

Math Games can be used to support the teaching of: Common Core Math Standards:

- Counting (Grade K, Counting and Cardinality, 1-7, Grade 1; Number and Operations in Base Ten, 1)
- Addition and Subtraction (Grade K, Operations and Algebraic Thinking, 1-5)
- Measure, Compare, & Classify objects and Data (Grade K, Measurement and Data, 1-3; Grade 1, Measurement and Data, 1, 2, 4)
- Problem Solving and Reasoning (Mathematical Practices Grades K-1)



## Math Games for Young Children

## The Role of Games in the Curriculum

- Games provide children with concrete manipulatives (e.g. counters, blocks), symbolic materials (e.g. die, spinner) and abstract representations (e.g. tokens) with which to explore mathematical concepts.
- Games can be created to provide a learning activity based on children's interests and ongoing themes and projects in the classroom.
- A variety of games provides for child-centered choice in the classroom.
- Games provide varied content in the curriculum with a focused purpose.
- Playing games is an enjoyable activity for children, which fosters the disposition to learn.

## What Children Learn

**Young children need opportunities to apply** the logical-mathematical skills and knowledge that they are acquiring. Playing developmentally appropriate games such as **Go Fish**, **Concentration** and **Shape Lotto** and simple **board games** provides them with hands-on experiences to apply to their developing concepts.

Playing math-oriented games:

- Develops numerical thinking skills (counting, computing, estimating, measuring)
- Builds the foundation for understanding one-to-one correspondence
- Develops problem-solving abilities
- Develops logical-thinking skills
- Encourages discussion, negotiation and cooperative learning
- Provides experience in self-regulation, turn taking and role-taking to recognize another player's point of view

## Tips for Introducing Games to Young Children

- ✓ Start with two players to introduce a game. Add more players as children come to know the rules and can wait to take a turn.
- ✓ Keep the game simple in the beginning, increasing the complexity as children master the concepts.
- ✓ Encourage children to verbalize their moves. When they talk to themselves out loud it helps them to process information.
- $\checkmark$  Help children negotiate, modify the rules, or construct their own rules.
- ✓ Develop ideas for making a rule about who will go first so that every player has a turn.

Web Resources (Visit <u>www.raft.net/raft-idea?isid=216</u> for more resources!)