## Subject

## Course Title

TEKS (Knowledge and Skills)

## (a) Introduction.

(1) The desire to achieve educational excellence is the driving force behind the Texas essential knowledge and skills for mathematics, guided by the college and career readiness standards. By embedding statistics, probability, and finance, while focusing on computational thinking, mathematical fluency, and solid understanding, Texas will lead the way in mathematics education and prepare all Texas students for the challenges they will face in the 21st century.
(2) The process standards describe ways in which students are expected to engage in the content. The placement of the process standards at the beginning of the knowledge and skills listed for each grade and course is intentional. The process standards weave the other knowledge and skills together so that students may be successful problem solvers and use mathematics efficiently and effectively in daily life. The process standards are integrated at every grade level and course. When possible, students will apply mathematics to problems arising in everyday life, society, and the workplace. Students will use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. Students will select appropriate tools such as real objects, manipulatives, algorithms, paper and pencil, and technology and techniques such as mental math, estimation, number sense, and generalization and abstraction to solve problems. Students will effectively communicate mathematical ideas, reasoning, and their implications using multiple representations such as symbols, diagrams, graphs, computer programs, and language. Students will use mathematical relationships to generate solutions and make connections and predictions. Students will analyze mathematical relationships to connect and communicate mathematical ideas. Students will display, explain, or justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
(3) For students to become fluent in mathematics, students must develop a robust sense of number. The National Research Council's report, "Adding It Up," defines procedural fluency as "skill in carrying out procedures flexibly, accurately, efficiently, and appropriately." As students develop procedural fluency, they must also realize that true problem solving may take time, effort, and perseverance. Students in Grade 2 are expected to perform their work without the use of calculators.
(4) The primary focal areas in Grade 2 are making comparisons within the base-10 place value system, solving problems with addition and subtraction within 1,000 , and building foundations for multiplication.
(A) Students develop an understanding of the base-10 place value system and place value concepts. The students' understanding of base-10 place value includes ideas of counting in units and multiples of thousands, hundreds, tens, and ones and a grasp of number relationships, which students demonstrate in a variety of ways.
(B) Students identify situations in which addition and subtraction are useful to solve problems. Students develop a variety of strategies to use efficient, accurate, and generalizable methods to add and subtract multi-digit whole numbers.
(C) Students use the relationship between skip counting and equal groups of objects to represent the addition or subtraction of equivalent sets, which builds a strong foundation for multiplication and division.
(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
(b) Knowledge and skills.
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:

## Chapter 111. Mathematics

## §111.4. Math, Grade 2, Beginning with School Year 2014-2015

| Student Expectation | Breakout | Element | Subelement |
| :--- | :--- | :--- | :--- |


| Subject | Chapter 111. Mathematics |  |  |  |
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| Course Title | §111.4. Math, Grade 2, Beginning with School Year 2014-2015 |  |  |  |
| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (A) apply mathematics to problems arising in everyday life, society, and the workplace | (ii) apply mathematics to problems arising in society |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (A) apply mathematics to problems arising in everyday life, society, and the workplace | (iii) apply mathematics to problems arising in the workplace |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (B) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution | (i) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (B) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution | (ii) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the reasonableness of the solution |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems | (i) select tools, including real objects as appropriate, to solve problems |  |  |


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| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems | (ii) select tools, including manipulatives as appropriate, to solve problems |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems | (iii) select tools, including paper and pencil as appropriate, to solve problems |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems | (iv) select tools, including technology as appropriate, to solve problems |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems | (v) select techniques, including mental math as appropriate, to solve problems |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems | (vi) select techniques, including estimation as appropriate, to solve problems |  |  |


| Subject | Chapter 111. Mathematics |  |  |  |
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| Course Title | §111.4. Math, Grade 2, Beginning with School Year 2014-2015 |  |  |  |
| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems | (vii) select techniques, including number sense as appropriate, to solve problems |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate | (i) communicate mathematical ideas using multiple representations, including symbols as appropriate |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate | (ii) communicate mathematical ideas using multiple representations, including diagrams as appropriate |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate | (iii) communicate mathematical ideas using multiple representations, including graphs as appropriate |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate | (iv) communicate mathematical ideas using multiple representations, including language as appropriate |  |  |


