



SADLIER

Progress in Mathematics

Aligned to the Chapter 111.

Texas Essential Knowledge and Skills for Mathematics

Subchapter A. Elementary, §111.2, Kindergarten, Adopted 2012.

Kindergarten

(b) Knowledge and skills

(1) Mathematical process standards	2
(2) Number and operations	3
(3) Number and operations	8
(4) Number and operations	10
(5) Algebraic reasoning	11
(6) Geometry and measurement	11
(7) Geometry and measurement	13
(8) Data analysis	14
(9) Personal financial literacy	15

 **Sadlier**
 William H. Sadlier, Inc.
www.sadlierschool.com
 800-221-5175

(b) Knowledge and skills

KINDERGARTEN TEXAS ESSENTIAL KNOWLEDGE AND SKILLS FOR MATHEMATICS	SADLIER <i>PROGRESS IN MATHEMATICS</i> KINDERGARTEN
<p>(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p>	
<p>(A) apply mathematics to problems arising in everyday life, society, and the workplace;</p>	<p>Children in the program have the opportunity to apply mathematics to real-world situations in 12 problem solving lessons. They also see practical application of new skills in the introduction to many lessons. Similarly, many lessons conclude with a set of Problem Solving, Critical Thinking, or Challenge exercises—problems that further connect the new skill or concept to everyday life.</p> <p>The final stage of the lesson plan in the TE—Part 5: Follow-Up—includes applications, such as “Real-World Connections,” “Game,” or “Problem Solving.” Each chapter ends with a “Connection” lesson (such as Math and Real World, Math and Math, or Math and Movement). And at the end of alternating chapters is a “Real Aloud” story that is related to newly studied skills, plus the related list of “Books to Read.”</p>
<p>(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;</p>	<p>Located at the beginning of the book, Introduction to Problem Solving presents a four-step problem solving model— Read, Plan, Solve, Check. Instruction in each of the 12 chapters includes a Problem Solving Strategy lesson.</p> <p>See also “Problem of the Day,” located in the TE at the beginning of each chapter, for nonroutine problems for each lesson.</p> <p>For a comprehensive listing of problem solving citations, see Index pp. T59—T60.</p>
<p>(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;</p>	<p>The lesson plan in the Teacher’s Edition for many lessons offers ideas for using real objects and manipulatives—such as two-color counters, connecting cubes, and base-ten blocks—to model the new concept. Depending on the topic, engaging activities involve tools and materials such as scissors, rulers, crayons, tape, or index cards.</p> <p>Located at the back of the TE are several blackline masters that can be used for learning activities. They include a place-value chart, grid and dot paper, number lines, fraction circles, and nets. There is also a wealth of online resources at www.progressinmathematics.com</p>
<p>(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;</p>	<p>Lessons in the program employ a rich variety of representations, including pictures of concrete models, diagrams, graphs, and symbols, to develop understanding of mathematical concepts and skills. Children use these representations in their discussions during daily lessons, thereby building communication skills and enhancing mathematical thinking through listening, modeled questioning, guided discussion, reading, and writing.</p> <p>Each lesson features a “Talk It Over” activity. Children develop listening skills during the “Listen” activity at the beginning of</p>

each chapter. In addition, there are six “Read Alouds” and recommended “Books to Read.” And the periodic “Check Your Progress” review/test preparation activities in each chapter require students to listen and respond to teacher- read directions.

Children are systematically taught the language of mathematics. Located in the Teacher’s Edition at the beginning of each chapter, the “Math Vocabulary” page includes “Vocabulary Review,” “Math Word Wall,” “Vocabulary Project,” and “Chapter Words.” The Meeting Individual Needs: English Language Learners section features “Oral Language and Vocabulary Development,” New vocabulary for each chapter is listed in the Student Textbook on the “Math Alive at Home” page. Each daily lesson plan in the TE includes a scripted introduction of new words and terms; new words are highlighted in yellow and defined in context in the Student Textbook. And words and terms are defined in the online and end-of-book glossary.

(E) create and use representations to organize, record, and communicate mathematical ideas;

Lessons such as 3-9 **Problem Solving Strategy: Follow Directions/Act It Out**, Lesson 11 **Problem Solving Strategy: Use a Model**, 12-8 **Problem Solving Strategy: Make a Table**—as well as the entire Chapter 6 **Tables, Graphs, and Fractions**—help young people learn to visualize, record, organize, and communicate ideas.

(F) analyze mathematical relationships to connect and communicate mathematical ideas; and

Children learn about relationships between mathematical ideas in the Math Connection activity in the TE at the beginning of each chapter and as they engage in “Lesson Readiness” and “Before Using the Page” activities for each lesson. For “Summarize/Assess”, they use several logical processes—classify and sort, compare and contrast, identify and extend patterns, make generalizations and draw conclusions, justify answers, and make predictions.

(G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

In addition to several opportunities in daily lessons to question and discuss the presentation of new concepts by the teacher, students explain mathematical ideas in written and oral communication in the daily “Talk It Over” activity.

(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. The student is expected to:

(A) count forward and backward to at least 20 with and without objects;

4-1 As Many As—pp. 111–112

Objective(s): To show one-to-one correspondence; to identify groups with the same number of objects; to make groups with as many objects as a given group.

