Wyoming Mathematics

Grade K

Adopted 2021

Standards for Mathematical Practice

1. **Make sense of problems and persevere in solving them.** MP.1
2. **Reason abstractly and quantitatively.** MP.2
3. **Construct viable arguments and critique the reasoning of others.** MP.3
4. **Model with mathematics.** MP.4
5. **Use appropriate tools strategically.** MP.5
6. **Attend to precision.** MP.6
7. **Look for and make use of structure.** MP.7
8. **Look for and express regularity in repeated reasoning.** MP.8

Counting and Cardinality

1. **Know number names and the count sequence.** K.CC.A.1
   - A. Count to 100 by ones and by tens. K.CC.A.1.A
   - B. Count backwards by ones from 20. K.CC.A.1.B
   - 1. Count to 100 by ones from a given number. K.CC.A.1.AD.A.1
   - 2. Count to 100 by tens from a given multiple of ten. K.CC.A.1.AD.A.2
   - B. Count backward by ones from a given number within 100. K.CC.A.1.AD.B
   - 1. Count to 100 by ones, starting at one. K.CC.A.1.P.A.1
   - 2. Count to 100 by multiples of ten, starting at ten. K.CC.A.1.P.A.2
   - B. Count backwards by ones from 20. K.CC.A.1.P.B
   - A. Count to 100 by ones, with prompting. K.CC.A.1.BA.A
   - B. Count backwards from 10 by ones. K.CC.A.1.BA.B

2. **Count forward beginning from a given number within the known sequence (instead of having to begin at 1).** K.CC.A.2

   Ad. Count forward a sequence of numbers, crossing two decades/tens starting at a number between 30 and 90. K.CC.A.2.AD

   P. Count forward a sequence of 10 numbers, crossing a decade/ten starting at a number between 1 and 30. K.CC.A.2.P

   Ba. Count forward a sequence of 10 numbers, crossing a decade/ten starting at a number between 1 and 30, with prompting. K.CC.A.2.BA

3. **Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with a 0 representing a count of no objects).** K.CC.A.3

   A. Write any two digit number above 20. K.CC.A.3.AD.A

   B. Represent a number of objects with a written numeral between 20 and 40. K.CC.A.3.AD.B

   A. Write numbers from 0 to 20. K.CC.A.3.P.A

   B. Represent a number of objects with a written numeral 0-20 (with 0 (zero) representing a count of no objects). K.CC.A.3.P.B

   A. Write numbers from 0 to 10. K.CC.A.3.BA.A

   B. Represent a number of objects with a written numeral 0-10 (with 0 (zero) representing a count of no objects). K.CC.A.3.BA.B

B. Count to tell the number of objects. K.CC.B

4. Understand the relationship between numbers and quantities; connect counting to cardinality. K.CC.B.4

   A. Use one-to-one correspondence when counting objects. K.CC.B.4.A

   B. Understand that the last number name said, tells the number of objects counted regardless of their arrangement. K.CC.B.4.B

   C. Understand that each successive number name refers to a quantity that is one more, and each previous number name refers to a quantity that is one less. K.CC.B.4.C

Ad. Count up or count back starting at an initial quantity when given an additive or removed item task. K.CC.B.4.AD

P. Count and tell the number of objects in a range from 10 to 39. K.CC.B.4.P

   A. Use one-to-one correspondence when counting objects. K.CC.B.4.P.A

   B. Understand that the last number name said, tells the number of objects counted regardless of their arrangement. K.CC.B.4.P.B

   C. Understand that each successive number name refers to a quantity that is one more, and each previous number name refers to a quantity that is one less. K.CC.B.4.P.C

Ba. Count and tell the number of objects in a range from 1-9. K.CC.B.4.BA

   A. Use one-to-one correspondence when counting objects. K.CC.B.4.BA.A

   B. Understand that the last number name said, tells the number of objects counted. K.CC.B.4.BA.B

BeB. The Below Basic student does not meet the Basic performance level. K.CC.B.4.BEB

A. When counting, answer the question "how many?" by counting up to 20 objects arranged in a line, a rectangular array, a circle, or as many as 10 objects in a scattered configuration. K.CC.B.5.A

B. When counting, given a number from 1-20, count out that many objects. K.CC.B.5.B

A. Answer the question "how many?" by counting beyond 20 in a scattered configuration. K.CC.B.5.AD.A

B. Count out the number of objects given a number 25-35. K.CC.B.5.AD.B

A. Answer the question "how many?" by counting up to 20 objects arranged in a line, a rectangular array, a circle, or as many as 10 objects in a scattered configuration. K.CC.B.5.P.A