| Subject | Chapter 111. Mathematics |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Course Title | §111.4. Math, Grade 2, Beginning with School Year 2014-2015 |  |  |  |
| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate | (v) communicate mathematical reasoning using multiple representations, including symbols as appropriate |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate | (vi) communicate mathematical reasoning using multiple representations, including diagrams as appropriate |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate | (vii) communicate mathematical reasoning using multiple representations, including graphs as appropriate |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate | (viii) communicate mathematical reasoning using multiple representations, including language as appropriate |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate | (ix) communicate [mathematical ideas'] implications using multiple representations, including symbols as appropriate |  |  |


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| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate | (x) communicate [mathematical ideas'] implications using multiple representations, including diagrams as appropriate |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate | (xi) communicate [mathematical ideas'] implications using multiple representations, including graphs as appropriate |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate | (xii) communicate [mathematical ideas'] implications using multiple representations, including language as appropriate |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate | (xiii) communicate [mathematical reasoning's] implications using multiple representations, including symbols as appropriate |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate | (xiv) communicate [mathematical reasoning's] implications using multiple representations, including diagrams as appropriate |  |  |


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| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate | (xv) communicate [mathematical reasoning's] implications using multiple representations, including graphs as appropriate |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate | (xvi) communicate [mathematical reasoning's] implications using multiple representations, including language as appropriate |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (E) create and use representations to organize, record, and communicate mathematical ideas | (i) create representations to organize mathematical ideas |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (E) create and use representations to organize, record, and communicate mathematical ideas | (ii) use representations to organize mathematical ideas |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (E) create and use representations to organize, record, and communicate mathematical ideas | (iii) create representations to record mathematical ideas |  |  |


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| Course Title | §111.4. Math, Grade 2, Beginning with School Year 2014-2015 |  |  |  |
| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (E) create and use representations to organize, record, and communicate mathematical ideas | (iv) use representations to record mathematical ideas |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (E) create and use representations to organize, record, and communicate mathematical ideas | (v) create representations to communicate mathematical ideas |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (E) create and use representations to organize, record, and communicate mathematical ideas | (vi) use representations to communicate mathematical ideas |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (F) analyze mathematical relationships to connect and communicate mathematical ideas | (i) analyze mathematical relationships to connect mathematical ideas |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (F) analyze mathematical relationships to connect and communicate mathematical ideas | (ii) analyze mathematical relationships to communicate mathematical ideas |  |  |


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| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication | (i) display mathematical ideas using precise mathematical language in written or oral communication |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication | (ii) display mathematical arguments using precise mathematical language in written or oral communication |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication | (iii) explain mathematical ideas using precise mathematical language in written or oral communication |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication | (iv) explain mathematical arguments using precise mathematical language in written or oral communication |  |  |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication | (v) justify mathematical ideas using precise mathematical language in written or oral communication |  |  |


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| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: | (G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication | (vi) justify mathematical arguments using precise mathematical language in written or oral communication |  |  |
| (2) Number and operations. The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. The student is expected to: | (A) use concrete and pictorial models to compose and decompose numbers up to 1,200 in more than one way as a sum of so many thousands, hundreds, tens, and ones | (i) use concrete models to compose numbers up to 1,200 in more than one way as a sum of so many thousands, hundreds, tens, and ones |  |  |
| (2) Number and operations. The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. The student is expected to: | (A) use concrete and pictorial models to compose and decompose numbers up to 1,200 in more than one way as a sum of so many thousands, hundreds, tens, and ones | (ii) use concrete models to decompose numbers up to 1,200 in more than one way as a sum of so many thousands, hundreds, tens, and ones |  |  |


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| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (2) Number and operations. The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. The student is expected to: | (A) use concrete and pictorial models to compose and decompose numbers up to 1,200 in more than one way as a sum of so many thousands, hundreds, tens, and ones | (iii) use pictorial models to compose numbers up to 1,200 in more than one way as a sum of so many thousands, hundreds, tens, and ones |  |  |
| (2) Number and operations. The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. The student is expected to: | (A) use concrete and pictorial models to compose and decompose numbers up to 1,200 in more than one way as a sum of so many thousands, hundreds, tens, and ones | (iv) use pictorial models to decompose numbers up to 1,200 in more than one way as a sum of so many thousands, hundreds, tens, and ones |  |  |
| (2) Number and operations. The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. The student is expected to: | (B) use standard, word, and expanded forms to represent numbers up to 1,200 | (i) use standard form to represent numbers up to 1,200 |  |  |