4-2 More—pp. 113–114

Objective(s): To compare and draw a group with more objects than a given group; to identify groups with more objects.

4-3 Fewer—pp. 115–116

Objective(s): To compare and draw a group with fewer objects than a given group; to identify groups with fewer objects.

4-4 Fewest, Most—pp. 117–118

Objective(s): To identify groups with the most and fewest objects.

4-5 Equalizing Sets—pp. 119–120

Objective(s): To equalize sets by drawing more or crossing out objects.

4-6 Identify and Write 0 and 1—pp. 123–124

Objective(s): To identify, show, and draw groups of 0 and 1 object; to read and write the numbers 0 and 1.

4-7 Identify and Write 2 and 3—pp. 125–126

Objective(s): To identify, show, and draw groups of 2 and 3 objects; to read and write the numbers 2 and 3.

4-8 Identify and Write 4 and 5—pp. 127–128

Objective(s): To identify, show, and draw groups of 4 and 5 objects; to read and write the numbers 4 and 5.

***4-8 A Count to Tell How Many—Online**

Objective(s): To count to tell the number of objects in a group; to count objects in different arrangements or in different orders; to count and identify the number of objects in a set and know that the last number counted tells "how many."

***4-8B Order 0–5—Online**

Objective(s): To show a number's location on a line in number order; to count by ones to 5, starting at any number; to order numbers 0–5; to show that each successive number name refers to a quantity that is one larger.

***4-8C Ways to Make 2, 3, 4, and 5—Online**

Objective(s): To decompose 3, 4, and 5 as two parts or subgroups of objects in more than one way; to draw a group of 2, 3, 4 or 5 objects.

4-10 Identify and Write 6 and 7—pp. 133–134

Objective(s): To identify, show, and draw groups of 6 and 7; to read and write the numbers 6 and 7.

***4-10A Ways to Make 6 and 7—Online**

Objective(s): To decompose 6 and 7 as two parts or subgroups of objects in more than one way; to draw a group of 6 or 7 objects.

4-11 Identify and Write 8 and 9—pp. 135–136

Objective(s): To identify, show, and draw groups of 8 and 9; to read and write the numbers 8 and 9.

***4-11A Ways to Make 8 and 9—Online**

Objective(s): To decompose 8 and 9 as two parts or subgroups of objects in more than one way; to draw a group of 8 or 9 objects.

4-12 Identify and Write 10—pp. 137–138

Objective(s): To identify, show, and draw groups of 10; to read and write the number 10.

***4-12A Ways to Make 10—Online**

Objective(s): To decompose 10 as two parts or subgroups of objects in more than one way; to draw a group of 10 objects; to find the number that makes 10 when added to the given number using objects or drawings and record answer with a drawing.

***4-12B One More, One Fewer—Online**

Objective(s): To identify the number that tells one more than; to identify the number that tells one fewer.

***4-12C Count to Compare Numbers—Online**

Objective(s): To compare numbers from 1–10 using counting strategies; to use one-to-one correspondence to count objects, pairing each number name with one object.

4-13 Numbers 1–10—pp. 139–140

Objective(s): To recognize the order of numbers 1–10.

4-14 Number Line—pp. 141–142

Objective(s): To count on and count back on a number line; to explore counting patterns on a number line.

***4-14A Compare Numbers—Online**

Objective(s): To use a model to compare numbers to 10.

4-15 Ordinals: First to Tenth—pp. 143–144

Objective(s): To use ordinal numbers first through tenth to identify position.

(B) read, write, and represent whole numbers from 0 to at least 20 with and without objects or pictures;

4-16 Number Patterns—pp. 145–146

Objective(s): To identify, extend, describe, and predict number patterns.

5-1 Identify and Write 11 and 12—pp. 159–160

Objective(s): To identify, show, and draw groups of 11 and 12; to read and write the numbers 11 and 12.

5-2 Compare Numbers to 12—pp. 161–162

Objective(s): To compare numbers up to 12; to identify a number as being less than, equal to, or greater than another number.

5-3 Order Numbers to 12—pp. 163–164

Objective(s): To count and order numbers from 0 to 12; to identify and write numbers to 12, just before, just after, or between other numbers.

5-4 Identify and Write 13 and 14—pp. 165–166

Objective(s): To identify, show, and draw groups of 13 and 14; to read and write the numbers 13 and 14.

5-5 Identify and Write 15 and 16—pp. 167–168

Objective(s): To identify, show, and draw groups of 15 and 16; to read and write the numbers 15 and 16.

5-6 Identify and Write 17 and 18—pp. 169–170

Objective(s): To identify, show, and draw groups of 17 and 18; to read and write the numbers 17 and 18.

5-7 Identify and Write 19 and 20—pp. 171–172

Objective(s): To identify, show, and draw groups of 19 and 20; to read and write the numbers 19 and 20.

***5-7A Count Out That Many—Online**

Objective(s): To count out 1- 20 objects; to count and identify the number of objects in a set and know that the last number counted tells "how many."

***5-7B Count Numbers to 20—Online**

Objective(s): To count and write numbers to 20, just before, just after, or between other numbers; to count from 11- 20, beginning with any number.

