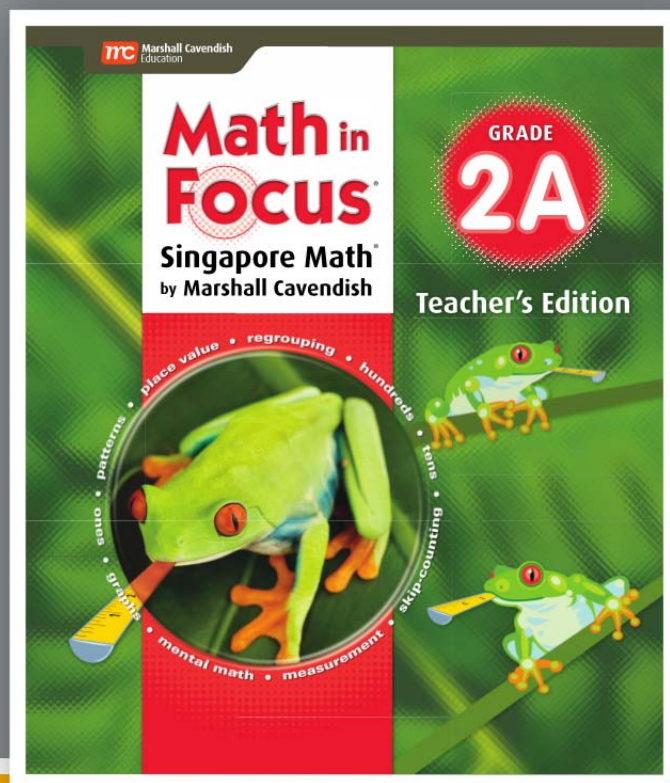


# Correlation to the Oklahoma Academic Standards for Mathematics Grade 2



Houghton Mifflin Harcourt  
Oklahoma Math in Focus ©2019  
Grade 2



**Houghton Mifflin Harcourt Publishers**  
**Oklahoma Math in Focus, Grade 2 ©2019**

correlated to the

**Oklahoma Academic Standards for Mathematics**  
**Grade 2**

Citations	Standard	Descriptor
<b>2.N.1 Compare and represent whole numbers up to 1,000 with an emphasis on place value and equality.</b>		
<u>Volume 2A:</u> SE/TE: 6–10, 11–17 Workbook: 1–6, 7–12	2.N.1.1	Read, write, discuss, and represent whole numbers up to 1,000. Representations may include numerals, words, pictures, tally marks, number lines and manipulatives.
<u>Volume 2A:</u> SE/TE: 24–32 Workbook: 17–18, 19–20, 21–24	2.N.1.2	Use knowledge of number relationships to locate the position of a given whole number on an <i>open number</i> line up to 100.
<u>Volume 2A:</u> SE/TE: 6–10, 11–17 Workbook: 1–6, 7–12	2.N.1.3	Use place value to describe whole numbers between 10 and 1,000 in terms of hundreds, tens and ones. Know that 100 is 10 tens, and 1,000 is 10 hundreds.
<u>Volume 2A:</u> SE/TE: 24–32 Workbook: 17–18, 20, 23–24	2.N.1.4	Find 10 more or 10 less than a given three-digit number. Find 100 more or 100 less than a given three-digit number.
<u>Volume 2B:</u> SE/TE: 28–39 Workbook: 15–20  Online Lesson: 10.5a	2.N.1.5	Recognize when to round numbers to the nearest 10 and 100.
<u>Volume 2A:</u> SE/TE: 18–23, 24–32 Workbook: 13–14, 19–20, 21–24	2.N.1.6	Use place value to compare and order whole numbers up to 1,000 using comparative language, numbers, and symbols( e.g., $425 > 276$ , $73 < 107$ , page 351 comes after page 350, 753 is between 700 and 800 ).