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| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (2) Number and operations. The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. The student is expected to: | (B) use standard, word, and expanded forms to represent numbers up to 1,200 | (ii) use word form to represent numbers up to 1,200 |  |  |
| (2) Number and operations. The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. The student is expected to: | (B) use standard, word, and expanded forms to represent numbers up to 1,200 | (iii) use expanded form to represent numbers up to 1,200 |  |  |
| (2) Number and operations. The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. The student is expected to: | (C) generate a number that is greater than or less than a given whole number up to 1,200 |  |  |  |


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| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (2) Number and operations. The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. The student is expected to: | (D) use place value to compare and order whole numbers up to 1,200 using comparative language, numbers, and symbols (>, <, or =) | (i) use place value to compare whole numbers up to 1,200 using comparative language, numbers, and symbols ( $>,<$, or $=$ ) |  |  |
| (2) Number and operations. The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. The student is expected to: | (D) use place value to compare and order whole numbers up to 1,200 using comparative language, numbers, and symbols (>, <, or =) | (ii) use place value to order whole numbers up to 1,200 |  |  |
| (2) Number and operations. The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. The student is expected to: | (E) locate the position of a given whole number on an open number line |  |  |  |


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| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (2) Number and operations. The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. The student is expected to: | (F) name the whole number that corresponds to a specific point on a number line | (i) name the whole number that corresponds to a specific point on a number line |  |  |
| (3) Number and operations. The student applies mathematical process standards to recognize and represent fractional units and communicates how they are used to name parts of a whole. The student is expected to: | (A) partition objects into equal parts and name the parts, including halves, fourths, and eighths, using words | (i) partition objects into equal parts, including halves |  |  |
| (3) Number and operations. The student applies mathematical process standards to recognize and represent fractional units and communicates how they are used to name parts of a whole. The student is expected to: | (A) partition objects into equal parts and name the parts, including halves, fourths, and eighths, using words | (ii) partition objects into equal parts, including fourths |  |  |
| (3) Number and operations. The student applies mathematical process standards to recognize and represent fractional units and communicates how they are used to name parts of a whole. The student is expected to: | (A) partition objects into equal parts and name the parts, including halves, fourths, and eighths, using words | (iii) partition objects into equal parts including eighths |  |  |


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| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (3) Number and operations. The student applies mathematical process standards to recognize and represent fractional units and communicates how they are used to name parts of a whole. The student is expected to: | (A) partition objects into equal parts and name the parts, including halves, fourths, and eighths, using words | (iv) name the parts using words |  |  |
| (3) Number and operations. The student applies mathematical process standards to recognize and represent fractional units and communicates how they are used to name parts of a whole. The student is expected to: | (B) explain that the more fractional parts used to make a whole, the smaller the part; and the fewer the fractional parts, the larger the part | (i) explain that the more fractional parts used to make a whole, the smaller the part |  |  |
| (3) Number and operations. The student applies mathematical process standards to recognize and represent fractional units and communicates how they are used to name parts of a whole. The student is expected to: | (B) explain that the more fractional parts used to make a whole, the smaller the part; and the fewer the fractional parts, the larger the part | (ii) explain that the fewer the fractional parts [used to make a whole], the larger the part |  |  |
| (3) Number and operations. The student applies mathematical process standards to recognize and represent fractional units and communicates how they are used to name parts of a whole. The student is expected to: | (C) use concrete models to count fractional parts beyond one whole using words and recognize how many parts it takes to equal one whole | (i) use concrete models to count fractional parts beyond one whole using words |  |  |


