Mathematics – The Creative Curriculum Approach

Mathematics can and should be part of children's everyday experiences and activities. In your child's classroom many skills and concepts will be taught that your child will need to become a successful mathematical thinker. There are five main components of mathematics that preschool children learn:

- 1. Number and operations
- 2. Geometry and spatial sense
- 3. Measurement
- 4. Patterns (algebra)
- 5. Data analysis

The book *Mathematics: The Creative Curriculum Approach* by Copley, Jones and Dighe gives examples of how all of these concepts can be brought into our classrooms through our daily routines, instructional activities and interactions with children. There are also many activities that families can do in relation to mathematics. Sometimes family members have difficulty recognizing the important role of mathematics in their lives because they often use mathematical skills unconsciously. Here are a few examples of things you can do at home to reinforce the concepts of numbers with your child.

- 1. Count everything. Touch objects as you say the corresponding numbers.
- 2. Count incorrectly or lose track of which objects you have already counted. Encourage your child to help you find the errors.
- 3. When reading counting books, after the objects on a page are counted, hide some of them with a small piece of paper or your hand. Ask your child to decide how many objects are hidden.
- 4. Ask your child to set the table, distributing the same number of each object to each place, or ask them how many more of something they need to have a particular number.
- 5. Concentrate on either the number 5 or 10. Ask your child to use his/her fingers to talk about parts of 5 (2 fingers on one hand and 3 fingers on the other hand, or 1 finger on one hand and 4 fingers on the other hand.) In a similar manner, ask your child to talk about the parts of 10 (for example, 3 fingers have rings and 7 fingers do not, or 2 thumbs and 8 other fingers.)
- 6. Play games with 5 and 10 objects. For example, suggest that your child toss 5 or 10 pennies, or 5 or 10 puffballs. Have him/her count how many pennies land "heads-up" and how many land "head-down." Have him/her identify how many puffballs land in a plastic cup target and how many land outside the cup.

Similar simple activities can be done at home to reinforce the other four mathematical concepts listed above. Have fun thinking of how your everyday routines and activities are helping your child develop mathematical thinking! You are all math teachers and may not have known it!