Citations	Standard	Descriptor
<b>2.N.2 Add and subtract one- and two-digit numbers in real-world and mathematical problems.</b>		
<u>Volume 2A:</u> SE/TE: 38–41 Workbook: 25–30  <u>Volume 2B:</u> SE/TE: 8–16, 20–27 Workbook: 3–6, 11–14	2.N.2.1	Use the relationship between addition and subtraction to generate basic facts up to 20.
<u>Volume 2A:</u> SE/TE: 38–41 Workbook: 25–30  <u>Volume 2B:</u> SE/TE: 8–16, 20–27 Workbook: 3–6, 11–14	2.N.2.2	Demonstrate fluency with basic addition facts and related subtraction facts up to 20.
<u>Volume 2B:</u> SE/TE: 28–39 Workbook: 15–20	2.N.2.3	Estimate sums and differences up to 100.
<u>Volume 2A:</u> SE/TE: 17–19 Workbook: 7–10  <u>Volume 2B:</u> SE/TE: 17–19 Workbook: 7–10	2.N.2.4	Use strategies and algorithms based on knowledge of place value and equality to add and subtract two-digit numbers.
<u>Volume 2B:</u> SE/TE: 118–121, 122–127 Workbook: 87–90, 96	2.N.2.5	Solve real-world and mathematical addition and subtraction problems involving whole numbers up to 2 digits.

Citations	Standard	Descriptor
<p><u>Volume 2A:</u> SE/TE: 127–133, 153–155, 156–161, 162–167, 168–172, 173–178 Workbook: 107–108, 109–110, 127–128, 129–132, 133–136, 137–140, 141–144</p> <p><u>Volume 2B:</u> SE/TE: 170–174, 179–183 Workbook: 135–140, 143–146</p>	2.N.2.6	Use concrete models and structured arrangements, such as repeated addition, arrays and ten frames to develop understanding of multiplication.
<b>2.N.3 Explore the foundational ideas of fractions.</b>		
<p><u>Volume 2B:</u> SE/TE: 75–82, 83–89 Workbook: 45–50, 51–52</p>	2.N.3.1	Identify the parts of a set and area that represent fractions for halves, thirds, and fourths.
<p><u>Volume 2B:</u> SE/TE: 75–82, 83–89 Workbook: 45–50, 51–52</p>	2.N.3.2	Construct equal-sized portions through fair sharing including length, set, and area models for halves, thirds, and fourths.
<b>2.N.4 Determine the value of a set of coins.</b>		
<p><u>Volume 2B:</u> SE/TE: 46–61, 66–72 Workbook: 23–34, 39–44</p>	2.N.4.1	Determine the value of a collection(s) of coins up to one dollar using the cent symbol.
<p><u>Volume 2B:</u> SE/TE: 46–61, 66–72 Workbook: 23–34, 39–44</p>	2.N.4.2	Use a combination of coins to represent a given amount of money up to one dollar.
<b>2.A.1 Describe the relationship found in patterns to solve real-world and mathematical problems.</b>		
<p><u>Volume 2A:</u> SE/TE: 24–32 Workbook: 17–18, 19–20, 21–24</p>	2.A.1.1	Represent, create, describe, complete, and extend growing and shrinking patterns with quantity and numbers in a variety of real-world and mathematical contexts.
<p><u>Volume 2B:</u> SE/TE: 292–303 Workbook: 239–244</p>	2.A.1.2	Represent and describe repeating patterns involving shapes in a variety of contexts.