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| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (3) Number and operations. The student applies mathematical process standards to recognize and represent fractional units and communicates how they are used to name parts of a whole. The student is expected to: | (C) use concrete models to count fractional parts beyond one whole using words and recognize how many parts it takes to equal one whole | (ii) recognize how many parts it takes to equal one whole |  |  |
| (3) Number and operations. The student applies mathematical process standards to recognize and represent fractional units and communicates how they are used to name parts of a whole. The student is expected to: | (D) identify examples and nonexamples of halves, fourths, and eighths | (i) identify examples of halves |  |  |
| (3) Number and operations. The student applies mathematical process standards to recognize and represent fractional units and communicates how they are used to name parts of a whole. The student is expected to: | (D) identify examples and nonexamples of halves, fourths, and eighths | (ii) identify examples of fourths |  |  |
| (3) Number and operations. The student applies mathematical process standards to recognize and represent fractional units and communicates how they are used to name parts of a whole. The student is expected to: | (D) identify examples and nonexamples of halves, fourths, and eighths | (iii) identify examples of eighths |  |  |


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| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Subelement |  |
| (3) Number and operations. The <br> student applies mathematical <br> process standards to recognize <br> and represent fractional units and <br> communicates how they are used <br> to name parts of a whole. The <br> student is expected to: | (D) identify examples and non- <br> examples of halves, fourths, and eighths | (iv) identify non-examples of halves |  |  |
| (3) Number and operations. The <br> student applies mathematical <br> process standards to recognize <br> and represent fractional units and <br> communicates how they are used <br> to name parts of a whole. The <br> student is expected to: | (D) identify examples and non- <br> examples of halves, fourths, and eighths | (v) identify non-examples of fourths |  |  |
| (3) Number and operations. The <br> student applies mathematical <br> process standards to recognize <br> and represent fractional units and <br> communicates how they are used <br> to name parts of a whole. The <br> student is expected to: | (D) identify examples and non- <br> examples of halves, fourths, and eighths | (vi) identify non-examples of eighths |  |  |
| (4) Number and operations. The <br> student applies mathematical <br> process standards to develop and <br> use strategies and methods for <br> whole number computations in <br> order to solve addition and <br> subtraction problems with <br> efficiency and accuracy. The <br> student is expected to: | (A) recall basic facts to add and <br> subtract within 20 with automaticity | automaticity |  |  |


| Subject | Chapter 111. Mathematics |  |  |  |
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| Course Title | §111.4. Math, Grade 2, Beginning with School Year 2014-2015 |  |  |  |
| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to: | (A) recall basic facts to add and subtract within 20 with automaticity | (ii) recall basic facts to subtract within 20 with automaticity |  |  |
| (4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to: | (B) add up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations | (i) add up to four two-digit numbers using mental strategies based on knowledge of place value |  |  |
| (4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to: | (B) add up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations | (ii) add up to four two-digit numbers using mental strategies based on knowledge of properties of operations |  |  |


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| Course Title | §111.4. Math, Grade 2, Beginning with School Year 2014-2015 |  |  |  |
| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to: | (B) add up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations | (iii) add up to four two-digit numbers using algorithms based on knowledge of place value |  |  |
| (4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to: | (B) add up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations | (iv) add up to four two-digit numbers using algorithms based on knowledge of properties of operations |  |  |
| (4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to: | (B) add up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations | (v) subtract two-digit numbers using mental strategies based on knowledge of place value |  |  |


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| Course Title | §111.4. Math, Grade 2, Beginning with School Year 2014-2015 |  |  |  |
| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to: | (B) add up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations | (vi) subtract two-digit numbers using mental strategies based on knowledge of properties of operations |  |  |
| (4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to: | (B) add up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations | (vii) subtract two-digit numbers using algorithms based on knowledge of place value |  |  |
| (4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to: | (B) add up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations | (viii) subtract two-digit numbers using algorithms based on knowledge of properties of operations |  |  |


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| Course Title | §111.4. Math, Grade 2, Beginning with School Year 2014-2015 |  |  |  |
| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to: | (C) solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms | (i) solve one-step word problems involving addition within 1,000 using a variety of strategies based on place value, including algorithms |  |  |
| (4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to: | (C) solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms | (ii) solve one-step word problems involving subtraction within 1,000 using a variety of strategies based on place value, including algorithms |  |  |
| (4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to: | (C) solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms | (iii) solve multi-step word problems involving addition within 1,000 using a variety of strategies based on place value, including algorithms |  |  |


