

Practices

MP5 Use appropriate tools strategically.

Younger students begin to consider the available tools (including estimation) when solving a mathematical problem and decide when certain tools might be helpful. For instance, kindergarteners may decide that it might be advantageous to use linking cubes to represent two quantities and then compare the two representations side-by-side.

MP6 Attend to precision.

As kindergarteners begin to develop their mathematical communication skills, they try to use clear and precise language in their discussions with others and in their own reasoning.

MP7 Look for and make use of structure.

Younger students begin to discern a number pattern or structure. For instance, students recognize the pattern that exists in the teen numbers; every teen number is written with a 1 (representing one ten) and ends with the digit that is first stated. They also recognize that $3 + 2 = 5$ and $2 + 3 = 5$.

MP8 Look for and express regularity in repeated reasoning.

In the early grades, students notice repetitive actions in counting and computation, etc. For example, they may notice that the next number in a counting sequence is one more. When counting by tens, the next number in the sequence is “ten more” (or one more group of ten). In addition, students continually check their work by asking themselves, “Does this make sense?”

www.aMathsDictionaryforKids.com

An animated, interactive dictionary for students which explains over 600 common mathematical terms in simple language.



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Source Documents:

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Adapted from North Dakota Content Standards: “I Can” Statements

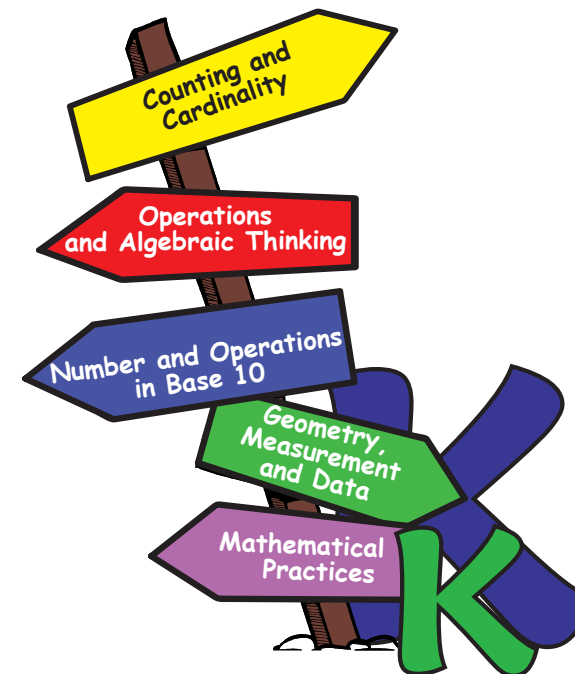
Adapted from Arizona Department of Education Mathematics Standards, 2010

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Grade K

CCSS Math Expectations Checklist



Mathematical

MP1 Make sense of problems and persevere in solving them.

In Kindergarten, students begin to build the understanding that doing mathematics involves solving problems and discussing how they solved them. Students explain to themselves the meaning of a problem and look for ways to solve it. Younger students may use concrete objects or pictures to help them conceptualize and solve problems. They may check their thinking by asking themselves, “Does this make sense?” or they may try another strategy.

MP2 Reason abstractly and quantitatively.

Younger students begin to recognize that a number represents a specific quantity. Then, they connect the quantity to written symbols. Quantitative reasoning entails creating a representation of a problem while attending to the meanings of the quantities.

MP3 Construct viable arguments and critique the reasoning of others.

Younger students construct arguments using concrete referents, such as objects, pictures, drawings, and actions. They also begin to develop their mathematical communication skills as they participate in mathematical discussions involving questions like “How did you get that?” and “Why is that true?” They explain their thinking to others and respond to others’ thinking.

MP4 Model with mathematics.

In early grades, students experiment with representing problem situations in multiple ways including numbers, words (mathematical language), drawing pictures, using objects, acting out, making a chart or list, creating equations, etc. Students need opportunities to connect the different representations and explain the connections. They should be able to use all of these representations as needed.



My checklist of what I can do in kindergarten math

I understand that it is important to apply the mathematical practices (identified on the inside cover) on a regular basis.

Counting and Cardinality

Know number names and the count sequence: (K.CC.1, K.CC.2, K.CC.3)

- I can count to 100 by ones.
- I can count to 100 by tens.
- I can count starting with any number.
- I can write the numbers from 0 to 20.

Count to tell the number of objects: (K.CC.4, K.CC.5)

- I can count to 100 by tens.
- I can say the number as I count each object.
- I can understand the last number I said is the total number of objects I counted.
- I can understand that each number name is one more than the last number name.
- I can count objects to answer questions.

Compare numbers: (K.CC.6, K.CC.7)

- I can compare groups of objects to decide which is greater than, less than, or equal to.
- I can compare two written numerals between 1 and 10 to decide which is greater than, less than, or equal to.

Operations & Algebraic Thinking

Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from: (K.OA.1, K.OA.2, K.OA.3, K.OA.4, K.OA.5)

- I can show addition.
- I can show subtraction.
- I can add to solve word problems within 10.
- I can subtract to solve word problems within 10.
- I can break apart numbers (1-10) into pairs in many ways.
- I can use objects and drawings to add a number to another number to make 10.
- I can make combinations of 10 using two numbers.
- I can show what number is needed to add to another number to make 10.
- I can quickly add numbers up to 5.
- I can quickly subtract from numbers up to 5.

Number & Operations in Base 10

Work with numbers 11-19 to gain foundations for place value: (K.NBT.1)

- I can show how the numbers 11-19 are made of ten ones and more ones.

Measurement and Data

Describe and compare measurable attributes: (K.MD.1, K.MD.2)

- I can describe objects.
- I can compare two objects.

Classify objects and count the number of objects in each category: (K.MD.3)

- I can sort and count objects.

Geometry

Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres): (K.G.1, K.G.2, K.G.3)

- I can describe objects around me by their shape and where they are found.
- I can name shapes.
- I can tell if a shape is flat or solid.

Analyze, compare, create, and compose shapes: (K.G.4, K.G.5, K.G.6)

- I can describe how shapes are alike and different.
- I can build and draw shapes.
- I can put shapes together to make another shape.

How to use checklist:

- Show the date of when you were able to do the math expectation.
- Show an example of what you did in a journal.