Citations	Standard	Descriptor
<b>2.A.2 Use number sentences involving unknowns to represent and solve real-world and mathematical problems.</b>		
Online Lesson: 2.1a	2.A.2.1	Use objects and number lines to represent number sentences.
Online Lesson: 4.1a	2.A.2.2	Generate real-world situations to represent number sentences and vice versa.
<u>Volume 2A:</u> SE/TE: 160–161, 171–172, 176–178 Workbook: 132, 139–140, 144  Online Lesson: 2.b	2.A.2.3	Apply commutative and identity properties and number sense to find values for unknowns that make number sentences involving addition and subtraction true or false.
<b>2.GM.1 Analyze attributes of two-dimensional figures and develop generalizations about their properties.</b>		
<u>Volume 2B:</u> SE/TE: 271–286 Workbook: 225–236	2.GM.1.1	Recognize trapezoids and hexagons.
<u>Volume 2B:</u> SE/TE: 271–286 Workbook: 225–236	2.GM.1.2	Describe, compare, and classify two-dimensional figures according to their geometric attributes.
<u>Volume 2B:</u> SE/TE: 271–286 Workbook: 225–236	2.GM.1.3	Compose two-dimensional shapes using triangles, squares, hexagons, trapezoids, and rhombi.
Online Lesson: 19.a	2.GM.1.4	Recognize right angles and classify angles as smaller or larger than a right angle.
<b>2.GM.2 Understand length as a measurable attribute and explore capacity.</b>		
<u>Volume 2A:</u> SE/TE: 216–221 Workbook: 179–182  <u>Volume 2B:</u> SE/TE: 111–117 Workbook: 79–82	2.GM.2.1	Explain the relationship between the size of the unit of measurement and the number of units needed to measure the length of an object.

Citations	Standard	Descriptor
<u>Volume 2B:</u> SE/TE: 103–106, 107–110, 111–117, 118–121, 122–127 Workbook: 73–76, 77–78, 79–82, 83–86, 87–90, 93–96	2.GM.2.2	Explain the relationship between length and the numbers on a ruler by using a ruler to measure lengths to the nearest whole unit.
Online Lesson: 9.1A	2.GM.2.3	Explore how varying shapes and styles of containers can have the same capacity.
<b>2.GM.3 Tell time to the quarter hour.</b>		
<u>Volume 2B:</u> SE/TE: 137–141, 142–149 Workbook: 101–106, 107–110	2.GM.3.1	Read and write time to the quarter-hour on an analog and digital clock. Distinguish between a.m. and p.m.
<b>2.D.1 Collect, organize, and interpret data.</b>		
<u>Volume 2B:</u> SE/TE: 224–231, 232–237, 238–245 Workbook: 179–182, 183–190, 191–194	2.D.1.1	Explain that the length of a bar in a bar graph or the number of objects in a picture graph represents the number of data points for a given category.
<u>Volume 2B:</u> SE/TE: 224–231, 232–237 Workbook: 179–182, 183–190	2.D.1.2	Organize a collection of data with up to four categories using pictographs and bar graphs with intervals of 1s, 2s, 5s or 10s.
<u>Volume 2B:</u> SE/TE: 224–231, 238–245 Workbook: 179–182, 191–194	2.D.1.3	Write and solve one-step word problems involving addition or subtraction using data represented within pictographs and bar graphs with intervals of one.
<u>Volume 2B:</u> SE/TE: 224–231, 232–237, 238–245 Workbook: 179–182, 183–190, 191–194	2.D.1.4	Draw conclusions and make predictions from information in a graph.