4-1 As Many As—pp. 111–112

Objective(s): To show one-to-one correspondence; to identify groups with the same number of objects; to make groups with as many objects as a given group.

4-2 More—pp. 113–114

Objective(s): To compare and draw a group with more objects than a given group; to identify groups with more objects.

4-3 Fewer—pp. 115–116

Objective(s): To compare and draw a group with fewer objects than a given group; to identify groups with fewer objects.

4-4 Fewest, Most—pp. 117–118

Objective(s): To identify groups with the most and fewest objects.

4-5 Equalizing Sets—pp. 119–120

Objective(s): To equalize sets by drawing more or crossing out objects.

4-6 Identify and Write 0 and 1—pp. 123–124

Objective(s): To identify, show, and draw groups of 0 and 1 object; to read and write the numbers 0 and 1.

4-7 Identify and Write 2 and 3—pp. 125–126

Objective(s): To identify, show, and draw groups of 2 and 3 objects; to read and write the numbers 2 and 3.

4-8 Identify and Write 4 and 5—pp. 127–128

Objective(s): To identify, show, and draw groups of 4 and 5 objects; to read and write the numbers 4 and 5.

***4-8 A Count to Tell How Many—Online**

Objective(s): To count to tell the number of objects in a group; to count objects in different arrangements or in different orders; to count and identify the number of objects in a set and know that the last number counted tells "how many."

- *4-8B Order 0–5—Online**
Objective(s): To show a number's location on a line in number order; to count by ones to 5, starting at any number; to order numbers 0–5; to show that each successive number name refers to a quantity that is one larger.
- *4-8C Ways to Make 2, 3, 4, and 5—Online**
Objective(s): To decompose 3, 4, and 5 as two parts or subgroups of objects in more than one way; to draw a group of 2, 3, 4 or 5 objects.
- 4-10 Identify and Write 6 and 7—pp. 133–134**
Objective(s): To identify, show, and draw groups of 6 and 7; to read and write the numbers 6 and 7.
- *4-10A Ways to Make 6 and 7—Online**
Objective(s): To decompose 6 and 7 as two parts or subgroups of objects in more than one way; to draw a group of 6 or 7 objects.
- 4-11 Identify and Write 8 and 9—pp. 135–136**
Objective(s): To identify, show, and draw groups of 8 and 9; to read and write the numbers 8 and 9.
- *4-11A Ways to Make 8 and 9—Online**
Objective(s): To decompose 8 and 9 as two parts or subgroups of objects in more than one way; to draw a group of 8 or 9 objects.
- 4-12 Identify and Write 10—pp. 137–138**
Objective(s): To identify, show, and draw groups of 10; to read and write the number 10.
- *4-12A Ways to Make 10—Online**
Objective(s): To decompose 10 as two parts or subgroups of objects in more than one way; to draw a group of 10 objects; to find the number that makes 10 when added to the given number using objects or drawings and record answer with a drawing.
- *4-12B One More, One Fewer—Online**
Objective(s): To identify the number that tells one more than; to identify the number that tells one fewer.
- *4-12C Count to Compare Numbers—Online**
Objective(s): To compare numbers from 1–10 using counting strategies; to use one-to-one correspondence to count objects, pairing each number name with one object.
- 4-13 Numbers 1–10—pp. 139–140**
Objective(s): To recognize the order of numbers 1–10.
- 4-14 Number Line—pp. 141–142**
Objective(s): To count on and count back on a number line; to explore counting patterns on a number line.
- *4-14A Compare Numbers—Online**
Objective(s): To use a model to compare numbers to 10.
- 4-15 Ordinals: First to Tenth—pp. 143–144**
Objective(s): To use ordinal numbers first through tenth to identify position.
- 4-16 Number Patterns—pp. 145–146**
Objective(s): To identify, extend, describe, and predict number patterns.
- 5-1 Identify and Write 11 and 12—pp. 159–160**
Objective(s): To identify, show, and draw groups of 11 and 12; to read and write the numbers 11 and 12.
- 5-2 Compare Numbers to 12—pp. 161–162**
Objective(s): To compare numbers up to 12; to identify a number as being less than, equal to, or greater than another number.
- 5-3 Order Numbers to 12—pp. 163–164**
Objective(s): To count and order numbers from 0 to 12; to identify and write numbers to 12, just before, just after, or between other numbers.
- 5-4 Identify and Write 13 and 14—pp. 165–166**
Objective(s): To identify, show, and draw groups of 13 and 14; to read and write the numbers 13 and 14.

