

# Sequential Skills

This set of charts lists, by strand, the skills that are assessed, taught, and practiced in the Skills Tutorial program. Each Strand ends with a Mastery Test. You can enter correlating data from the MathSteps program, another textbook program, state framework, formal assessments, or any other source in the right-hand column. Use your correlation to help you identify where in the basal program, framework, or standardized test each Skill aligns. When you make assignments, refer to your completed correlation to guide your choice of Skills, Skills Inventories, and Computation Tests.

## Strands and Major Topics

### **P1 Basic Number Concepts**

Write numbers, order numbers, group a 2- or 3-digit number

### **P2 Basic Skills: Addition**

Add two or three numbers, add with no regrouping, regroup ones

### **P3 Basic Skills: Subtraction**

Subtract with and without regrouping

### **1 Whole Numbers: Addition**

Add two or three numbers, add with and without regrouping

### **2 Whole Numbers: Subtraction**

Subtract with and without regrouping

### **3 Whole Numbers: Multiplication**

Multiply with and without regrouping, multiply by 10s, 100s, 1000s

### **4 Whole Numbers: Division**

Divide with and without a remainder, write the remainder as a fraction or decimal

### **5 Fractions: Basic Skills**

Represent part of a whole or group, find GCF, simplify, find LCM, write equivalent fractions, find LCD, write whole or mixed number as fraction (or the reverse)

### **6A Fractions: Addition**

Add with like or unlike denominators

### **6B Fractions: Subtraction**

Subtract with like or unlike denominators, subtract fraction or mixed number

### **7A Fractions: Multiplication**

Multiply fractions, mixed number and fraction, mixed number or whole number by mixed number

### **7B Fractions: Division**

Divide whole number by a fraction, divide mixed number or fraction by a fraction, whole number, or mixed number

### **8 Decimals**

Write decimals, round, write fraction as decimal, write decimal as fraction, add and subtract with and without regrouping, multiply decimals, divide decimals

### **9 Rates, Ratios, and Proportions**

Write ratios as fractions, determine equality, solve proportions, find unit rates

### **10 Percents**

Write decimals or fractions or mixed numbers as percents, write percents as fractions or mixed numbers, find percents



# Sequential Skills

## Strands and Skill Objectives

### Primary Strands

#### P1 Basic Number Concepts Correlation

1. Write the numbers 1–5.
2. Write the number 0.
3. Write the numbers 6–10.
4. Write in order the numbers 10, 20, ...90.
5. Write the numbers 11–20.
6. Write the numbers 21–99.
7. Write in order the numbers 100, 200, ...900.
8. Write the numbers 100–999.
9. Group a 2-digit number into tens and ones.
10. Group a 3-digit number into hundreds, tens, and ones.

#### P2 Basic Skills: Addition Correlation

1. Add two numbers with sums to 5.
  2. Add two numbers with sums to 10.
  3. Add two numbers with sums to 18.
  4. Add three numbers with sums to 10.
  5. Add three numbers with sums to 20.
- Review 1** (Skills 1–5)
6. Add a 2-digit number and a 1-digit number with no regrouping.
  7. Add a 2-digit number and a multiple of ten with no regrouping.
  8. Add two 2-digit numbers with no regrouping.
  9. Add a 2-digit number and a 1-digit number regrouping ones.
  10. Add two 2-digit numbers regrouping ones.
  11. Add two 3-digit numbers with no regrouping.

#### Review 2 (Skills 6–11)

#### P3 Basic Skills: Subtraction Correlation

1. Subtract two numbers with sums to 5.
  2. Subtract two numbers with sums to 10.
  3. Subtract two numbers with sums to 18.
- Review 1** (Skills 1–3)
4. Subtract a 1-digit number from a 2-digit number with no regrouping.
  5. Subtract a multiple of ten from a 2-digit number with no regrouping.
  6. Subtract two 2-digit numbers with no regrouping.

#### Review 2 (Skills 4–6)



## Primary Strands cont.

7. Subtract a 1-digit number from a 2-digit number with regrouping.
8. Subtract two 2-digit numbers with regrouping.
9. Subtract two 3-digit numbers with no regrouping.

