

TOUCHMATH®



ALIGNMENT TO NORTH CAROLINA FOUNDATIONS FOR EARLY LEARNING & DEVELOPMENT

PRE-K

The TouchMath® Pre-K program and multisensory components provide a valuable resource for North Carolina educators focused on early child development in mathematics and pre-mathematics concepts such as problem-solving and reasoning, and adds opportunities for reinforcing cognitive and language development, as well.

Although specific alignment areas are identified within, the Teacher's Edition provides suggestions and options for added experiences and activities that aid in social and emotional development and language acquisition.

TouchMath® offers added supplemental products to speed mastery – contact us for more information.

Call: **1-855-929-0880**

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Alignment to North Carolina Foundations for Early Learning & Development

NC Foundations for Early Learning & Development	TouchMath® Pre-K Standards-Based Program
APL Approaches to Play and Learning	
Curiosity, Information-Seeking, and Eagerness	
<ol style="list-style-type: none"> Children show curiosity and express interest in the world around them. Children actively seek to understand the world around them. 	<p>Throughout TouchMath®, children are challenged to explore basic math concepts with a variety of manipulatives, games, and activities.</p>
Play and Imagination	
<ol style="list-style-type: none"> Children engage in increasingly complex play. Children demonstrate creativity, imagination, and inventiveness. 	<p>Throughout TouchMath®, children are challenged to explore basic math concepts with a variety of manipulatives, games, and activities.</p>
Risk-Taking, Problem-Solving, and Flexibility	
<ol style="list-style-type: none"> Children are willing to try new and challenging experiences. Children use a variety of strategies to solve problems. 	<p>Problem-solving activities are embedded in TouchMath®, often using manipulatives such as 2-D shapes (matching by color, size and shape), TouchPoints™ with Pictures, Activity Mats, picture cards, simple visual representations, and picture patterns.</p>
Attentiveness, Effort, and Persistence	
<ol style="list-style-type: none"> Children demonstrate initiative. Children maintain attentiveness and focus. Children persist at challenging activities. 	<p>Developmentally appropriate progressive problem-solving activities in TouchMath® are designed to reinforce attentiveness, effort and persistence.</p>

NC Foundations for Early Learning & Development	TouchMath® Pre-K Standards-Based Program
HPD Health and Physical Development	
Physical Health and Growth	
<ol style="list-style-type: none"> 1. Children develop healthy eating habits. 2. Children engage in active physical play indoors and outdoors. 3. Children develop healthy sleeping habits. 	<p>One of the themes in the TouchMath® Pre-K program is food. Students learn where fruits and vegetables come from, about healthy snacks and meals, and are introduced to food groups – all while learning to sort and classify using food picture cards and other supporting manipulatives.</p>
Motor Development	
<ol style="list-style-type: none"> 4. Children develop the large muscle control and abilities needed to move through and explore their environment. 5. Children develop small muscle control and hand-eye coordination to manipulate objects and work with tools. 	<p>In TouchMath®, counting and cardinality (number sense) are reinforced by activities using movement and relationship to body parts to associate one-to-one correspondence.</p>
LDC Language Development and Communication	
Learning to Communicate	
<ol style="list-style-type: none"> 1. Children understand communications from others. 2. Children participate in conversations with peers and adults in one-on-one, small, and larger group interactions. 3. Children ask and answer questions in order to seek help, get information, or clarify something that is not understood. 4. Children speak audibly and express thoughts, feelings, and ideas clearly. 5. Children describe familiar people, places, things, and events. 6. Children use most grammatical constructions of their home language well. 7. Children respond to and use a growing vocabulary. 	<p>TouchMath® reinforces language development and communication in activities that scaffold mathematical language, e.g., numbers, in verbal expression and discussion in small groups. Activities are fun and game-like, often incorporating physical movement, use of manipulatives and verbal responses.</p>
Foundations for Reading	
<ol style="list-style-type: none"> 8. Children develop interest in books and motivation to read. 9. Children comprehend and use information presented in books and other print media. 10. Children develop book knowledge and print awareness. 11. Children develop phonological awareness. 	<p>Each module in the TouchMath® Pre-K program contains a thematic storyline which supports the activity mat illustrations. Stories may be read aloud in small groups or individual settings, allowing students to follow along, engage and interact. Literacy connections are also included at the end of each module, with suggested books and stories that further support and extend the theme and lessons within each module.</p>