<p>(C) count a set of objects up to at least 20 and demonstrate that the last number said tells the number of objects in the set regardless of their arrangement or order;</p>	<p>5- 5 Identify and Write 15 and 16—pp. 167–168 Objective(s): To identify, show, and draw groups of 15 and 16; to read and write the numbers 15 and 16.</p> <p>5-6 Identify and Write 17 and 18—pp. 169–170 Objective(s): To identify, show, and draw groups of 17 and 18; to read and write the numbers 17 and 18.</p> <p>5-7 Identify and Write 19 and 20—pp. 171–172 Objective(s): To identify, show, and draw groups of 19 and 20; to read and write the numbers 19 and 20.</p> <p>*5-7A Count Out That Many—Online Objective(s): To count out 1- 20 objects; to count and identify the number of objects in a set and know that the last number counted tells "how many."</p> <p>*5-7B Count Numbers to 20—Online Objective(s): To count and write numbers to 20, just before, just after, or between other numbers; to count from 11- 20, beginning with any number.</p>
<p>(D) recognize instantly the quantity of a small group of objects in organized and random arrangements;</p>	<p>*4-8 A Count to Tell How Many—Online Objective(s): To count to tell the number of objects in a group; to count objects in different arrangements or in different orders; to count and identify the number of objects in a set and know that the last number counted tells "how many."</p> <p>4-6 Identify and Write 0 and 1—pp. 123–124 Objective(s): To identify, show, and draw groups of 0 and 1 object; to read and write the numbers 0 and 1.</p> <p>4-7 Identify and Write 2 and 3—pp. 125–126 Objective(s): To identify, show, and draw groups of 2 and 3 objects; to read and write the numbers 2 and 3.</p> <p>4-8 Identify and Write 4 and 5—pp. 127–128 Objective(s): To identify, show, and draw groups of 4 and 5 objects; to read and write the numbers 4 and 5.</p> <p>*4-8 A Count to Tell How Many—Online Objective(s): To count to tell the number of objects in a group; to count objects in different arrangements or in different orders; to count and identify the number of objects in a set and know that the last number counted tells "how many."</p> <p><i>*Related content—</i></p> <p>5-12 Estimate Groups—pp. 183–184 Objective(s): To estimate and identify group size as about 10, 20, or 30 objects; to verify the estimated number in a group by counting the objects.</p>
<p>(E) generate a set using concrete and pictorial models that represents a number that is more than, less than, and equal to a given number up to 20;</p>	<p>*4-12C Count to Compare Numbers—Online Objective(s): To compare numbers from 1–10 using counting strategies; to use one-to-one correspondence to count objects, pairing each number name with one object.</p> <p>5-2 Compare Numbers to 12—pp. 161–162 Objective(s): To compare numbers up to 12; to identify a number as being less than, equal to, or greater than another number.</p> <p>5-10 Compare Numbers to 31—pp. 179–180 Objective(s): To compare numbers up to 31; to identify a number as being less than, equal to, or greater than another number.</p> <p>9-7 Comparing Money—pp. 313–314 Objective(s): To compare two groups of coins to determine which amount is greater or which amount is less.</p>
<p>(F) generate a number that is one more than or one less than another number up to at least 20;</p>	<p>*4-12B One More, One Fewer—Online Objective(s): To identify the number that tells one more than; to identify the number that tells one fewer.</p> <p>7-2 Add 1—pp. 239–240 Objective(s): To add 1 to numbers 1 through 7 using manipulatives; to complete number sentences.</p>

(G) compare sets of objects up to at least 20 in each set using comparative language;

(H) use comparative language to describe two numbers up to 20 presented as written numerals; and

(I) compose and decompose numbers up to 10 with objects and pictures.

(3) Number and operations. The student applies mathematical process standards to develop an understanding of addition and subtraction situations in order to solve problems. The student is expected to:

(A) model the action of joining to represent addition and the action of separating to represent subtraction;

8-2 Subtract 1—pp. 271–272

Objective(s): To subtract 1 from numbers 1 through 9 using manipulatives; to complete subtraction sentences.

4-1 As Many As—pp. 111–112

Objective(s): To show one-to-one correspondence; to identify groups with the same number of objects; to make groups with as many objects as a given group.

4-2 More—pp. 113–114

Objective(s): To compare and draw a group with more objects than a given group; to identify groups with more objects.

4-3 Fewer—pp. 115–116

Objective(s): To compare and draw a group with fewer objects than a given group; to identify groups with fewer objects.

4-4 Fewest, Most—pp. 117–118

Objective(s): To identify groups with the most and fewest objects.

***4-12C Count to Compare Numbers—Online**

Objective(s): To compare numbers from 1–10 using counting strategies; to use one-to-one correspondence to count objects, pairing each number name with one object.

5-2 Compare Numbers to 12—pp. 161–162

Objective(s): To compare numbers up to 12; to identify a number as being less than, equal to, or greater than another number.

5-10 Compare Numbers to 31—pp. 179–180

Objective(s): To compare numbers up to 31; to identify a number as being less than, equal to, or greater than another number.

9-7 Comparing Money—pp. 313–314

Objective(s): To compare two groups of coins to determine which amount is greater or which amount is less.

***4-8C Ways to Make 2, 3, 4, and 5—Online**

Objective(s): To decompose 3, 4, and 5 as two parts or subgroups of objects in more than one way; to draw a group of 2, 3, 4 or 5 objects.

***4-10A Ways to Make 6 and 7—Online**

Objective(s): To decompose 6 and 7 as two parts or subgroups of objects in more than one way; to draw a group of 6 or 7 objects.

***4-11A Ways to Make 8 and 9—Online**

Objective(s): To decompose 8 and 9 as two parts or subgroups of objects in more than one way; to draw a group of 8 or 9 objects.

***4-12A Ways to Make 10—Online**

Objective(s): To decompose 10 as two parts or subgroups of objects in more than one way; to draw a group of 10 objects; to find the number that makes 10 when added to the given number using objects or drawings and record answer with a drawing.

