During Centers</b>	<p>Children will work individually or collaboratively to match, count and arrange cubes to make a city.</p> <p>Take observational notes about children's exploration and language. Follow the children's lead and use precise mathematical vocabulary to narrate what they are doing.</p>
<b>Facilitation</b>	<ul style="list-style-type: none"> <li>● What will you add to your city? Why?</li> <li>● Do you think this array has more or less than this one? How do you know?</li> <li>● How are you a member of our math community?</li> <li>● How have you connected mathematics to other learning this year?</li> <li>● What have you learned about numbers and counting?</li> <li>● How have you shown what you know in different ways?</li> <li>● What do you do when you're not sure of what to do in math or if your answer is correct?</li> </ul>
<b>Standards</b>	<p><b>Building Towards:</b></p> <ul style="list-style-type: none"> <li>● <b>The Guiding Principles &amp; Standards for Mathematical Practice QR.C.2</b> Count to tell the number of objects.</li> </ul>

	<ul style="list-style-type: none"><li>● <b>K.CC.B.4</b></li></ul> <p><b>QR.C.3</b> Compare numbers</p> <ul style="list-style-type: none"><li>● <b>K.CC.C.6</b></li></ul> <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</b></li></ul>
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**Notes**