B. Count out the number of objects given a number from 1-20. K.CC.B.5.P.B

A. Answer the question "how many?" by counting up to 20 objects arranged in a line, a rectangular array, a circle, or as many as 10 objects in a scattered configuration. OR K.CC.B.5.BA.A

B. Count out the number of objects given a number from 1-20. K.CC.B.5.BA.B

BeB. The Below Basic student does not meet the Basic performance level. K.CC.B.5.BEB

C. Compare numbers. K.CC.C

6. Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. (Include groups with up to ten objects.) K.CC.C.6

Ad. Order 3 or more groups of objects (Include groups with up to ten objects.) from greatest to least or least to greatest. K.CC.C.6.AD

P. Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group. (Include groups with up to ten objects.) K.CC.C.6.P

Ba. Identify whether the number of objects in one group is equal to or not equal to the number of objects in another group. (Include groups with up to five objects.) K.CC.C.6.BA

BeB. The Below Basic student does not meet the Basic performance level. K.CC.C.6.BEB

7. Compare two numbers between 1 and 10 presented as written numerals. K.CC.C.7

Ad. Compare 3 or more non-consecutive numbers between 1 and 20 presented as written numerals. K.CC.C.7.AD

P. Compare two numbers between 1 and 10 presented as written numerals. K.CC.C.7.P

Ba. Compare two numbers between 1 and 5 presented as written numerals. K.CC.C.7.BA

BeB. The Below Basic student does not meet the Basic performance level. K.CC.C.7.BEB

Operations And Algebraic Thinking

D. Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. K.OA.D

1. Model situations that involve representing addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. K.OA.D.1

Ad. Model situations that involve representing addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, and write the corresponding expression, or equation. K.OA.D.1.AD

P. Model situations that involve representing addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. K.OA.D.1.P

B. Model situations that involve representing addition with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. K.OA.D.1.B

2. Solve word problems using objects and drawings to find sums up to 10 and differences within 10. K.OA.D.2

Ad. Create a word problem to find sums up to 10 and differences within 10. K.OA.D.2.AD

P. Solve word problems using objects and drawings to find sums up to 10 and differences within 10. K.OA.D.2.P

Ba. Solve word problems using objects and drawings to find sums up to 5 and differences within 5. K.OA.D.2.BA

BeB. The Below Basic student does not meet the Basic performance level. K.OA.D.2.BEB

3. Decompose numbers less than or equal to 10 in more than one way. K.OA.D.3

Ad. Decompose numbers with parts that are less than or equal to 10 in more than one way identifying patterns. K.OA.D.3.AD

P. Decompose numbers less than or equal to 10 in more than one way. K.OA.D.3.P

Ba. Decompose numbers less than or equal to 5 in more than one way. K.OA.D.3.BA

BeB. The Below Basic student does not meet the Basic performance level. K.OA.D.3.BEB

4. For any number from 1 to 9, find the number that makes 10 when added to the given number. K.OA.D.4

Ad. For any number from 10-19, find the number that makes 20 when added to the given number. K.OA.D.4.AD

P. For any number from 1 to 9, find the number that makes 10 when added to the given number. K.OA.D.4.P

Ba. For any number from 1 to 4, find the number that makes 5 when added to the given number. K.OA.D.4.BA

BeB. The Below Basic student does not meet the Basic performance level. K.OA.D.4.BEB

5. Fluently add and subtract within 5. K.OA.D.5

Ad. Fluently add and subtract within 5 including missing addend problems. K.OA.D.5.AD

P. Fluently add and subtract within 5. K.OA.D.5.P

Ba. Fluently add within 5. K.OA.D.5.BA

BeB. The Below Basic student does not meet the Basic performance level. K.OA.D.5.BEB

Number And Operations In Base Ten

1. **Work with numbers 11-19 to gain foundations for place value.** K.NBT.E.1

A. Describe, explore, and explain how the counting numbers 11 to 19 are composed of ten ones and more ones. K.NBT.E.1.A

B. Describe, explore, and explain how the counting numbers 11 to 19 are decomposed into ten ones and more ones. K.NBT.E.1.B

Ad. Describe, explore, and explain how the counting numbers 11 to 19 are: K.NBT.E.1.AD

A. Composed of one unit of ten and more ones. K.NBT.E.1.AD.A

B. Decomposed into one unit of ten and more ones. K.NBT.E.1.AD.B

P. Describe, explore, and explain how the counting numbers 11 to 19 are: K.NBT.E.1.P

A. Composed of ten ones and more ones. K.NBT.E.1.P.A

B. Decomposed into ten ones and more ones. K.NBT.E.1.P.B

Ba. Describe, explore, and explain how the counting numbers 11 to 19 are composed of ten ones and more ones. K.NBT.E.1.BA