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| Course Title | §111.4. Math, Grade 2, Beginning with School Year 2014-2015 |  |  |  |
| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to: | (C) solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms | (iv) solve multi-step word problems involving subtraction within 1,000 using a variety of strategies based on place value, including algorithms |  |  |
| (4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to: | (D) generate and solve problem situations for a given mathematical number sentence involving addition and subtraction of whole numbers within 1,000 | (i) generate problem situations for a given mathematical number sentence involving addition of whole numbers within 1,000 |  |  |
| (4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to: | (D) generate and solve problem situations for a given mathematical number sentence involving addition and subtraction of whole numbers within 1,000 | (ii) generate problem situations for a given mathematical number sentence involving subtraction of whole numbers within 1,000 |  |  |


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| Course Title | §111.4. Math, Grade 2, Beginning with School Year 2014-2015 |  |  |  |
| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to: | (D) generate and solve problem situations for a given mathematical number sentence involving addition and subtraction of whole numbers within 1,000 | (iii) solve problem situations for a given mathematical number sentence involving addition of whole numbers within 1,000 |  |  |
| (4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to: | (D) generate and solve problem situations for a given mathematical number sentence involving addition and subtraction of whole numbers within 1,000 | (iv) solve problem situations for a given mathematical number sentence involving subtraction of whole numbers within 1,000 |  |  |
| (5) Number and operations. The student applies mathematical process standards to determine the value of coins in order to solve monetary transactions. The student is expected to: | (A) determine the value of a collection of coins up to one dollar |  |  |  |
| (5) Number and operations. The student applies mathematical process standards to determine the value of coins in order to solve monetary transactions. The student is expected to: | (B) use the cent symbol, dollar sign, and the decimal point to name the value of a collection of coins | (i) use the cent symbol to name the value of a collection of coins |  |  |


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| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (5) Number and operations. The student applies mathematical process standards to determine the value of coins in order to solve monetary transactions. The student is expected to: | (B) use the cent symbol, dollar sign, and the decimal point to name the value of a collection of coins | (ii) use the dollar sign and the decimal point to name the value of a collection of coins |  |  |
| (6) Number and operations. The student applies mathematical process standards to connect repeated addition and subtraction to multiplication and division situations that involve equal groupings and shares. The student is expected to: | (A) model, create, and describe contextual multiplication situations in which equivalent sets of concrete objects are joined | (i) model contextual multiplication situations in which equivalent sets of concrete objects are joined |  |  |
| (6) Number and operations. The student applies mathematical process standards to connect repeated addition and subtraction to multiplication and division situations that involve equal groupings and shares. The student is expected to: | (A) model, create, and describe contextual multiplication situations in which equivalent sets of concrete objects are joined | (ii) create contextual multiplication situations in which equivalent sets of concrete objects are joined |  |  |
| (6) Number and operations. The student applies mathematical process standards to connect repeated addition and subtraction to multiplication and division situations that involve equal groupings and shares. The student is expected to: | (A) model, create, and describe contextual multiplication situations in which equivalent sets of concrete objects are joined | (iii) describe contextual multiplication situations in which equivalent sets of concrete objects are joined |  |  |


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| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (6) Number and operations. The student applies mathematical process standards to connect repeated addition and subtraction to multiplication and division situations that involve equal groupings and shares. The student is expected to: | (B) model, create, and describe contextual division situations in which a set of concrete objects is separated into equivalent sets | (i) model contextual division situations in which a set of concrete objects is separated into equivalent sets |  |  |
| (6) Number and operations. The student applies mathematical process standards to connect repeated addition and subtraction to multiplication and division situations that involve equal groupings and shares. The student is expected to: | (B) model, create, and describe contextual division situations in which a set of concrete objects is separated into equivalent sets | (ii) create contextual division situations in which a set of concrete objects is separated into equivalent sets |  |  |
| (6) Number and operations. The student applies mathematical process standards to connect repeated addition and subtraction to multiplication and division situations that involve equal groupings and shares. The student is expected to: | (B) model, create, and describe contextual division situations in which a set of concrete objects is separated into equivalent sets | (iii) describe contextual division situations in which a set of concrete objects is separated into equivalent sets |  |  |
| (7) Algebraic reasoning. The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. The student is expected to: | (A) determine whether a number up to 40 is even or odd using pairings of objects to represent the number |  |  |  |


