

# How Our Workbooks Build Fluency

# Fluency Pyramid

## Progressive

Essential concepts are introduced with foundational problems that make sense to students. Understanding is strengthened with problems that increase in complexity and level of abstraction.

## Structured

Problems throughout the books are mapped to state or district standards, which are listed at the top of each page.

## Flexible

Maintaining Skills and Building Fluency sections are easily adapted to the needs of a variety of teachers and classrooms. The mini-lessons in the Essential Math Review provide an opportunity to review key math concepts and can be incorporated into any part of the instructional process.

## Customized

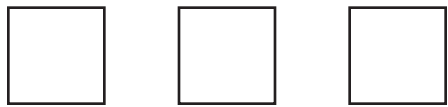
Our workbooks are designed to help students build fluency with state or district standards. Yearly updates incorporate feedback from students, teachers, principals, and administrators.

Informal Strategies

Formal Strategies

**Equal Parts and "What's the Whole?"**

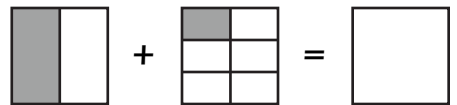
1. Four friends share 3 sandwiches so that each friend gets the same amount. Use the rectangles below to show how much of a sandwich each friend gets.



**Benchmark Fractions**

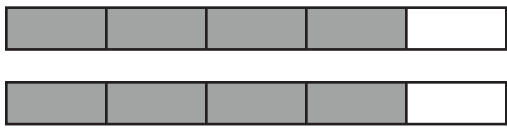
Use the rectangles to add these benchmark fractions.

2. Add  $\frac{1}{2}$  of a sandwich to  $\frac{1}{6}$  of a sandwich.



**Equivalent Fractions**

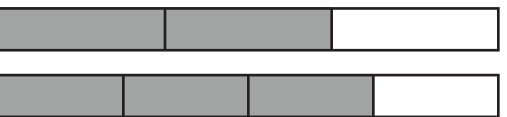
3. Use the bottom bar to show that  $\frac{4}{5} = \frac{12}{15}$ .



On the bottom bar, each fifth is split into \_\_\_\_ equal pieces.

**Common Denominators**


4. Split each bar into the same number of equal pieces.



Each third is split into \_\_\_\_ equal pieces.  
 Each fourth is split into \_\_\_\_ equal pieces.  
 Each bar is split into \_\_\_\_ equal pieces.

**Adding and Subtracting Fractions**

5.  $\frac{2}{3} + \frac{1}{4}$



*"Students like to work in the books and cannot wait to come up to the overhead projector to show their solutions."*

—Classroom Teacher

*"The workbooks support our district's core curriculum and eligible content for the state's math assessment."*

—District Administrator

*"The workbooks are easy to use and when sent home as homework, parents feel like they can assist their children."*

—Classroom Teacher

State Standards

Maintaining Skills

Building Fluency

Visual Models

Student Workbook

TEKS—GRADE 6

**4.2 Benchmark Fractions, Decimals, and Percents**

**Number, Operation, and Quantitative Reasoning**



- 6.1.B Generate equivalent forms of rational numbers, including whole numbers, fractions, and decimals



**Patterns, Relationships, and Algebraic Thinking**


- 6.3.B Represent ratios and percents with [concrete] models, fractions, and decimals

**MAINTAINING SKILLS**

1. Identify the fraction, decimal, and percent for the shaded part of each figure.

a)  d) 

b)  e) 

c) 

2. Convert each fraction to a decimal and a percent.


a)  $\frac{54}{100} =$  \_\_\_\_\_  
 b)  $\frac{3}{100} =$  \_\_\_\_\_


3. Convert each percent to a decimal and a fraction.


a) 82% = \_\_\_\_\_  
 b) 51% = \_\_\_\_\_

**BUILDING FLUENCY**

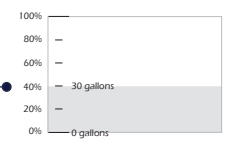
Identify the fraction of the bar that is shaded. Then label the bar with an equivalent decimal and percent.

1. 

2. 

3. 


4. A large fish tank that is 40% full has 30 gallons of water in it. Complete the scale on the tank. How much water is in a full tank?




5. Complete the table below for the tank in Problem 4.

Percents Full	40%	20%	80%	100%
Gallons of Water	30			

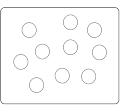
6. Shade in 20% of the granola bar below.



7. Shade in 60% of the granola bar below.



8. Shade in 80% percent of all the marbles.



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