BeB. Does not meet the Basic performance level. K.NBT.E.1.BEB

Measurement And Data

F. Describe and compare measurable attributes. K.MD.F

1. Describe several measurable attributes of one or more objects. K.MD.F.1

Ad. Describe several measurable and non-measurable attributes of one or more real-world object(s). K.MD.F.1.AD

P. Describe several measurable attributes of one or more objects. K.MD.F.1.P

Ba. Describe at least two attributes of one or more objects. K.MD.F.1.BA

2. Make direct comparisons of the length, capacity, weight, and temperature of objects, and recognize which object is shorter/longer, taller, lighter/heavier, warmer/cooler, and which holds more/less. K.MD.F.2

Ad. Make a direct comparison of three or more objects based on the length, capacity, weight, and temperature of objects, and order them shorter/longer, taller, lighter/heavier, warmer/cooler, and which holds more/less and vice versa. K.MD.F.2.AD

P. Make direct comparisons of the length, capacity, weight, and temperature of objects, and recognize which object is shorter/longer, taller, lighter/heavier, warmer/cooler, and which holds more/less. K.MD.F.2.P

Ba. Make direct comparisons of the length of objects, and recognize which object is shorter/longer. K.MD.F.2.BA

G. Classify objects and count the number of objects in each category. K.MD.G

3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (Limit category counts to be less than or equal to 10.) K.MD.G.3

Ad. Construct categories from the given objects and justify reasoning for each category. K.MD.G.3.AD

P. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (Limit category counts to be less than or equal to 10.) K.MD.G.3.P

Ba. Identify objects from given categories; count the numbers of objects in each category. (Limit category counts to be less than or equal to 10.) K.MD.G.3.BA

4. Identify U.S. coins by name (pennies, nickels, dimes, and quarters). K.MD.G.4

Ad. Identify the value of at least two U.S. coins (pennies, nickels, dimes, and quarters). K.MD.G.4.AD

P. Identify U.S. coins by name (pennies, nickels, dimes, and quarters). K.MD.G.4.P

Ba. Identify at least two U.S. coins by name (pennies, nickels, dimes, and quarters). K.MD.G.4.BA

Geometry

H. Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres). K.G.H

1. Describe objects in the environment using the names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to. K.G.H.1

Ad. Using the names of shapes describe the position of one object relative to two or more objects. K.G.H.1.AD

P. Describe objects in the environment using the names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to. K.G.H.1.P

Ba. Describe the relative positions of objects using terms such as above, below, beside, in front of, behind, and next to. K.G.H.1.BA

2. Correctly name shapes regardless of their orientations or overall size. K.G.H.2

Ad. Correctly identify shapes within a compound figure. K.G.H.2.AD

P. Correctly name shapes regardless of their orientations or overall size. K.G.H.2.P

Ba. Correctly name shapes: squares, circles, triangles, rectangles, cones, and cubes. K.G.H.2.BA

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3. Identify shapes as two-dimensional or three-dimensional. K.G.H.3

Ad. Justify the difference between two-dimensional and three-dimensional shapes. K.G.H.3.AD

P. Identify shapes as two-dimensional or three-dimensional. K.G.H.3.P

Ba. Identify shapes as two-dimensional. K.G.H.3.BA

I. **Analyze, compare, create, and compose shapes.** K.G.I

4. Analyze and compare two- and three-dimensional shapes, using informal language to describe their similarities, differences, and attributes. K.G.I.4

Ad. Group shapes based on attributes and justify reasoning. K.G.I.4.AD

P. Analyze and compare two- and three-dimensional shapes, using informal language to describe their similarities, differences, and attributes. K.G.I.4.P

Ba. Informal language to describe the similarities, differences, and attributes of corresponding two- or three-dimensional shapes (comparing two-dimensional to two-dimensional and three-dimensional to three-dimensional). K.G.I.4.BA

5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. K.G.I.5

Ad. Predict and test what components are needed to change a two-dimensional shape to a three-dimensional shape (e.g., square to cube). K.G.I.5.AD

P. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. K.G.I.5.P

Ba. Model two-dimensional shapes in the world by building shapes from components (e.g., sticks and clay balls) or drawing two-dimensional shapes. K.G.I.5.BA

6. Use simple shapes to compose squares, rectangles, and hexagons. K.G.I.6

Ad. Decompose a two-dimensional figure to determine the shapes that were used to build it. K.G.I.6.AD

P. Use simple shapes to compose squares, rectangles, and hexagons. K.G.I.6.P

Ba. Use given simple shapes to compose squares and rectangles. K.G.I.6.BA