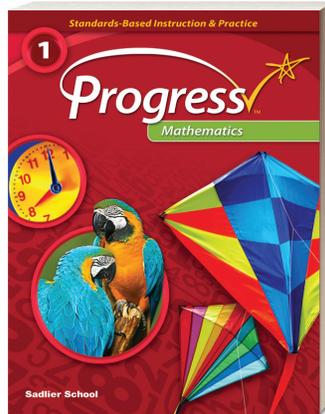


SADLIER

Progress Mathematics

Standards-Based Instruction & Practice



Aligned to the

Colorado Academic Standards for Mathematics

First Grade

Contents

1. Number Sense, Properties, and Operations	2
2. Patterns, Functions, and Algebraic Structures	4
3. Data Analysis, Statistics, and Probability	4
4. Shape, Dimension, and Geometric Relationships	5

Standard: 1. Number Sense, Properties, and Operations

Prepared Graduates:

- Understand the structure and properties of our number system. At their most basic level numbers are abstract symbols that represent real-world quantities

Concepts and skills students master:

1. The whole number system describes place value relationships within and beyond 100 and forms the foundation for efficient algorithms

FIRST GRADE EVIDENCE OUTCOMES

SADLIER *PROGRESS MATHEMATICS*, GRADE 1

Students can:

a. Count to 120 (CCSS: 1.NBT.1)

- i. Count starting at any number less than 120. (CCSS: 1.NBT.1)
- ii. Within 120, read and write numerals and represent a number of objects with a written numeral. (CCSS: 1.NBT.1)

Lesson 11 **Count to 120**—pp. 96–103

Lesson 12 **Read and Write Numbers**—pp. 104–111

b. Represent and use the digits of a two-digit number. (CCSS: 1.NBT.2)

- i. Represent the digits of a two-digit number as tens and ones.1 (CCSS: 1.NBT.2)
- ii. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$. (CCSS: 1.NBT.3)
- iii. Compare two sets of objects, including pennies, up to at least 25 using language such as "three more or three fewer" (PFL)

Lesson 13 **Understand Place Value: Tens and Ones**—pp. 112–119

Lesson 14 **Compare Numbers**—pp. 120–127

Lesson 14 **Compare Numbers**—pp. 120–127

c. Use place value and properties of operations to add and subtract. (CCSS: 1.NBT)

- i. Add within 100, including adding a two-digit number and a one-digit number and adding a two-digit number and a multiple of ten, using concrete models or drawings, and/or the relationship between addition and subtraction. (CCSS: 1.NBT.4)
- ii. Identify coins and find the value of a collection of two coins (PFL)
- iii. Mentally find 10 more or 10 less than any two-digit number, without counting; explain the reasoning used. (CCSS: 1.NBT.5)

Lesson 15 **Add Two-Digit Numbers**—pp. 128–135

Lesson 21 **Money**—pp. 186–193

Lesson 16 **Find 10 More and 10 Less**—pp. 136–143

FIRST GRADE EVIDENCE OUTCOMES

- iv. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. (CCSS: 1.NBT.6)
- v. Relate addition and subtraction strategies to a written method and explain the reasoning used. (CCSS: 1.NBT.4 and 1.NBT.6)

SADLIER *PROGRESS MATHEMATICS*, GRADE 1

Lesson 17 Subtract Multiples of 10—pp. 144–161

Lesson 15 Add Two-Digit Numbers—pp. 128–135

Lesson 17 Subtract Multiples of 10—pp. 144–161

Standard: 1. Number Sense, Properties, and Operations

Prepared Graduates:

- Apply transformation to numbers, shapes, functional representations, and data

Concepts and skills students master:

- 2. Number relationships can be used to solve addition and subtraction problems

FIRST GRADE EVIDENCE OUTCOMES

Students can:

a. Represent and solve problems involving addition and subtraction. (CCSS: 1.OA)

- i. Use addition and subtraction within 20 to solve word problems. (CCSS: 1.OA.1)
- ii. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20. (CCSS: 1.OA.2)

b. Apply properties of operations and the relationship between addition and subtraction. (CCSS: 1.OA)

- i. Apply properties of operations as strategies to add and subtract. (CCSS: 1.OA.3)
- ii. Relate subtraction to unknown-addend problem. (CCSS: 1.OA.4)

c. Add and subtract within 20. (CCSS: 1.OA)

- i. Relate counting to addition and subtraction. (CCSS: 1.OA.5)
- ii. Add and subtract within 20 using multiple strategies. (CCSS: 1.OA.6)