7-1 Joining—pp. 237–238

Objective(s): To understand addition as the joining of two groups; to describe the effect of joining sets of objects.

***7-1A Model Joining Stories—Online**

Objective(s): To model addition using concrete objects; to model addition as the joining of two groups; to use addition stories to describe joining; to represent addition by using an expression.

8-1 Take Away—pp. 269–270

Objective(s): To understand and represent subtraction as a separating action.

- (B) solve word problems using objects and drawings to find sums up to 10 and differences within 10; and

***8-1A Model Subtraction Stories—Online**

Objective(s): To model subtraction using concrete objects; to model subtraction as a separating action; to use subtraction stories to describe taking away; to represent subtraction by using an expression.

***4-8C Ways to Make 2, 3, 4, and 5—Online**

Objective(s): To decompose 3, 4, and 5 as two parts or subgroups of objects in more than one way; to draw a group of 2, 3, 4 or 5 objects.

***4-10A Ways to Make 6 and 7—Online**

Objective(s): To decompose 6 and 7 as two parts or subgroups of objects in more than one way; to draw a group of 6 or 7 objects.

***4-11A Ways to Make 8 and 9—Online**

Objective(s): To decompose 8 and 9 as two parts or subgroups of objects in more than one way; to draw a group of 8 or 9 objects.

***4-12A Ways to Make 10—Online**

Objective(s): To decompose 10 as two parts or subgroups of objects in more than one way; to draw a group of 10 objects; to find the number that makes 10 when added to the given number using objects or drawings and record answer with a drawing.

7-1 Joining—pp. 237–238

Objective(s): To understand addition as the joining of two groups; to describe the effect of joining sets of objects.

***7-1A Model Joining Stories—Online**

Objective(s): To model addition using concrete objects; to model addition as the joining of two groups; to use addition stories to describe joining; to represent addition by using an expression.

7-2 Add 1—pp. 239–240

Objective(s): To add 1 to numbers 1 through 7 using manipulatives; to complete number sentences.

7-3 Add 2—pp. 241–242

Objective(s): To add 2 to numbers 0 through 7 using manipulatives; to complete addition sentences.

7-4 Add 3—pp. 243–244

Objective(s): To add 3 to numbers 0 through 6 using manipulatives; to complete addition sentences.

7-5 Add 4—pp. 245–246

Objective(s): To add 4 to numbers 0 through 5 using manipulatives; to complete addition sentences.

***7-5-A Use a Bar Model to Add—Online**

Objective(s): To use a bar diagram to solve addition word problems; to represent addition by using a number sentence.

7-6 Vertical Addition—pp. 249–250

Objective(s): To read and add numbers in vertical form.

7-7 Use Ten-Frames to Add—pp. 251–252

Objective(s): To add sums of 10 in vertical form using a ten-frame.

8-1 Take Away—pp. 269–270

Objective(s): To understand and represent subtraction as a separating action.

***8-1A Model Subtraction Stories—Online**

Objective(s): To model subtraction using concrete objects; to model subtraction as a separating action; to use subtraction stories to describe taking away; to represent subtraction by using an expression.

8-2 Subtract 1—pp. 271–272

Objective(s): To subtract 1 from numbers 1 through 9 using manipulatives; to complete subtraction sentences.

8-3 Subtract 2—pp. 273–274

Objective(s): To subtract 2 from numbers 2 through 9 using manipulatives; to complete subtraction sentences.

(C) explain the strategies used to solve problems involving adding and subtracting within 10 using spoken words, concrete and pictorial models, and number sentences.

(4) Number and operations. The student applies mathematical process standards to identify coins in order to recognize the need for monetary transactions. The student is expected to identify U.S. coins by name, including pennies, nickels, dimes, and quarters.

8-4 Subtract 3—pp. 275–276

Objective(s): To subtract 3 from numbers 3 through 9 using manipulatives; to complete subtraction sentences.

8-5 Subtract 4—pp. 277–278

Objective(s): To subtract 4 from numbers 4 through 9 using manipulatives; to complete subtraction sentences.

***8-5A Use a Bar Model to Subtract—Online**

Objective(s): To use a bar diagram to solve subtraction word problems.

8-6 Vertical Subtraction—pp. 281–282

Objective(s): To read and subtract numbers in vertical form.

8-7 Addition and Subtraction Patterns—pp. 283–284

Objective(s): To identify addition and subtraction patterns; to add or subtract to show number patterns.

8-8 Use Ten-Frames to Subtract—pp. 285–286

Objective(s): To use ten-frames to subtract from 10; to complete subtraction in vertical form.

7-8 Problem Solving Strategy: Write a Number Sentence—pp. 253–254

Objective(s): To solve problems by using the Write a Number Sentence strategy.

8-9 Problem Solving Strategy: Choose the Operation—pp. 287–288

Objective(s): To solve problems by using the Choose the Operation strategy.

9-1 Pennies and Nickels—pp. 299–300

Objective(s): To identify a penny and a nickel.

9-2 Count On from Pennies and Nickels—pp. 301–302

Objective(s): To identify the value of a penny as 1 cent and a nickel as 5 cents; to count on from pennies and nickels.