NC Foundations for Early Learning & Development	TouchMath® Pre-K Standards-Based Program
CD Cognitive Development	
Construction of Knowledge: Thinking and Reasoning	
<ol style="list-style-type: none"> 1. Children use their senses to construct knowledge about the world around them. 2. Children recall information and use it for new situations and problems. 3. Children demonstrate the ability to think about their own thinking: reasoning, taking perspectives, and making decisions. 	<p>TouchMath® activities reinforce and expand student reasoning and decision-making by scaffolding activities focused on matching, comparing, naming, positioning, sorting, classifying, manipulating the environment, measuring (small, large), using templates, and using language to reason, among other approaches.</p>
Creative Expression	
<ol style="list-style-type: none"> 4. Children demonstrate appreciation for different forms of artistic expression. 5. Children demonstrate self-expression and creativity in a variety of forms and contexts, including play, visual arts, music, drama, and dance. 	<p>One of the themes in the program focuses on the Arts, which introduces visual arts through introduction to shapes. Throughout the TouchMath® Pre-K program, children are encouraged to color their activity mats, engage in creative activities following instructions for cutting and pasting, building and constructing with artistic materials, play, dance, singing, poetry, and interacting with manipulatives.</p>
Mathematical Thinking and Expression	
<ol style="list-style-type: none"> 10. Children show understanding of numbers and quantities during play and other activities. 11. Children compare, sort, group, organize, and measure objects and create patterns in their everyday environment. 12. Children identify and use common shapes and concepts about position during play and other activities. 13. Children use mathematical thinking to solve problems in their everyday environment. 	<p>The TouchMath® Pre-K program provides a comprehensive and developmentally scaffolded unit for mathematical thinking and expression. A full scope & sequence follows. Educators are encouraged to use the included developmentally appropriate activities for implementing the patented TouchMath® pedagogy with manipulatives. This not only enhances the sheer fun of math, it adds reinforcement of mathematical reasoning. The additional Teacher Guide activities may be chosen to match classroom themes and needs.</p>
Scientific Exploration and Knowledge	
<ol style="list-style-type: none"> 14. Children observe and describe characteristics of living things and the physical world. 15. Children explore the natural world by observing, manipulating objects, asking questions, making predictions, and developing generalizations. 	<p>Themes of space and animals help children explore the physical world (clouds, moon, stars, planets, etc.) and identify the characteristics of living things (animal names, animal sounds, physical features, habitats, etc.) The matching space and animal Picture TouchPoints™ allow students to engage with the TouchMath® activity mats while they are learning mathematical concepts.</p>

COUNTING AND CARDINALITY: NUMBER SENSE (READINESS)

Module 1

Counting

Preparation for Kindergarten: K.CC.1, K.CC.2, K.CC.4, K.CC.5, K.CC.6

Counting

Count to 10 verbally

Count to 10 verbally from any number

One-to-one correspondence

Point to objects when counting

Count quantities of manipulatives

Count quantities of objects in pictures

Numbers 1-10

Use matching and counting to tell how many

Match number of fingers shown to objects

Match TPPs to objects in pictures

Compare sets of objects

Identify equal and unequal sets

Verbally identify more and equal (same)

Make sets of objects equal

Ordinal numbers first–fifth

Recognize names given orally for ordinal positions

Verbally identify objects in each ordinal position in pictures

COUNTING AND CARDINALITY: NUMBER CONCEPTS AND NUMERALS

Module 2

TouchPoints

Preparation for Kindergarten: K.CC.2, K.CC.3, K.CC.4, K.CC.5, K.CC.6, K.CC.7

Represent quantities to nine using manipulatives and TouchPoints

Associate numeral, quantity, and TouchPoint

Connect quantity and TouchPoint

Represent quantities to nine using pictures and TouchPoints

Count objects in pictures

Associate objects in pictures to Pictorial TouchPoints

Associate pictures, Pictorial TouchPoints, and TouchPoints through nine

Match foam TouchPoints (blank sides of TPPs) to TPPs to pictures on Activity Mats

