## **Bridges in Mathematics Pre-K Unit 6**

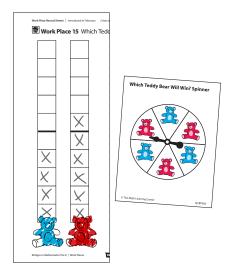
# **February**

Teddy bears offer fun and friendly contexts for counting and comparing, early addition, sorting, graphing, patterning, measuring, and geometry. In this unit, your child will:

- Count, compare, read, and write numbers to 10
- Explore different ways to make 5
- Work with AAB repeating patterns
- Sort the same set of objects in more than one way
- Compare objects by length, size, and weight
- Identify an object's location using words like front, back, top, bottom, under, over.

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

**COMMENTS** 

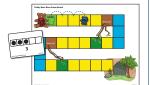


#### **ACTIVITY OR GAME**

Race Chirpy and Lil' Green along the large floor paths.



Play a new board game called Teddy Bear Race.



Children take turns hopping the crickets forward and backward on the large floor paths until they reach the end. Both children start on the green square in

the middle of their path and take the number of hops shown on the number die, moving forward when the other die lands on the addition sign, and backward when it lands on the subtraction sign. This game provides practice reading numbers and counting hops instead of spaces. It also introduces the idea of adding and subtracting on a number line, which will be developed in later grades.

Children take turns drawing a card and hopping their marker along the game board. If they happen to land on a shortcut square at the end of a turn, they get to slide their marker down the branch to the row below. The game is over when both players reach the cave at the end of the board.

Use 5 red and 5 blue teddy bear counters to make different combinations of 5.







The teacher gives each child a forest storyboard and 10 teddy bear counters—5 reds and 5 blues. One of the children spins the spinner, and everyone counts that many red bears into the five-frame on their board. Then they fill the remaining boxes with blue bears. The children describe the results as the teacher records them with numbers and words. She might also write an addition equation to match and read it with the children. The big idea is that 5 can be partitioned in different ways, for example, 3 reds and 2 blues or 1 red and 4 blues.

Make teddy bears and hearts and help arrange them in an AAB, AAB pattern.











The teacher introduces an AAB pattern with a rhythmic sequence of motions—clap, clap, tap your head; clap, clap, tap your head. After children practice this, they build an AAB pattern with the teddy bears and hearts they made.



Practice using location language by playing the Bear & Box Game and listening to a story about a mischievious teddy bear who hides from his owner. Although many children are familiar with such words and phrases as inside, outside, in front of, behind, and beside, the teacher reviews these and introduces others by playing a game and reading a story to the class. It's essential that children understand these terms going into kindergarten, as instructions like "stand behind the red line" or "hang your pack in your cubby above your coat" have little or no meaning without them.

#### FREQUENTLY ASKED QUESTIONS ABOUT UNIT 6

**Q:** My child can count to 10, but when she tries to count more than 3 or 4 objects, she skips some of them and counts others twice. Help!

**A:** First of all, don't worry. This is perfectly normal. Our goal is for preschoolers to count at least 10 objects accurately before they go on to kindergarten. Some children will continue to work on this skill in kindergarten, and that is fine. Here are some things you can do at home to help children learn to count objects accurately.

- Show your child how to move each object as she counts it, so she can keep track of those she's counted and those she has left to count.
- When you're counting objects that can't be moved, like pictures in a book, point to each one as you count it, and encourage your child to do the same.
- Start with 3, 4, and 5, and gradually increase the number of objects or pictures you're counting to 6. Stick with 6 for several weeks before moving on to 7, 8, 9, and finally 10. The shift from counting 5 to counting 6 objects is more challenging than many people realize.
- Play counting games with small hard objects, such as pennies or Legos, and an ice cube tray. The separate compartments in an ice cube tray reinforce the idea of one object per count. Take turns rolling a 1–6 die and counting that many objects into the tray, with one object in each compartment. (If you don't have a die around the house, you can find free dice apps for phones and tablets.) Or, have your child roll the die and place that many objects on one side of the tray. Then roll the die yourself and place that many objects on the other side of the tray. Have your child point to the side that has more. Then restate the comparison with numbers: "You're right! Five is more than three!"

### **Q:** Are there pattern activities we can do at home?

**A:** Working with patterns gives children the chance to reason logically and make predictions. It's also a lot of fun, and there are many ways to find and make patterns in daily life.

- Look for patterns around the house, on your clothing, in the yard, on the way to school, at the park. Take pictures of some of the patterns you find and share them with us.
- Move! Step-step-jump; step-step-jump or jump-step-twirl; jump-step-twirl.
- Listen to the beat; drum and clap; move to the music—music and dance are all about patterns.
- Use blocks, bath toys, or stuffed animals to make patterns with your child. Start simple with ABAB patterns. Then try AABBAABB, AABAAB, and ABBABB. When those are easy for your child, try patterns with three elements like ABCABC, ABBCABBC, and so on.
- Ask your child to make the same kind of pattern with different materials. For example, show them a pattern that goes red-red-white-white; red-red-white-white and ask them to make the same kind of pattern with green and orange objects instead: green-green-orange-orange; green-green-orange-orange.

You might also look for some of these picture books about patterns next time you're at the library:

- Max Found Two Sticks by Brian Pinkney
- Pattern Fish and Pattern Bugs by Trudy Harris
- A-B-A-B-A- A Book of Pattern Play by Brian P. Cleary
- Teddy Bear Patterns by Barbara Barbieri McGrath
- See a Pattern Here by Bruce Goldstone

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