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| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (7) Algebraic reasoning. The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. The student is expected to: | (B) use an understanding of place value to determine the number that is 10 or 100 more or less than a given number up to 1,200 |  |  |  |
| (7) Algebraic reasoning. The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. The student is expected to: | (C) represent and solve addition and subtraction word problems where unknowns may be any one of the terms in the problem | (i) represent addition word problems where unknowns may be any one of the terms in the problem |  |  |
| (7) Algebraic reasoning. The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. The student is expected to: | (C) represent and solve addition and subtraction word problems where unknowns may be any one of the terms in the problem | (ii) represent subtraction word problems where unknowns may be any one of the terms in the problem |  |  |
| (7) Algebraic reasoning. The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. The student is expected to: | (C) represent and solve addition and subtraction word problems where unknowns may be any one of the terms in the problem | (iii) solve addition word problems where unknowns may be any one of the terms in the problem |  |  |


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| Course Title | §111.4. Math, Grade 2, Beginning with School Year 2014-2015 |  |  |  |
| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (7) Algebraic reasoning. The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. The student is expected to: | (C) represent and solve addition and subtraction word problems where unknowns may be any one of the terms in the problem | (iv) solve subtraction word problems where unknowns may be any one of the terms in the problem |  |  |
| (8) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to: | (A) create two-dimensional shapes based on given attributes, including number of sides and vertices | (i) create two-dimensional shapes based on given attributes, including number of sides |  |  |
| (8) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to: | (A) create two-dimensional shapes based on given attributes, including number of sides and vertices | (ii) create two-dimensional shapes based on given attributes, including number of vertices |  |  |
| (8) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to: | B) classify and sort three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes as special rectangular prisms), and triangular prisms, based on attributes using formal geometric language | (i) classify three-dimensional solids, including spheres, based on attributes using formal geometric language |  |  |


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| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (8) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to: | B) classify and sort three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes as special rectangular prisms), and triangular prisms, based on attributes using formal geometric language | (ii) classify three-dimensional solids, including cones, based on attributes using formal geometric language |  |  |
| (8) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to: | B) classify and sort three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes as special rectangular prisms), and triangular prisms, based on attributes using formal geometric language | (iii) classify three-dimensional solids, including cylinders, based on attributes using formal geometric language |  |  |
| (8) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to: | B) classify and sort three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes as special rectangular prisms), and triangular prisms, based on attributes using formal geometric language | (iv) classify three-dimensional solids, including rectangular prisms (including cubes as special rectangular prisms), based on attributes using formal geometric language |  |  |
| (8) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to: | B) classify and sort three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes as special rectangular prisms), and triangular prisms, based on attributes using formal geometric language | (v) classify three-dimensional solids, including triangular prisms, based on attributes using formal geometric language |  |  |


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| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (8) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to: | B) classify and sort three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes as special rectangular prisms), and triangular prisms, based on attributes using formal geometric language | (vi) sort three-dimensional solids, including spheres, based on attributes using formal geometric language |  |  |
| (8) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to: | B) classify and sort three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes as special rectangular prisms), and triangular prisms, based on attributes using formal geometric language | (vii) sort three-dimensional solids, including cones, based on attributes using formal geometric language |  |  |
| (8) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to: | B) classify and sort three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes as special rectangular prisms), and triangular prisms, based on attributes using formal geometric language | (viii) sort three-dimensional solids, including cylinders, based on attributes using formal geometric language |  |  |
| (8) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to: | B) classify and sort three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes as special rectangular prisms), and triangular prisms, based on attributes using formal geometric language | (ix) sort three-dimensional solids, including rectangular prisms (including cubes as special rectangular prisms), based on attributes using formal geometric language |  |  |