Relate the three representations

Demonstrate the correct Touching/Counting Pattern for TouchPoints

Compare quantities, numerals, and quantities with numerals

Identify which set of objects has more

Select which Pictorial TouchPoint represents more

Trace, write, and compare numerals

MEASUREMENT AND DATA: CLASSIFYING (READINESS)

Module 3 Classifying

Preparation for Kindergarten: K.CC.5, K.CC.6, K.MD.1, K.MD.2, K.MD.3

Describe foods

Color

Size

Shape

Sort, classify, and count foods by their descriptions

Match food replicas, images, and picture cards to objects in pictures

Match foam TouchPoints (blank sides of TPPs) to objects in pictures

Move manipulatives from objects in pictures to the table to sort

Represent foods in two categories on paper plates

Use all representations of food manipulatives

Move manipulatives from the table top or the pictures to the paper plates

Count and compare the number in each category

Represent foods in three categories (including a drink)

Sort the two food categories (maintaining the drink category) in various ways

Move the manipulatives to the paper plates

Count and compare the number in each category

GEOMETRY: SPATIAL CONCEPTS

Module 4 2-D Shapes

Preparation for Kindergarten: K.MD.1, K.MD.2, K.G.1, K.G.2, K.G.3, K.G.4, K.G.5, K.G.6

Describe 2-D shapes by defining attributes

Count the number of sides

Count the number of corners

Identify shapes by name in the environment

Demonstrate that size is not a defining attribute

Recognize shapes of different orientations

Use defining and non-defining attributes

Distinguish a given shape from other shapes

Match the size of a shape

Sort, classify, and compare shapes

Compare shapes with different numbers of sides and corners

Identify shapes with the same number of sides and corners

Compose shapes

Use the same shape to create other shapes and pictures

Use different shapes to create new shapes and pictures

Compare 2-D and 3-D shapes

Recognize that 2-D shapes are flat and seen on paper

Identify 2-D shapes within 3-D shapes

GEOMETRY: SPATIAL CONCEPTS CONTINUED

Model shapes in the environment

Build shapes with sticks and clay balls, building blocks

Trace and draw 2-D shapes with templates

Use location words

Understand and identify location words when used in directions

Describe the relative position of objects in pictures

OPERATIONS AND ALGEBRAIC THINKING: READINESS FOR ADDING AND SUBTRACTING

Module 4 2-D Shapes

Preparation for Kindergarten: K.OA.1, K.OA.2, K.OA.3, K.OA.4

Continue to compare the number of objects in sets

Sequence sets of objects and numerals

Recognize when one set has one more than the other

Add to sets

Add one more to sets

Add objects to one set to make equal sets

Module 5 Graphs

Preparation for Kindergarten: K.OA.1, K.OA.2, K.OA.3, K.OA.4

Uses up to 10 objects

Creates two equal sets

Creates two unequal sets

Uses 12 objects

Finds equal sets of 2-4 objects

Uses all objects to create different sets

Identifies and compares

Counts the number in each set

Verbalizes the ways to make a given number with sets of objects

MEASUREMENT AND DATA: GRAPHS (READINESS)

Module 5 Graphs

Preparation for Kindergarten: K.MD.1, K.MD.2, K.MD.3

Sort, classify, and record results on simple graphs

Match TPPs to pictures of objects

Move TPPs to the columns on the graph

Count the number in each column

Compare the quantities

Associate numerals with quantities

Match TouchNumerals to the quantity in each column

Compare the numeral of each quantity

Identify a numeral for the column

Match the number of TPPs to the numeral

Graph TPPs

Use 2 x 2 graph templates

Use 2 x 3 graph templates

Use 3 x 3 graph templates

Use 3 x 4 graph templates

Create sets of TPPs to graph

Make sets of 1, 2, or 3 TPPs

Place them on the graph

Compare each pair of TPPs

Repeat using TouchNumerals instead of TouchPoints

Transition from TPPs

Match TPPs to foam TouchPoints

Match TPPs to picture cards

Match foam TouchPoints to same-color TouchShapes

Match foam TouchPoints to same shape (different colors)

Identify and extend patterns

Use objects, then pictures, to identify the pattern

Identify and add one more to ABAB patterns with pictures

Identify and add one more to AABAAB patterns with pictures

Create patterns using 2 different objects