Bridges in Mathematics Pre-K Unit 2

October

Leaves and pumpkins provide contexts for counting, sorting, patterning, graphing, and measuring this month. In this unit, your child will:

- Count to 10
- Match sets and numbers to 6
- Compare sets of objects and tell which has more
- Sort objects by color, shape, size, and texture
- Compare objects by length and by weight

Your child will learn and practice these skills by doing activities and playing games like those shown below.

<table>
<thead>
<tr>
<th>ACTIVITY OR GAME</th>
<th>COMMENTS</th>
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<tr>
<td>Practice counting to 10 with a puppet.</td>
<td>While some children enter preschool counting to 20 or beyond, others are still learning to count to 10. Games help make counting practice enjoyable for all children. In Puppet Count, the teacher takes turns with the puppet to say a few numbers at a time. The children help the puppet by counting along.</td>
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<tr>
<td>Teacher 1, 2, 3</td>
<td>Puppet and Children 1, 2, 3</td>
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<tr>
<td>Teacher 4, 5, 6</td>
<td>Puppet and Children 4, 5, 6</td>
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<tr>
<td>Teacher 7, 8, 9, 10!</td>
<td>Puppet and Children 7, 8, 9, 10!</td>
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<td>Teacher Let's do it over again!</td>
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<td>Make numbers with playdough.</td>
<td>Children learn to recognize numbers and understand their value by forming them with playdough. They roll a “snake” of playdough and use it to trace the numeral on a card. Each card has the number of dots shown so children can count the dots to remember what the number says.</td>
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<td>Take a walk outside to gather autumn leaves. Sort the leaves by color, size, shape, and texture. Graph some of the leaves by color.</td>
<td>Each child brings a red or yellow leaf to the circle. The teacher invites them to predict whether there are more reds or more yellows. Then children take turns placing their leaves in the correct row of the graph. When all leaves are on the graph, the children can tell which color has more just by looking. The teacher and children count the leaves in each row, and then the teacher records the number for red and for yellow.</td>
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<tr>
<td>Cut a piece of string to match the length of the pumpkin’s belt. Wrap the string around the pumpkin to check, and display the results.</td>
<td>The teacher fastens a masking tape “belt” around the widest part of the class pumpkin. Then children cut and test lengths of string they think will be just the same as the pumpkin’s belt. Each child hangs his or her string under one of the labels to show whether it was shorter, longer, or the same length as the pumpkin’s belt. This type of work helps children measure length with better understanding in later grades.</td>
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FREQUENTLY ASKED QUESTIONS ABOUT UNIT 2

Q: My child can already count to 30. I’m worried this might not hold her interest.
A: Children develop skills and understandings at different times and at different rates. Many math games and activities address a wide range of learners. In a counting game, for example, children roll a die, locate the numeral on the number path, and then count to confirm it is the right number. Confident counters can also use the dots on the die to see, for example, that 5 is equal to 4 and 1 more or to a group of 2 combined with a group of 3. This is a very sophisticated and interesting way of reasoning about numbers. Preschoolers are also developing important school-readiness skills such as participating in a group game, taking turns, listening to others, self-monitoring to refrain from calling out, and so on.

Q: It seems like the children do a lot of sorting. What does sorting have to do with math?
A: Sorting is a way for children to organize objects so that they can think about them mathematically. For example, children can sort leaves by color and then count each group of leaves. They can add those groups of leaves together to think about how many there are in all. They can compare the groups to see which is greater and even count to determine exactly how many more leaves are in one group than in the other. In short, sorting is one of the first steps children take toward imposing order upon their surroundings and using math to make sense of the world around them.

Q: Are there sorting activities we can do at home?
A: When you start looking for a chance to sort objects at home, you’ll begin to see them everywhere!

- Laundry
  - “Let’s make a pile of light clothes here and dark clothes over there.”
  - “Can you sort the T-shirts by size? Can you put all the big ones here, and the little ones over there?”

- Kitchen
  - “Can you put the knives, forks, and spoons where they belong in the silverware tray?”
  - “Look at the mess in our junk drawer! Let’s dump these things into a tub and sort them.”

- Clean-Up Time
  - “Let’s put all the small books on the top shelf, and all the big ones on the bottom shelf.”
  - “Let’s sort the plastic animals so next time it’s easy to find the ones you want. Which ones belong together?”

You can also look for sorting books at the library. These are some favorites.

- The Button Box by Margaret Reid
- Sorting at the Market by Tracey Steffora
- Sorting (Math Counts) by Henry Pluckrose

For more ideas and resources, go to www.mathlearningcenter.org/families