SADLIER *PROGRESS MATHEMATICS*, GRADE 1

Lesson 1 Problem Solving: Addition—pp. 10–17

Lesson 2 Problem Solving: Subtraction—pp. 18–25

Lesson 3 Problem Solving: Addition of Three Numbers—pp. 26–33

Lesson 4 Apply Properties of Operations—pp. 34–41

Lesson 5 Relate Addition and Subtraction Facts—pp. 42–49

Lesson 6 Relate Counting to Addition and Subtraction—pp. 50–57

Lesson 7 Addition and Subtraction Facts to 10 (fluency)—pp. 58–65

Lesson 8 Addition and Subtraction Facts to 20—pp. 66–73

FIRST GRADE EVIDENCE OUTCOMES	SADLIER <i>PROGRESS MATHEMATICS</i> , GRADE 1
iii. Demonstrate fluency for addition and subtraction within 10. (CCSS: 1.OA.6)	Lesson 7 Addition and Subtraction Facts to 10 (fluency)—pp. 58–65
	Lesson 8 Addition and Subtraction Facts to 20 —pp. 66–73
d. Use addition and subtraction equations to show number relationships. (CCSS: 1.OA)	
i. Use the equal sign to demonstrate equality in number relationships. (CCSS: 1.OA.7)	Lesson 9 Addition and Subtraction Equations —pp. 74–81
ii. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. (CCSS: 1.OA.8)	Lesson 10 Find Missing Numbers in Equations —pp. 82–95

Standard: 2. Patterns, Functions, and Algebraic Structures

Prepared Graduates:

The prepared graduate competencies are the preschool through twelfth-grade concepts and skills that all students who complete the Colorado education system must have to ensure success in a postsecondary and workforce setting.

Expectations for this standard are integrated into the other standards at preschool through third grade.

Standard: 3. Data Analysis, Statistics, and Probability

Prepared Graduates:

- Solve problems and make decisions that depend on understanding, explaining, and quantifying the variability in data

Concepts and skills students master:

1. Visual displays of information can be used to answer questions

FIRST GRADE EVIDENCE OUTCOMES	SADLIER <i>PROGRESS MATHEMATICS</i> , GRADE 1
Students can:	
a. Represent and interpret data. (CCSS: 1.MD)	
i. Organize, represent, and interpret data with up to three categories. (CCSS: 1.MD.4)	Lesson 22 Use Tables —pp. 194–207
ii. Ask and answer questions about the total number of data points how many in each category, and how many more or less are in one category than in another. (CCSS: 1.MD.4)	Lesson 22 Use Tables —pp. 194–207

Standard: 4. Shape, Dimension, and Geometric Relationships

Prepared Graduates:

- Make claims about relationships among numbers, shapes, symbols, and data and defend those claims by relying on the properties that are the structure of mathematics

Concepts and skills students master:

1. Shapes can be described by defining attributes and created by composing and decomposing

FIRST GRADE EVIDENCE OUTCOMES

Students can:

- a. Distinguish between defining attributes¹ versus non-defining attributes. (CCSS: 1.G.1)
- b. Build and draw shapes to possess defining attributes. (CCSS: 1.G.1)
- c. Compose two-dimensional shapes or three-dimensional shapes to create a composite shape, and compose new shapes from the composite shape. (CCSS: 1.G.2)
- d. Partition circles and rectangles into two and four equal shares. (CCSS: 1.G.3)
 - i. Describe shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. (CCSS: 1.G.3)
 - ii. Describe the whole as two of, or four of the equal shares. (CCSS: 1.G.3)

SADLIER *PROGRESS MATHEMATICS*, GRADE 1

Lesson 23 Identify Shapes—pp. 208–215

Lesson 23 Identify Shapes—pp. 208–215

Lesson 24 Two-Dimensional Shapes—pp. 216–223

Lesson 25 Three-Dimensional Shapes—pp. 224–231

Lesson 26 Equal Shares—pp. 232–239

Lesson 26 Equal Shares—pp. 232–239

Lesson 26 Equal Shares—pp. 232–239

Standard: 4. Shape, Dimension, and Geometric Relationships

Prepared Graduates:

- Understand quantity through estimation, precision, order of magnitude, and comparison. The reasonableness of answers relies on the ability to judge appropriateness, compare, estimate, and analyze error

Concepts and skills students master:

2. Measurement is used to compare and order objects and events

FIRST GRADE EVIDENCE OUTCOMES

Students can:

- a. Measure lengths indirectly and by iterating length units. (CCSS: 1.MD)
 - i. Order three objects by length; compare the lengths of two objects indirectly by using a third object. (CCSS: 1.MD.1)
 - ii. Express the length of an object as a whole number of length units.⁶ (CCSS: 1.MD.2)

SADLIER *PROGRESS MATHEMATICS*, GRADE 1

Lesson 18 Compare and Order Lengths—pp. 162–169

Lesson 19 Measure Length in Length Units—pp. 170–177

FIRST GRADE EVIDENCE OUTCOMES

SADLIER *PROGRESS MATHEMATICS*, GRADE 1

b. Tell and write time. (CCSS: 1.MD)

- i. Tell and write time in hours and half-hours using analog and digital clocks. (CCSS: 1.MD.3)

Lesson 20 **Tell Time**—pp. 178–185

Lesson 21 **Money**—pp. 186–193