9-3 Dimes and Quarters—pp. 303–304

Objective(s): To identify a dime and a quarter.

9-4 Count On from Dimes and Quarters—pp. 305–306

Objective(s): To identify the value of a dime as 10 cents and a quarter as 25 cents; to count on from dimes and quarters.

9-5 Trading for Nickels—pp. 309–310

Objective(s): To trade 5 pennies for 1 nickel and 10 pennies for 2 nickels or 5 pennies and 1 nickel for 2 nickels.

9-6 Trading for Dimes—pp. 311–312

Objective(s): To trade 10 pennies for 1 dime, 2 nickels for 1 dime, or 1 nickel and 5 pennies for 1 dime.

9-7 Comparing Money—pp. 313–314

Objective(s): To compare two groups of coins to determine which amount is greater or which amount is less.

9-8 Using Money—pp. 315–316

Objective(s): To match the cost of an item to the correct coin amount.

9-9 Adding Money—pp. 317–318

Objective(s): To add cent amounts to 9¢.

9-10 Subtracting Money—pp. 319–320

Objective(s): To subtract cent amounts up to 4¢ from 4¢ to 9¢.

9-11 Problem Solving Strategy: Use a Model—pp. 321–322

Objective(s): To solve problems by using a model.

Ch. 9 Connections: Math and Real World (patterns using coins)—p. 324

Ch. 9 Enrichment: Equal Shares (use coins to model equal shares)—p. 328

Ch. 9 Read Aloud: “Two Little Pigs”—pp. 329–332

KINDERGARTEN TEXAS ESSENTIAL KNOWLEDGE AND SKILLS FOR MATHEMATICS

(5) Algebraic reasoning. The student applies mathematical process standards to identify the pattern in the number word list. The student is expected to recite numbers up to at least 100 by ones and tens beginning with any given number.

(6) 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) identify two-dimensional shapes, including circles, triangles, rectangles, and squares as special rectangles;

(B) identify three-dimensional solids, including cylinders, cones, spheres, and cubes, in the real world;

(C) identify two-dimensional components of three-dimensional objects;

SADLIER *PROGRESS IN MATHEMATICS* KINDERGARTEN

4-16 Number Patterns—pp. 145–146

Objective(s): To identify, extend, describe, and predict number patterns.

5-3 Order Numbers to 12—pp. 163–164

Objective(s): To count and order numbers from 0 to 12; to identify and write numbers to 12, just before, just after, or between other numbers.

8-7 Addition and Subtraction Patterns—pp. 283–284

Objective(s): To identify addition and subtraction patterns; to add or subtract to show number patterns.

2-4 Plane Figures on Solids—pp. 43–44

Objective(s): To identify plane figures that make up the flat surfaces of solids.

***2-4A Plane Figures—Online**

Objective(s): To use informal language to describe similarities, differences, parts, and attributes of closed plane figures.

2-5 Triangle—pp. 45–46

Objective(s): To identify a triangle and objects shaped like triangles; to identify corners and sides of a triangle; to draw different types of triangles.

2-6 Square and Rectangle—pp. 47–48

Objective(s): To identify a square and rectangle, and objects shaped like squares and rectangles; to identify the sides and corners of a square and rectangle; to draw squares and rectangles.

2-7 Circle—pp. 49–50

Objective(s): To identify a circle and objects shaped like circles.

***2-7A Compare Plane and Solid Figures—Online**

Objective(s): To compare two- and three-dimensional figures in different sizes and orientations; to identify shapes as either two- or three-dimensional (flat or solid); to use informal language to describe similarities, differences, parts, and attributes of three-dimensional figures.

2-1 Cylinder, Cone, and Sphere—pp. 37–38

Objective(s): To identify a cylinder and classify objects shaped like a cylinder; to identify a cone and classify objects shaped like a cone; to identify a sphere and classify objects shaped like a sphere.

2-2 Cube and Rectangular Prism—pp. 39–40

Objective(s): To identify a cube and classify objects shaped like a cube; to identify a rectangular prism and classify objects shaped like a rectangular prism.

***2-2A Recognize Solid Shapes—Online**

Objective(s): To use spatial reasoning to classify real-world structures in the environment that are shaped like solid figures; to identify simple solid figures in a composite shape; to model shapes in the world by drawing.

2-4 Plane Figures on Solids—pp. 43–44

Objective(s): To identify plane figures that make up the flat surfaces of solids.

(D) identify attributes of two-dimensional shapes using informal and formal geometric language interchangeably;

(E) classify and sort a variety of regular and irregular two- and three-dimensional figures regardless of orientation or size; and

***2-7A Compare Plane and Solid Figures—Online**

Objective(s): To compare two- and three-dimensional figures in different sizes and orientations; to identify shapes as either two- or three-dimensional (flat or solid); to use informal language to describe similarities, differences, parts, and attributes of three-dimensional figures.

2-4 Plane Figures on Solids—pp. 43–44

Objective(s): To identify plane figures that make up the flat surfaces of solids.

***2-4A Plane Figures—Online**

Objective(s): To use informal language to describe similarities, differences, parts, and attributes of closed plane figures.