**Review 3** (Skills 7–9)

## Intermediate Strands

### 1 Whole Numbers: Addition

### Correlation

1. Add two 1-digit numbers with sums to 18.
2. Add three 1-digit numbers with sums to 9.
3. Add three 1-digit numbers with sums of 10 or more.
4. Add two numbers with no regrouping, using 1- and 2-digit numbers.

**Review 1** (Skills 1–4)

5. Add two numbers, regrouping ones, using 1- to 4-digit numbers.
6. Add two numbers, regrouping tens, using 2- to 4-digit numbers.
7. Add two numbers, regrouping ones and tens, using 2- to 4-digit numbers.
8. Add three or more numbers, regrouping ones and tens, using 2- to 4-digit numbers.
9. Add two or more numbers with regrouping, using 4- to 6-digit numbers.

**Review 2** (Skills 5–9)

### 2 Whole Numbers: Subtraction

### Correlation

1. Subtract a number from 9 or less.
2. Subtract a 1-digit number from 18 or less.
3. Subtract a 1- or 2-digit number from a 2-digit number with no regrouping.
4. Subtract a 1- to 3-digit number from a 3-digit number with no regrouping.

**Review 1** (Skills 1–4)

5. Subtract a 1- to 3-digit number from a 2- or 3-digit number, regrouping tens.
6. Subtract a 2- or 3-digit number from a 3-digit number, regrouping hundreds.
7. Subtract a 3- or 4-digit number from a 4-digit number, regrouping hundreds.
8. Subtract a 2- or 3-digit number from a 3-digit number, regrouping tens and hundreds.
9. Subtract a 3- or 4-digit number from a 4-digit number, regrouping tens and hundreds.

10. Subtract a 4- or 5-digit number from a 5- or 6-digit number, with regrouping.

**Review 2** (Skills 5–10)



## Intermediate Strands cont.

### 3 Whole Numbers: Multiplication

### Correlation

1. Multiply two 1-digit numbers.
2. Multiply a 2- or 3-digit number by a 1-digit number with no regrouping.
3. Multiply a 2- or 3-digit number by a 1-digit number, regrouping ones.
4. Multiply a 2-digit number by a 1-digit number, regrouping ones and tens.
5. Multiply a 3- or 4-digit number by a 1-digit number, regrouping as necessary.

#### Review 1 (Skills 1–5)

6. Multiply a 2- to 4-digit number by a 2-digit multiple of 10.
7. Multiply a 3- or 4-digit number by a 3-digit multiple of 100.
8. Multiply a 4- or 5-digit number by a 4-digit multiple of 1,000.
9. Multiply two 2-digit numbers.
10. Multiply a 3- or 4-digit number by a 2-digit number.
11. Multiply a 3- or 4-digit number by a 2- to 4-digit number.
12. Multiply a 3- or 4-digit number by a 3-digit number using numbers with one or more zeros.

#### Review 2 (Skills 6–12)

### 4 Whole Numbers: Division

### Correlation

1. Divide a 2-digit number by a 1-digit number with a 1-digit number or 10 in the quotient, no remainder.
2. Divide a 2-digit number by a 1-digit number with a 2-digit number in the quotient, no remainder.
3. Divide a 3-digit number by a 1-digit number with no remainder.
4. Divide a 3- to 4-digit number by a 1-digit number with no remainder.
5. Divide a 2- to 4-digit number by a 2-digit number with no remainder.

#### Review 1 (Skills 1–5)

6. Divide a 1- to 4-digit number by a 1- or 2-digit number with a remainder.
7. Divide a 3- to 6-digit number by a 2- or 3-digit number with a remainder.
8. Divide a 2- to 4-digit number by a 1- to 3-digit number and write the remainder as a fraction.
9. Divide a 2- to 4-digit number by a 1- or 2-digit number and write the answer as a decimal.

#### Review 2 (Skills 6–9)



## Intermediate Strands cont.

### 5 Fractions: Basic Skills

### Correlation

1. Write a fraction to represent a given part of a whole unit.
2. Identify that part of a whole unit represented by a given fraction.
3. Write a fraction to represent what part a given number of objects is of a total group of objects.
4. Identify the objects in a group of objects as represented by a given fraction.

