Key Education Publishing
Standards Correlation for *Math Experiences for Young Learners: Developmental Activities on Numbers and Counting, Shapes, Order and Position of Objects, Patterns, and Measurement*

This book supports the recommended teaching practices outlined in the NAEYC/NCTM position statement *Early Childhood Mathematics: Promoting Good Beginnings* and the NCTM *Principles and Standards for School Mathematics.*

NAEYC/NCTM Position Statement *Early Childhood Mathematics: Promoting Good Beginnings*

1. **Teachers should support children's natural interest in mathematics and their tendency to use it to learn about their world.** The activities in this book build upon children's natural curiosity in mathematics by integrating mathematics concepts into a wide variety of activities, from individual play to partner games to large-group activities.

2. **Teachers should use children's prior experiences, background knowledge, and individual learning styles as a basis for teaching mathematics.** The activities in *Math Experiences for Young Learners* draw on students' prior experiences and background knowledge by using concepts and materials with which they are familiar and by promoting family involvement in mathematics learning. The many different types of activities support many different student learning styles.

3. **Teachers should base their mathematics curriculum and teaching on what they know about all aspects of child development.** The introductory material on concept development stages and the suggested activities make it clear how the book supports developmentally appropriate practices by emphasizing hands-on work at the right level for children.

4. **Teachers should use mathematics curriculum and teaching methods that strengthen children's abilities in all areas of mathematics skills, including problem-solving, reasoning, representing, communicating, and connecting mathematical ideas.** This book offers open-ended problem solving activities along with ideas for games, group discussions, and mini-books that enable students to build skills in all of these mathematical areas.

5. **Teachers should be sure that early childhood mathematics curriculum supports important "big ideas" in later mathematics.** The activities in *Math Experiences for Young Learners* build a basis for all of the major areas of primary-grade mathematics.

6. **Teachers should provide students with in-depth interaction with important mathematical ideas. In early childhood, key areas of study include number and operations, geometry, measurement, and patterning.** This book provides for in-depth exploration of ideas in the areas of number and operations, geometry, measurement, and sorting and patterning. Each area has a variety of activities associated with it, presented in a variety of ways.

7. **Teachers should integrate mathematics into the curriculum, teaching it in conjunction with other subject areas.** The activities in *Math Experiences for Young Learners* integrate explicitly, not only into other curriculum areas, but also into everyday classroom routines like lining up or center time. Many activities include explicit instructions for integration, including integrated literature suggestions.

8. **Teachers should provide time, materials, and support for children to engage in mathematical play.** *Math Experiences for Young Learners* includes center ideas and games that provide ample opportunities for play incorporating mathematical concepts.

9. **Teachers should introduce mathematical concepts, activities, and vocabulary through a wide variety of experiences and teaching methods.** *Math Experiences for Young Learners* helps teachers introduce math concepts through whole group experiences, small group experiences, individual activities, and free play.

10. **Teachers should support children's learning through continual assessment of their mathematical knowledge and skills.** This book provides suggestions for assessing students' skills through observations and through projects such as mini-books and hands-on activities.

NCTM *Principles and Standards for School Mathematics*

Certain activities in this book support the following Number and Operations Standard Expectations for Grades Pre-K–2:

1. **Students count and recognize the number of objects in a set.** Many activities in this book support this standard.

2. **Students understand the relative position and size of ordinal and cardinal numbers.** Ordering and comparing activities in this book support this skill.

3. **Students connect number words to numerals and to the quantities they represent using different physical representations.** Many activities in this book require students to connect numerals to corresponding sets of quantities.

4. **Students understand and represent common fractions such as 1/4, 1/3, and 1/2.** The "Snack Time Half" activity focuses on dividing items in half.

Certain activities in this book support the following Algebra Standard Expectations for Grades Pre-K–2:

1. **Students sort, classify, and order objects by a variety of properties.** This book includes number ordering activities and object sorting activities that support this standard.

2. **Students recognize, describe, and extend simple sound, shape, or numeric patterns and change patterns from one form to another.** Many activities in this book require students to recognize, describe, and extend object or shape patterns.

Select activities support the following Geometry Standard Expectations for Grades Pre-K–2:

1. **Students identify, create, draw, compare, and sort two- and three-dimensional shapes.** Many activities have students identify, create, compare, and/or sort two-dimensional shapes.

2. **Students describe characteristics and parts of two- and three-dimensional shapes.** The "Shape Stretch" activity has students discuss the number of sides of geometric shapes.

3. **Students can interpret the relative position of objects.** Several activities in this book deal with the relative position of objects.

4. **Students recognize geometric shapes in the world around them.** The "Shape Stretch" activity has students find objects that correspond to certain geometric shapes.

Certain activities support the following Measurement Standard Expectations for Grades Pre-K–2:

1. **Students recognize the characteristics of length, volume, weight, area, and time.** Activities in this book deal with length, volume, and weight measurements.

2. **Students compare and order objects according to length, volume, weight, area, and/or time.** This book includes length, volume, and weight comparison activities.

3. **Students measure using standard and nonstandard units.** In this book, students measure with nonstandard units.

4. **Students measure with multiples of units of the same size, such as shoes, laid end to end.** Several activities in this book have students measure length in this way.

5. **Students use a variety of tools to measure.** In this book, students learn to measure length, weight, and volume using a wide variety of tools.

6. **Students develop the ability to make measurement comparisons and estimates.** This book contains several measurement comparison and estimation activities.

Select activities support the following Data Analysis and Probability Standard Expectations for Grades Pre-K–2:

1. **Students can sort and group objects according to their characteristics and organize information about the objects.** Several activities in this book have students sort and group objects according to different characteristics.

2. **Students can show data using objects, pictures, and graphs.** One activity in this book has a suggestion for graphing data.