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| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (8) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to: | B) classify and sort three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes as special rectangular prisms), and triangular prisms, based on attributes using formal geometric language | (x) sort three-dimensional solids, including triangular prisms, based on attributes using formal geometric language |  |  |
| (8) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to: | (C) classify and sort polygons with 12 or fewer sides according to attributes, including identifying the number of sides and number of vertices | (i) classify polygons with 12 or fewer sides according to attributes, including identifying the number of sides |  |  |
| (8) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to: | (C) classify and sort polygons with 12 or fewer sides according to attributes, including identifying the number of sides and number of vertices | (ii) classify polygons with 12 or fewer sides according to attributes, including identifying the number of vertices |  |  |
| (8) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to: | (C) classify and sort polygons with 12 or fewer sides according to attributes, including identifying the number of sides and number of vertices | (iii) sort polygons with 12 or fewer sides according to attributes, including identifying the number of sides |  |  |


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| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (8) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to: | (C) classify and sort polygons with 12 or fewer sides according to attributes, including identifying the number of sides and number of vertices | (iv) sort polygons with 12 or fewer sides according to attributes, including identifying the number of vertices |  |  |
| (8) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to: | (D) compose two-dimensional shapes and three-dimensional solids with given properties or attributes | (i) compose two-dimensional shapes with given properties or attributes |  |  |
| (8) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to: | (D) compose two-dimensional shapes and three-dimensional solids with given properties or attributes | (ii) compose three-dimensional solids with given properties or attributes |  |  |
| (8) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to: | (E) decompose two-dimensional shapes such as cutting out a square from a rectangle, dividing a shape in half, or partitioning a rectangle into identical triangles and identify the resulting geometric parts | (i) decompose two-dimensional shapes |  |  |


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| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (8) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to: | (E) decompose two-dimensional shapes such as cutting out a square from a rectangle, dividing a shape in half, or partitioning a rectangle into identical triangles and identify the resulting geometric parts | (ii) identify the resulting geometric parts |  |  |
| (9) Geometry and measurement. The student applies mathematical process standards to select and use units to describe length, area, and time. The student is expected to: | (A) find the length of objects using concrete models for standard units of length |  |  |  |
| (9) Geometry and measurement. The student applies mathematical process standards to select and use units to describe length, area, and time. The student is expected to: | (B) describe the inverse relationship between the size of the unit and the number of units needed to equal the length of an object |  |  |  |
| (9) Geometry and measurement. The student applies mathematical process standards to select and use units to describe length, area, and time. The student is expected to: | (C) represent whole numbers as distances from any given location on a number line |  |  |  |
| (9) Geometry and measurement. The student applies mathematical process standards to select and use units to describe length, area, and time. The student is expected to: | (D) determine the length of an object to the nearest marked unit using rulers, yardsticks, meter sticks, or measuring tapes |  |  |  |


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| (9) Geometry and measurement. The student applies mathematical process standards to select and use units to describe length, area, and time. The student is expected to: | (E) determine a solution to a problem involving length, including estimating lengths |  |  |  |
| (9) Geometry and measurement. The student applies mathematical process standards to select and use units to describe length, area, and time. The student is expected to: | (F) use concrete models of square units to find the area of a rectangle by covering it with no gaps or overlaps, counting to find the total number of square units, and describing the measurement using a number and the unit |  |  |  |
| (9) Geometry and measurement. The student applies mathematical process standards to select and use units to describe length, area, and time. The student is expected to: | (G) read and write time to the nearest one-minute increment using analog and digital clocks and distinguish between a.m. and p.m. | (i) read time to the nearest one-minute increment using analog clocks |  |  |
| (9) Geometry and measurement. The student applies mathematical process standards to select and use units to describe length, area, and time. The student is expected to: | (G) read and write time to the nearest one-minute increment using analog and digital clocks and distinguish between a.m. and p.m. | (ii) write time to the nearest one-minute increment |  |  |
| (9) Geometry and measurement. The student applies mathematical process standards to select and use units to describe length, area, and time. The student is expected to: | (G) read and write time to the nearest one-minute increment using analog and digital clocks and distinguish between a.m. and p.m. | (iii) read time to the nearest one-minute increment using digital clocks |  |  |