#### Review 1 (Skills 1–4)

5. Find the factors of a number.
6. Find the Greatest Common Factor of two or more numbers.
7. Write fractions in simplest form.

#### Review 2 (Skills 5–7)

8. Write the consecutive multiples of a number.
9. Find the Least Common Multiple of two or more numbers.
10. Write equivalent fractions.
11. Find the Least Common Denominator for two or more fractions.
12. Write two or more fractions with the Least Common Denominator.

#### Review 3 (Skills 8–12)

13. Write whole numbers or mixed numbers as fractions.
14. Write fractions as whole numbers or mixed numbers.
15. Rename a whole number or mixed number as an equivalent fraction.

#### Review 4 (Skills 13–15)

### 6A Fractions: Addition

### Correlation

1. Add fractions with like denominators.
2. Add mixed numbers with like denominators (no renaming).
3. Add mixed numbers with like denominators (with renaming).

#### Review 1 (Skills 1–3)

4. Add fractions with unlike denominators.
5. Add mixed numbers with unlike denominators.

#### Review 2 (Skills 4–5)



## Intermediate Strands cont.

### 6B Fractions: Subtraction

### Correlation

1. Subtract fractions with like denominators.
2. Subtract mixed numbers with like denominators (no renaming).
3. Subtract a fraction or a mixed number from a whole number (with renaming of whole numbers).
4. Subtract mixed numbers with like denominators (with renaming).

#### Review 1 (Skills 1–4)

5. Subtract fractions with unlike denominators.
6. Subtract mixed numbers with unlike denominators.

#### Review 2 (Skills 5–6)

### 7A Fractions: Multiplication

### Correlation

1. Multiply unit fractions.
2. Multiply fractions with numerators greater than one.
3. Multiply a whole number and a fraction.

#### Review 1 (Skills 1–3)

4. Multiply a mixed number and a fraction.
5. Multiply a mixed number or a whole number by a mixed number.

#### Review 2 (Skills 4–5)

### 7B Fractions: Division

### Correlation

1. Divide a whole number by a unit fraction.
2. Divide a whole number by a fraction.
3. Divide a fraction by a fraction.

#### Review 1 (Skills 1–3)

4. Divide a mixed number by a fraction.
5. Divide a fraction or a mixed number by a whole number.
6. Divide a whole number, a fraction, or a mixed number by a mixed number.

#### Review 2 (Skills 4–5)

### 8 Decimals

### Correlation

1. Write decimals to thousandths.

2. Round decimals.

3. Write fractions as decimals.

4. Write decimals as fractions.

5. Write mixed numbers as decimals.

6. Write decimals as mixed numbers.

#### Review 1 (Skills 1–6)



## Intermediate Strands cont.

7. Add decimals to thousandths with no regrouping.

8. Add decimals to thousandths with regrouping.

9. Subtract decimals to thousandths with no regrouping.

10. Subtract decimals to thousandths with regrouping.

11. Multiply with decimals.

12. Divide with decimals.

**Review 2** (Skills 7–12)

### 9 Rates, Ratios, and Proportions

**Correlation**

1. Write ratios as fractions.

2. Determine if ratios are equal.

3. Solve proportions.

**Review 1** (Skills 1–3)

4. Write equal rates as proportions.

5. Write and solve proportions.

6. Find unit rates.

**Review 2** (Skills 4–6)

### 10 Percents

**Correlation**

1. Write fractions as fractions with denominators of 100.

2. Write decimals or fractions with denominators of 100 as percents.

3. Write decimals to thousandths as percents.

4. Write fractions as percents.

**Review 1** (Skills 1–4)

5. Write mixed numbers as percents.

6. Write percents as fractions or mixed numbers.

7. Write percents as decimals.

**Review 2** (Skills 5–7)

8. Find a percent of a number.

9. Find the percent one number is of another number.

10. Find a number if a percent of the number is known.

**Review 1** (Skills 8–10)

