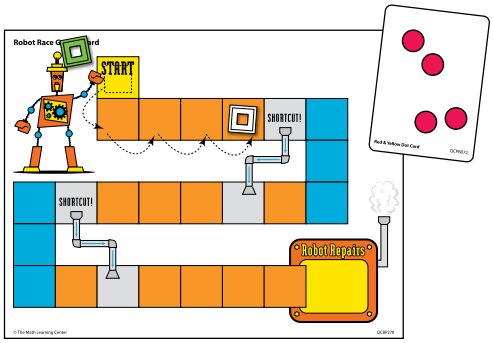
Bridges in Mathematics Pre-K Unit 7

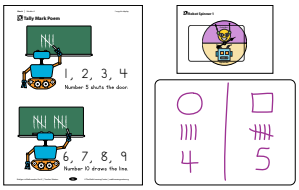
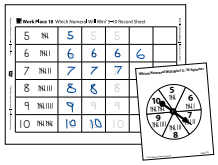
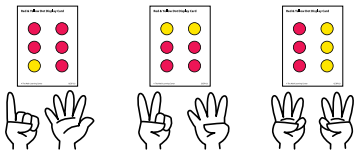
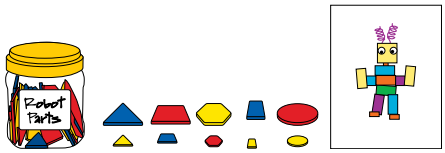
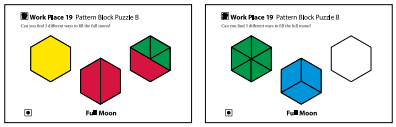
March



Robots rule as children revisit shapes, count and compare, add and subtract, sort, pattern, and graph this month. In this unit, your child will:

- Use tally marks to represent quantities
- Count, compare, read, and write numbers to 10
- Explore different ways to make 3, 4, 5, and 6
- Work with ABB repeating patterns
- Recognize, name, describe, sort, and put shapes together

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

ACTIVITY OR GAME	COMMENTS
Learn how to make tally marks and use them to record the results of spinner experiments. 	The teacher reads a poem about tally marks and shows the children how to make tallies through 10. The next day, the teacher introduces a spinner with a circle robot on the top half and a square robot on the bottom half. Where will the arrow land? Is the spinner fair for both of the robots? Each child spins the spinner. The teacher uses tally marks to record the results, and then the class talks about them. Afterward, children can repeat the spinner experiment themselves.
Spin and trace numbers on a graph to see which row fills first. 	Children practice reading and writing numbers 5–10 as they spin a number spinner, read the number they landed on, then find and trace the matching number on their record sheet. As they're working, the teacher might ask them how many 5s or how many 6s they've gotten so far, or how many more 7s they need to fill the row. She can also ask them to compare the numbers in neighboring rows: "Do you have more 9s or more 10s so far?"
Explore different ways to make the same total. 	Children use fingers on both hands to show how many red and yellow dots they see on each card—1 yellow and 5 reds, 2 yellows and 4 reds, 3 of each color. As they work, they notice that there are different ways to make the same total.
Use different shapes to make paper robots. 	At the beginning of the month, the children discover a jar of robot parts in the mystery box. When the teacher dumps the contents onto the rug, the "robot parts" turn out to be a collection of shapes. The teacher shares a story about two friends who start their own robot-building business, using shapes to build robots. Then the teacher sets out paper shapes and other art supplies so the children can make their own robots.
Find more than one way to fill a shape outline. 	Just as there are different ways to make the same number, there are different ways to make the same shape. Two trapezoids, or 3 rhombuses, or 6 triangles make a hexagon. There are no guidelines within the larger shapes, so children have to experiment with different ways to put the smaller shapes together. They are also challenged to come up with three different ways to make the same shape.

FREQUENTLY ASKED QUESTIONS ABOUT UNIT 7

Q: My child writes some numbers backward. Should I be concerned?

A: No. This is perfectly normal. Preschoolers are just learning to form their numbers. Many of them are still developing the hand-eye coordination they need look at a number (or letter) and copy it accurately. Some may not yet realize that the way the number is turned is important. And even when they know the basic shape and orientation of a number, they may write it starting at the bottom instead of the top.

Q: Can you suggest some good ways to have my child practice writing numbers at home?

A: Write the numbers 0–9 on slips of scratch paper or sticky notes for them to copy. Then let them choose those they want to work on. Don't limit them to paper and pencil practice, though. Instead …

THINK FINGERS! Put a dollop of finger paint on a piece of paper, chocolate pudding on a large paper plate, or shaving cream on a table. Have them spread it around and then practice writing the numbers with their finger. You can also pour a thin layer of salt or sand into a cake pan, or provide a piece of sandpaper for more textured finger writing.

THINK BIG! Have them paint the numbers with water and a big brush, or write them with colored chalk, on the driveway, sidewalk, or blacktop.

THINK GAMES! Use chalk to draw a simple hopscotch diagram on the sidewalk. Have your child help write the numbers and teach them how to play the game. Or draw three shapes—a triangle, a square, and a pentagon. Have your child count the corners with you and write the matching number inside the shape. Then take turns tossing small twigs, beanbags, or other markers into the shapes until each is filled with the correct number.

MOVE! It might seem surprising, but practicing large motor skills like jumping, hopping, climbing, catching, and kicking a ball can improve children's fine motor skills. That includes drawing, cutting, and writing numbers and letters.

Q: How can we help use words like under, over, beside, on top of, and underneath at home?

A: Here are a couple of ideas:

- Be as specific as possible when asking for your child's help: Please find the big yellow mixing bowl in the cupboard next to the stove. It's on the bottom shelf behind the cake pans.
- Play games when you take a walk or go to the park: Can you jump on the cracks between the squares in the sidewalk? Let's walk along the top of this little low wall. Can you stand next to the park sign, right below that big tree so I can take your picture to send to Grandma? See if you can climb up to the top of the slide, come down, and turn around three times.

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

- *All About Where* by Tana Hoban
- *Over Under* by Marthe Jocelyn and Tom Slaughter
- *Rosie's Walk* by Pat Hutchins
- *Where, Oh Where Is Rosie's Chick?* by Pat Hutchins
- *Up, Down, and Around* by Kathryn Ayers

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