**The Oklahoma Academic Standards for Mathematics  
Mathematical Actions and Processes Standards**

Standard	Descriptor	Citations
<p><u>Volume 2A:</u> SE/TE: 26–31, 31A, 32, 32A, 53–54, 58, 58B, 88–89, 92–93, 93A, 125, 125C, 138–142, 145A, 146–150, 150A, 151, 151A, 157–159, 159A, 166–167, 171A, 177, 182A, 189, 189A, 198, 199A, 209–210, 214A, 220, 224A, 225, 225A, 234, 238A, 251, 263, 285, 285B</p> <p><u>Volume 2B:</u> SE/TE: 8, 10–15, 15A, 36–37, 37A, 38–39, 72, 72A, 72B, 94–95, 99, 130, 130A, 131, 131A, 158–160, 160A, 161–163, 188–191, 193A, 194, 194A, 210–218, 220A, 220B, 221, 221A, 230–237, 237A, 238–240, 243A, 243B, 244–248, 248A, 253–254, 257–258, 278–280, 280A, 281, 312–322, 322A, 323</p>	<p>Develop a Deep and Flexible Conceptual Understanding</p>	<p>Demonstrate a deep and flexible conceptual understanding of mathematical concepts, operations, and relations while making mathematical and real-world connections. Students will develop an understanding of how and when to apply and use the mathematics they know to solve problems.</p>
<p><u>Volume 2A:</u> SE/TE: 38–41, 41A, 42–45, 45A, 45B, 46–49, 49A, 50–52, 52A, 53–58, 58A, 58B, 65–70, 70A, 71–75, 75A, 76–81, 81A, 81B, 82–87, 87A, 88–91, 91A, 92–93, 93A, 100–106, 106A, 107–112, 112A, 113–118, 118A, 119–125, 125A, 125B, 125C, 131–137, 137A, 138–145, 145A, 146–150, 150A, 151, 151A, 157–159, 159A, 160–165, 165, 166–171, 171A, 172–176, 176A, 177–182, 182A, 220–224, 224A, 225, 225A, 257–262, 262A, 263, 263A, 282–285, 285A, 285B</p> <p><u>Volume 2B:</u> SE/TE: 6–7, 7A, 8–15, 15A, 16, 17–19, 19A, 20–26, 26A, 27, 66–72, 72A, 72B, 92–98, 98A, 99, 126–130, 130A, 131, 131A, 170–173, 173A, 174–178, 178A, 178B, 179–182, 182A, 183–187, 187A, 188, 188A, 189–193, 193A, 194, 194A, 202–204, 204A, 204B, 205–209, 209A, 210, 210A, 211–220, 220A, 220B, 221, 221A</p>	<p>Develop Accurate and Appropriate Procedural Fluency</p>	<p>Learn efficient procedures and algorithms for computations and repeated processes based on a strong sense of numbers. Develop fluency in addition, subtraction, multiplication, and division of numbers and expressions. Students will generate a sophisticated understanding of the development and application of algorithms and procedures.</p>



Standard	Descriptor	Citations
<p><u>Volume 2A:</u> SE/TE: 6–10, 11–12, 15, 17, 17A, 18–23, 24–26, 28–31, 31A, 32, 32A, 38–41, 41A, 42–45, 45A, 46–49, 49A, 50–52, 52A, 53–58, 58A, 58B, 65–70, 70A, 71–75, 75A, 76–81, 81A, 81B, 82–87, 87A, 88–91, 91A, 92–93, 93A, 100–106, 106A, 107–112, 112A, 113–118, 118A, 119–125, 125A, 125B, 125C, 138–140, 151, 151A, 157–159, 159A, 160–164, 165A, 166–171, 171A, 172, 175, 176A, 177–182, 182A, 189, 189A, 196–199, 199A, 202, 205–214, 214A, 215–219, 220–225, 225A, 233–238, 239–243, 243A, 244–248, 248A, 251–256, 263, 263A, 278–281, 281A, 285, 285B</p> <p><u>Volume 2B:</u> SE/TE: 8–15, 15A, 16, 20–26, 26A, 27, 34–37, 38–39, 72, 72A, 72B, 99, 131, 131A, 161, 162, 170–173, 173A, 179–182, 182A, 194, 194A, 197, 221, 221A, 257–258, 259, 281, 312–316, 318–320, 322, 322A, 323</p>	<p>Develop Strategies for Problem Solving</p>	<p>Analyze the parts of complex mathematical tasks and identify entry points to begin the search for a solution. Students will select from a variety of problem solving strategies and use corresponding multiple representations (verbal, physical, symbolic, pictorial, graphical, tabular) when appropriate. They will pursue solutions to various tasks from real-world situations and applications that are often interdisciplinary in nature. They will find methods to verify their answers in context and will always question the reasonableness of solutions.</p>
<p><u>Volume 2A:</u> SE/TE: 25–31, 31A, 32, 32A, 58, 58B, 88–91, 91A, 92–93, 93A, 124–125, 125A, 125B, 125C, 135, 137A, 148–150, 150A, 151, 159, 159A, 162–165, 165A, 174–176, 176A, 180–182, 182A, 189, 189A, 198–199, 215–219, 219A, 236–238, 253, 271–276, 276A, 285, 285B</p> <p><u>Volume 2B:</u> SE/TE: 9, 16, 27, 33, 38–39, 51, 53, 99, 131, 131A, 154–160, 160A, 161, 176–178, 178A, 185–187, 187A, 190–191, 221, 221A, 230–237, 237A, 257–258, 278–280, 280A, 281, 312–322, 322A, 323</p>	<p>Develop Mathematical Reasoning</p>	<p>Explore and communicate a variety of reasoning strategies to think through problems. Students will apply their logic to critique the thinking and strategies of others to develop and evaluate mathematical arguments, including making arguments and counterarguments and making connections to other contexts.</p>
<p><u>Volume 2A:</u> SE/TE: 24–26, 29–30, 31A, 32, 32A, 58, 58B, 88–89, 92–93, 93A, 131–137, 137A, 138–145, 145A, 189, 189A, 225, 225A, 239–243, 243A, 249–256, 274–276, 276A, 276B</p> <p><u>Volume 2B:</u> SE/TE: 39, 72, 72B, 85–91, 99, 131, 161, 194, 194A, 221, 221A, 257–258, 259, 287–305, 305A, 305B, 305C, 323</p>	<p>Develop a Productive Mathematical Disposition</p>	<p>Hold the belief that mathematics is sensible, useful and worthwhile. Students will develop the habit of looking for and making use of patterns and mathematical structures. They will persevere and become resilient, effective problem solvers.</p>