2-5 Triangle—pp. 45–46

Objective(s): To identify a triangle and objects shaped like triangles; to identify corners and sides of a triangle; to draw different types of triangles.

2-6 Square and Rectangle—pp. 47–48

Objective(s): To identify a square and rectangle, and objects shaped like squares and rectangles; to identify the sides and corners of a square and rectangle; to draw squares and rectangles.

2-7 Circle—pp. 49–50

Objective(s): To identify a circle and objects shaped like circles.

1-1 Alike/Same—pp. 3–4

Objective(s): To sort and group objects based on the likeness of attributes.

1-2 Different—pp. 5–6

Objective(s): To identify an object based on the difference of attributes.

1-3 Sort by Color—pp. 7–8

Objective(s): To identify and sort objects that are the same color.

1-4 Same Shape—pp. 9–10

Objective(s): To identify and sort objects that are the same shape.

1-5 Sort by Size—pp. 13–14

Objective(s): To sort small and big objects.

1-6 Sort by Color and Shape—pp. 15–16

Objective(s): To sort objects by two attributes, color and shape.

1-7 Sort by Shape and Size—pp. 17–18

Objective(s): To sort objects by two attributes, shape and size.

1-8 Sort Two Ways (color and shape)—pp. 19–20

Objective(s): To sort objects based on the likeness of attributes.

2-1 Cylinder, Cone, and Sphere—pp. 37–38

Objective(s): To identify a cylinder and classify objects shaped like a cylinder; to identify a cone and classify objects shaped like a cone; to identify a sphere and classify objects shaped like a sphere.

2-2 Cube and Rectangular Prism—pp. 39–40

Objective(s): To identify a cube and classify objects shaped like a cube; to identify a rectangular prism and classify objects shaped like a rectangular prism.

***2-2A Recognize Solid Shapes—Online**

Objective(s): To use spatial reasoning to classify real-world structures in the environment that are shaped like solid figures; to identify simple solid figures in a composite shape; to model shapes in the world by drawing.

2-3 Moving Shapes—pp. 41–42

Objective(s): To sort solids by whether they can roll, slide, or be stacked; to identify objects that can roll, slide, or be stacked.

2-4 Plane Figures on Solids—pp. 43–44

Objective(s): To identify plane figures that make up the flat surfaces of solids.
 plane figure; to separate shapes to make other shapes.

- (F) create two-dimensional shapes using a variety of materials and drawings.

(7) Geometry and measurement. The student applies mathematical process standards to directly compare measurable attributes. The student is expected to:

- (A) give an example of a measurable attribute of a given object, including length, capacity, and weight; and

***2-4A Plane Figures—Online**

Objective(s): To use informal language to describe similarities, differences, parts, and attributes of closed plane figures.

2-5 Triangle—pp. 45–46

Objective(s): To identify a triangle and objects shaped like triangles; to identify corners and sides of a triangle; to draw different types of triangles.

2-6 Square and Rectangle—pp. 47–48

Objective(s): To identify a square and rectangle, and objects shaped like squares and rectangles; to identify the sides and corners of a square and rectangle; to draw squares and rectangles.

2-7 Circle—pp. 49–50

Objective(s): To identify a circle and objects shaped like circles.

***2-7A Compare Plane and Solid Figures—Online**

Objective(s): To compare two- and three-dimensional figures in different sizes and orientations; to identify shapes as either two- or three-dimensional (flat or solid); to use informal language to describe similarities, differences, parts, and attributes of three-dimensional figures.

2-8 Combine and Separate Figures—pp. 51–52

Objective(s): To put together shapes to cover exactly a given

2-5 Triangle—pp. 45–46

Objective(s): To identify a triangle and objects shaped like triangles; to identify corners and sides of a triangle; to draw different types of triangles.

2-6 Square and Rectangle—pp. 47–48

Objective(s): To identify a square and rectangle, and objects shaped like squares and rectangles; to identify the sides and corners of a square and rectangle; to draw squares and rectangles.

2-7 Circle—pp. 49–50

Objective(s): To identify a circle and objects shaped like circles.

2-10 Shape Patterns—pp. 57–58

Objective(s): To identify, extend, describe, and predict shape patterns.

Performance Assessment (draw a triangle)—p. 71

3-3 Over, On, Under (draw a circle, triangle, square)—pp. 81–82

Objective(s): To identify the positions over, on, and under.

3-7 Left, Between, Right (draw a triangle)—pp. 91–92

Objective(s): To identify the positions left, right, and between.

4-1 As Many As (draw squares)—pp. 111–112

Objective(s): To show one-to-one correspondence; to identify groups with the same number of objects; to make groups with as many objects as a given group.

4-10 Identify and Write 6 and 7 (draw circles, squares)—pp. 133–134

Objective(s): To identify, show, and draw groups of 6 and 7; to read and write the numbers 6 and 7.

11-1 Compare by Size—pp. 365–366

Objective(s): To identify which of two objects is smaller or larger.

11-2 Compare by Length—pp. 367–368

Objective(s): To identify which of two objects is longer or shorter.

11-3 Order by Length—pp. 369–370

Objective(s): To identify which of three objects is longest and which is shortest; to order objects by length.

11-4 Compare by Height—pp. 371–372

Objective(s): To identify which of two objects is shorter or taller.

