KINDERGARTEN
Common Core State Standards
TouchMath Kindergarten meets or exceeds all Common Core State Standards

› COUNTING AND CARDINALITY

Count to 100 by Ones and Tens

K.CC.1 1 Count to 100 verbally (and trace)
- Sequence numbers
- Count and fill in missing numbers
- Name numbers before and after given numbers
- Count to 10
- Count 10 to 20
- Count 21 to 30
- Count 31 to 40
- Count 41 to 50
- Count 51 to 60
- Count 61 to 70
- Count 71 to 80
- Count 81 to 90
- Count 91 to 100
- Identify numbers out of sequence

K.CC.2
- Count from any number

K.CC.1 2 Count to 100 by tens
- Count to 50
- Count 60 to 100

Represent Numbers Using Manipulatives, Pictures, and TouchPoints

K.CC.3 1 Represent numbers with manipulatives
- Count objects in groups
- Associate groups of objects to numbers
- Use matching and counting strategies
- Represent Zero–Number 5
- Represent Numbers 6–9
- Represent Number 10
- Represent Numbers 10–15
- Represent Numbers 16–20

K.CC.3, 4, 5 2 Write numbers and associate to quantities
- Write numbers
- Answer how many
- Write and associate numbers 1–5
- Write and associate numbers 6–9
- Write and associate number 10
- Write and associate numbers 10–15
- Write and associate numbers 16–20

K.CC.3 3 Represent numbers with pictures
- Connect pictures and TouchPoints as representations
- Represent quantities in multiple ways
- Apply understanding of counting to quantities
- Demonstrate the correct Touching/Counting Patterns
• Use TouchPoints to reinforce counting for numbers 1–5
• Use TouchPoints to reinforce counting for numbers 6–9
• Represent number 10
• Correspond numbers 10–15 to quantities in pictures
• Correspond numbers 16–20 to quantities in pictures

K.CC.6, 7 4 Compare quantities with pictures and numbers
• Identify more with pictures
• Identify less with pictures
• Identify equal with pictures
• Use mixed comparisons with pictures
• Compare quantities with pictures and numbers
• Compare quantities with numbers

OPERATIONS AND ALGEBRAIC THINKING

Add Using Manipulatives, Pictures, and TouchPoints
K.OA.1, 2, 5 1 Represent addition problems
• Recognize combining parts to make a whole
• Apply counting strategies to find the whole
• Use fingers to represent the problem
• Show the problem using an equation
• Tell word problems using pictures
• Demonstrate addition with TouchPoints
• Write addends in boxes

2 Sums within 5
• Use counters to show the problem
• Recognize multiple representations of problems
• Master adding fluently within 5

3 Sums within 9
• Use pictures to show the problem
• Recognize multiple representations of problems

Subtract Using Manipulatives, Pictures, and TouchPoints
K.OA.1, 2, 5 1 Represent subtraction problems
• Recognize taking parts from the whole
• Apply counting strategies to the problem
• Use fingers to represent the problem
• Show the problem using an equation
• Tell word problems using pictures
• Demonstrate subtraction with TouchPoints on both numbers
• Write missing addends in boxes
• Use backward counting as a subtraction strategy
• Apply using TouchPoints on the subtrahend only

2 Minuends within 5
• Use counters to show the problem
• Recognize multiple representations of problems
• Master subtracting fluently within 5

3 Minuends within 9
• Use objects being black to show taking away
• Recognize multiple representations of problems
Add and Subtract Using Pictures and TouchPoints

**K.OA.2** 1 Sums and minuends within 9
- Recognize operation signs (+ and –)
- Connect pictures and TouchPoints as representations
- Use objects being crossed out to show taking away
- Tell word problems using pictures
- Read word problems using pictures

**K.OA.1–5** 2 Sums and minuends within 10 in word problems
- Associate quantities with TouchPoints
- Identify information not needed to solve the problem
- Demonstrate fluency within 5

Compose and Decompose Numbers Using Manipulatives and Pictures

**K.OA.3, 4** 1 Compose Numbers
- Transfer learning of combining parts to composing numbers
- Relate addition to composing numbers
- Demonstrate building a number more than one way
- Record each composition

2 Decompose Numbers
- Transfer learning of finding parts to decomposing numbers
- Relate subtraction to decomposing numbers
- Demonstrate breaking down a number into pairs more than one way
- Record each decomposition

3 Compose and decompose numbers within 9
- Use objects in 2 groups to build a number
- Build each number more than one way
- Use breaking down a group of objects into 2 groups
- Break down each number more than one way

4 Compose and decompose number 10
- Use combining objects in groups to build 10
- Build 10 using each pair of numbers
- Use breaking down a group of 10 objects into 2 groups
- Break down 10 using each pair of numbers

**NUMBER AND OPERATIONS IN BASE TEN**

**K.NBT.1** 1 Compose and decompose numbers 11–20
- Use objects in 2 groups to build a number
- Build each number more than one way
- Use objects in 3 groups to build a number
- Build each number in more than one way
- Use objects in 4 groups to build a number
- Build each number more than one way
- Use breaking down of groups of objects into 2 groups
- Break down each number using each pair of numbers
- Use breaking down of 2 groups of objects into 4 groups

Extend Place Value for 10–20

**K.CC.1–5** 1 Use various models to represent 10–20 as a group of 10 + ones

**K.OA.1–5** 1 Represent with bundles of straws
**K.NBT.1**
- Use Touch2Learn Math Fans
- Demonstrate with sticks in cups
- Make strings of beads

**2 Use multiple representations of the numbers**
- Associate the various representations
- Record each representation as 10 + ones
- Recognize 20 as 2 sets of 10 + 0 ones

### MEASUREMENT AND DATA

**Describe Measurable Attributes of Objects**

**K.MD.1**

1. Describe measurable attributes of objects using picture
   - Describe lengths of objects using nonstandard units
   - Describe weights of objects using sink and float
   - Describe length and width of a single object

**K.MD.2**

2. Compare measurable attributes of objects using pictures
   - Compare lengths of objects
   - Compare weights of objects
   - Compare length and weight of an object to another object

**K.MD.3**

3. Sort, count, and classify objects by measurable attributes
   - Sort, count and classify by length
   - Sort, count, and classify by weight
   - Classify by length and weight

### GEOMETRY

**2-D Shapes: Circle, Triangle, Rectangle, and Square**

**3-D Shapes: Sphere, Cone, Cube, and Cylinder**

**K.G.1, 3**

1. Describe 2-D and 3-D shapes in the environment
   - Describe shapes by kind of line and number of sides and corners
   - Describe relative positions of objects (e.g., over/under)
   - Distinguish between 2-D and 3-D shapes

**K.G.2, 4, 6**

2. Define 2-D shapes
   - Distinguish each shape from other shapes in pictures
   - Match each shape by in pictures regardless of size, color, or orientation
   - Name each shape by its defining attributes
   - Analyze and compare 2-D shapes
   - Describe similarities and differences of 2-D shapes
   - Compose larger shapes from smaller shapes using manipulatives
   - Compose larger shapes from smaller shapes using cutting and pasting

**K.G.2, 4, 5, 6**

3. Define 3-D shapes
   - Distinguish shapes using 3-D solid and paper models
   - Distinguish each shape from other shapes in pictures
   - Match each shape by size and orientation in pictures
   - Match each shape in pictures regardless of size, color, or orientation
   - Match each shape to an object in the environment
   - Describe similarities and differences of 3-D shapes
   - Describe similarities and differences of 2-D and 3-D shapes
   - Build 3-D shapes from readily available materials
   - Compose larger shapes from smaller shapes using cutting and pasting