Standard	Descriptor	Citations
<p><u>Volume 2A:</u> SE/TE: 6–10, 10A, 10B, 11–12, 16–17, 17A, 18–23, 26–27, 29–31, 31A, 32, 32A, 40–41, 41A, 42–45, 65–67, 71–72, 76–78, 82–84, 88–93, 93A, 100–106, 106A, 107–112, 112A, 113–118, 118A, 119–125, 125A, 125B, 131–137, 137A, 138–145, 145A, 150, 150A, 151, 151A, 183–186, 188A, 189, 189A, 220–224, 224A, 225, 225A, 260–262, 262A, 263, 263A, 282–285, 285A, 285B</p> <p><u>Volume 2B:</u> SE/TE: 6–7, 17–19, 19A, 20–25, 26A, 39, 66–69, 72, 72A, 72B, 77–84, 84A, 84B, 85–91, 92–95, 98, 98A, 99, 126–130, 130A, 131, 131A, 137–140, 140A, 141–145, 145A, 162, 194, 194A, 202–204, 204A, 204B, 205–209, 209A, 221, 221A, 249–252, 257–258, 259, 281, 323</p>	<p>Develop the Ability to Make Conjectures, Model, and Generalize</p>	<p>Make predictions and conjectures and draw conclusions throughout the problem solving process based on patterns and the repeated structures in mathematics. Students will create, identify, and extend patterns as a strategy for solving and making sense of problems.</p>
<p><u>Volume 2A:</u> SE/TE: 25–26, 29–30, 100–105, 107–111, 113–116, 119, 124, 125B, 131–133, 135, 136, 137A, 138, 140–141, 145A, 146–148, 150, 150A, 172–176, 196–197, 200–202, 205–207, 209–210, 212, 217, 232–234, 236, 238A, 251–253, 270–272, 274, 276A</p> <p><u>Volume 2B:</u> SE/TE: 9, 16, 27, 28, 33, 37A, 38, 51, 53, 59, 61A, 61B, 61C, 79, 82, 89, 107, 108A, 111, 112A, 122, 124, 125A, 139, 140A, 158, 160, 160A, 172, 177–178, 178A, 184, 187A, 188–191, 193A, 203–204, 204B, 205–208, 209A, 241–242, 243A, 243B, 270, 272, 273A, 278–279, 280A, 290, 292, 295, 297, 305A, 305B, 305C, 309–310, 311A, 317, 322A</p>	<p>Develop the Ability to Communicate Mathematically</p>	<p>Students will discuss, write, read, interpret and translate ideas and concepts mathematically. As they progress, students’ ability to communicate mathematically will include their increased use of mathematical language and terms and analysis of mathematical definitions.</p>