(B) compare two objects with a common measurable attribute to see which object has more of/less of the attribute and describe the difference.

(8) Data analysis. The student applies mathematical process standards to collect and organize data to make it useful for interpreting information. The student is expected to:

(A) collect, sort, and organize data into two or three categories;

11-5 Measure Length—pp. 373–374

Objective(s): To estimate and measure the length of objects using nonstandard units.

11-6 Measure Distance Around—pp. 375–376

Objective(s): To measure the distance around a shape using nonstandard units.

11-7 Weight: Heavier or Lighter—pp. 379–380

Objective(s): To identify which of two objects is heavier or lighter.

11-8 Order by Weight—pp. 381–382

Objective(s): To order by weight; to identify which of three objects is heaviest and which is lightest.

11-9 Holds More or Holds Less—pp. 383–384

Objective(s): To identify which of two different-size containers holds more or less.

11-10 Order by Capacity—pp. 385–386

Objective(s): To order by capacity; to identify which of three objects holds the most and which holds the least.

***11-10A Multiple Measureable Attributes—Online**

Objective(s): To describe measureable attributes (length or weight) of an object.

***2-7A Compare Plane and Solid Figures—Online**

Objective(s): To compare two- and three-dimensional figures in different sizes and orientations; to identify shapes as either two- or three-dimensional (flat or solid); to use informal language to describe similarities, differences, parts, and attributes of three-dimensional figures.

11-1 Compare by Size—pp. 365–366

Objective(s): To identify which of two objects is smaller or larger.

11-2 Compare by Length—pp. 367–368

Objective(s): To identify which of two objects is longer or shorter.

11-3 Order by Length—pp. 369–370

Objective(s): To identify which of three objects is longest and which is shortest; to order objects by length.

11-4 Compare by Height—pp. 371–372

Objective(s): To identify which of two objects is shorter or taller.

11-8 Order by Weight—pp. 381–382

Objective(s): To order by weight; to identify which of three objects is heaviest and which is lightest.

11-9 Holds More or Holds Less—pp. 383–384

Objective(s): To identify which of two different-size containers holds more or less.

11-10 Order by Capacity—pp. 385–386

Objective(s): To order by capacity; to identify which of three objects holds the most and which holds the least.

***11-10A Multiple Measureable Attributes—Online**

Objective(s): To describe measureable attributes (length or weight) of an object.

***6-2A Sorting Categories—Online**

Objective(s): To count the number of objects in different categories; to sort categories by the number of objects in each category.

6-5 Surveys and Real Graphs—pp. 209–210

Objective(s): To poll children about a topic and display the data in a real graph; to discuss questions about data collected; to generalize and make predictions; to formulate questions for a two-choice survey.

KINDERGARTEN TEXAS ESSENTIAL KNOWLEDGE AND SKILLS FOR MATHEMATICS	SADLIER <i>PROGRESS IN MATHEMATICS</i> KINDERGARTEN
<p>(B) use data to create real-object and picture graphs; and</p>	<p>6-6 Bar Graphs—pp. 211–212 Objective(s): To use tally marks to record data on a bar graph; to collect, organize, and interpret data; to identify the purpose of a bar graph.</p> <hr/> <p>6-1 Tally Marks—pp. 201–202 Objective(s): To write the number of objects in a group to match the number of tally marks.</p> <p>6-2 Tally Charts—pp. 203–204 Objective(s): To use tally marks to record data on a chart; to interpret tally charts.</p> <p>*6-2A Sorting Categories—Online Objective(s): To count the number of objects in different categories; to sort categories by the number of objects in each category.</p> <p>6-3 Picture Graphs—pp. 205–206 Objective(s): To use tally marks to record data on a picture graph; to identify the purpose of a picture graph; to collect, organize, and interpret data.</p> <p>6-4 Pictographs—pp. 207–208 Objective(s): To use tallies to record data on a pictograph; to complete and interpret a pictograph; to identify the purpose of a pictograph.</p> <p>6-5 Surveys and Real Graphs—pp. 209–210 Objective(s): To poll children about a topic and display the data in a real graph; to discuss questions about data collected; to generalize and make predictions; to formulate questions for a two-choice survey.</p> <p>6-6 Bar Graphs—pp. 211–212 Objective(s): To use tally marks to record data on a bar graph; to collect, organize, and interpret data; to identify the purpose of a bar graph.</p> <p>11-12 Problem Solving Strategy: Make a Graph—pp. 389–390 Objective(s): To solve problems by making a graph.</p>
<p>(C) draw conclusions from real-object and picture graphs.</p>	<p>6-3 Picture Graphs—pp. 205–206 Objective(s): To use tally marks to record data on a picture graph; to identify the purpose of a picture graph; to collect, organize, and interpret data.</p>
<p>(9) 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:</p> <p>(A) identify ways to earn income;</p> <p>(B) differentiate between money received as income and money received as gifts;</p> <p>(C) list simple skills required for jobs; and</p> <p>(D) distinguish between wants and needs and identify income as a source to meet one's wants and needs.</p>	<p>n/a</p> <hr/> <p>n/a</p> <hr/> <p>n/a</p> <hr/> <p>n/a</p>