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| (9) Geometry and measurement. The student applies mathematical process standards to select and use units to describe length, area, and time. The student is expected to: | (G) read and write time to the nearest one-minute increment using analog and digital clocks and distinguish between a.m. and p.m. | (iv) write time to the nearest one-minute increment |  |  |
| (9) Geometry and measurement. The student applies mathematical process standards to select and use units to describe length, area, and time. The student is expected to: | (G) read and write time to the nearest one-minute increment using analog and digital clocks and distinguish between a.m. and p.m. | (v) distinguish between a.m. and p.m. |  |  |
| (10) Data analysis. The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems. The student is expected to: | (A) explain that the length of a bar in a bar graph or the number of pictures in a pictograph represents the number of data points for a given category |  |  |  |
| (10) Data analysis. The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems. The student is expected to: | (B) organize a collection of data with up to four categories using pictographs and bar graphs with intervals of one or more | (i) organize a collection of data with up to four categories using pictographs with intervals of one or more |  |  |
| (10) Data analysis. The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems. The student is expected to: | (B) organize a collection of data with up to four categories using pictographs and bar graphs with intervals of one or more | (ii) organize a collection of data with up to four categories using bar graphs with intervals of one or more |  |  |


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| (10) Data analysis. The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems. The student is expected to: | (C) write and solve one-step word problems involving addition or subtraction using data represented within pictographs and bar graphs with intervals of one | (i) write one-step word problems involving addition or subtraction using data represented within pictographs with intervals of one |  |  |
| (10) Data analysis. The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems. The student is expected to: | (C) write and solve one-step word problems involving addition or subtraction using data represented within pictographs and bar graphs with intervals of one | (ii) write one-step word problems involving addition or subtraction using data represented within bar graphs with intervals of one |  |  |
| (10) Data analysis. The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems. The student is expected to: | (C) write and solve one-step word problems involving addition or subtraction using data represented within pictographs and bar graphs with intervals of one | (iii) solve one-step word problems involving addition or subtraction using data represented within pictographs with intervals of one |  |  |
| (10) Data analysis. The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems. The student is expected to: | (C) write and solve one-step word problems involving addition or subtraction using data represented within pictographs and bar graphs with intervals of one | (iv) solve one-step word problems involving addition or subtraction using data represented within bar graphs with intervals of one |  |  |
| (10) Data analysis. The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems. The student is expected to: | (D) draw conclusions and make predictions from information in a graph | (i) draw conclusions from information in a graph |  |  |


| Subject | Chapter 111. Mathematics |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Course Title | §111.4. Math, Grade 2, Beginning with School Year 2014-2015 |  |  |  |
| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (10) Data analysis. The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems. The student is expected to: | (D) draw conclusions and make predictions from information in a graph | (ii) make predictions from information in a graph |  |  |
| (11) Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to: | (A) calculate how money saved can accumulate into a larger amount over time |  |  |  |
| (11) Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to: | (B) explain that saving is an alternative to spending |  |  |  |
| (11) Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to: | (C) distinguish between a deposit and a withdrawal |  |  |  |


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| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (11) Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to: | (D) identify examples of borrowing and distinguish between responsible and irresponsible borrowing | (i) identify examples of borrowing |  |  |
| (11) Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to: | (D) identify examples of borrowing and distinguish between responsible and irresponsible borrowing | (ii) distinguish between responsible and irresponsible borrowing |  |  |
| (11) Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to: | (E) identify examples of lending and use concepts of benefits and costs to evaluate lending decisions | (i) identify examples of lending |  |  |
| (11) Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to: | (E) identify examples of lending and use concepts of benefits and costs to evaluate lending decisions | (ii) use concepts of benefits to evaluate lending decisions |  |  |


| Subject | Chapter 111. Mathematics |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Course Title | §111.4. Math, Grade 2, Beginning with School Year 2014-2015 |  |  |  |
| TEKS (Knowledge and Skills) | Student Expectation | Breakout | Element | Subelement |
| (11) Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to: | (E) identify examples of lending and use concepts of benefits and costs to evaluate lending decisions | (iii) use concepts of costs to evaluate lending decisions |  |  |
| (11) Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to: | (F) differentiate between producers and consumers and calculate the cost to produce a simple item | (i) differentiate between producers and consumers |  |  |
| (11) Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to: | (F) differentiate between producers and consumers and calculate the cost to produce a simple item | (ii) calculate the cost to produce a simple item |  |  |

