

# Swun Math

## Program Overview

*A highly-effective and coherent math model with alignment in standards, curriculum, assessments, professional development and accountability measures.*

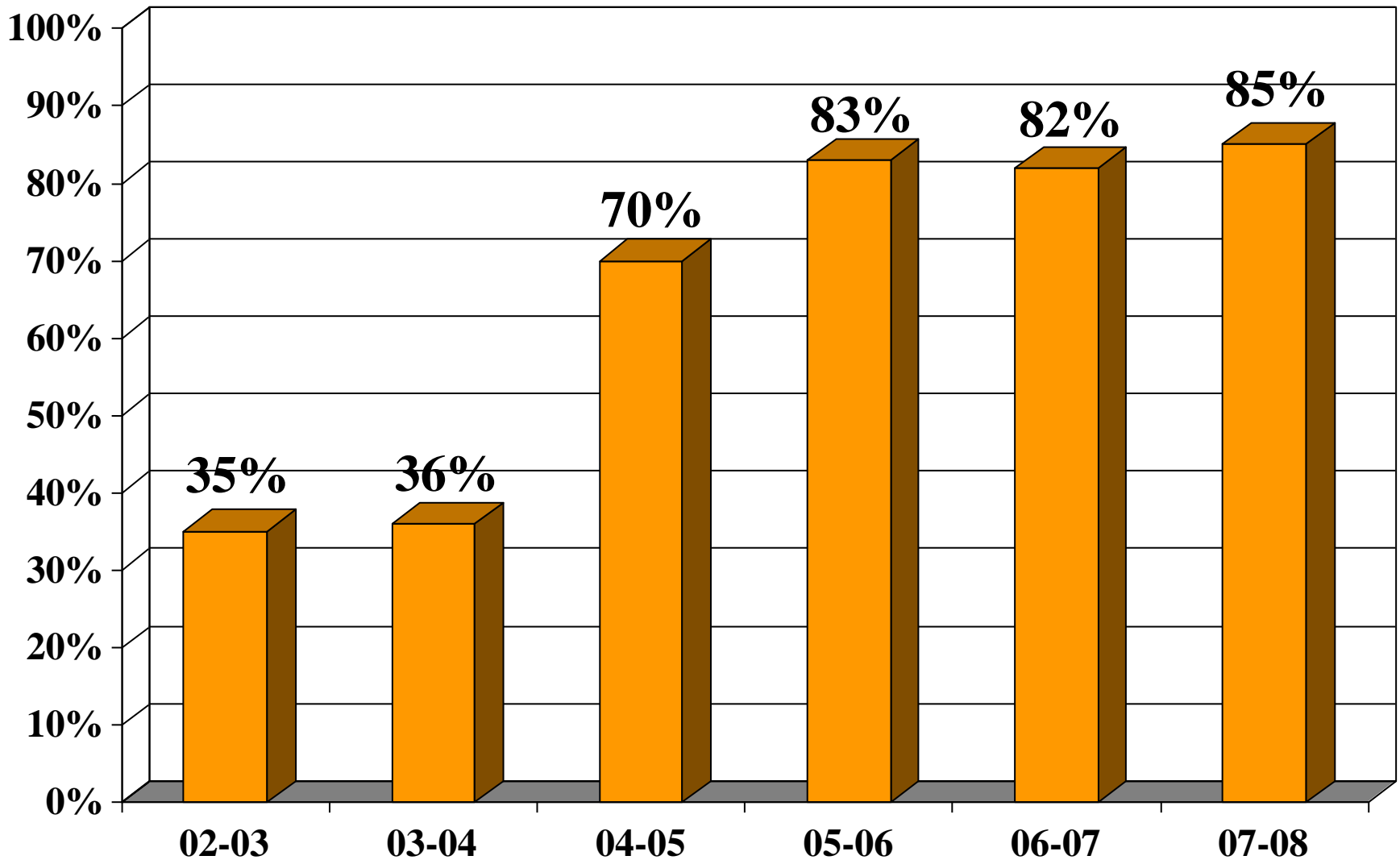
# Swun Math Pilot School

## “Edison Elementary”

Subgroups	Edison Elementary
African American	10%
Latino	87%
Other	3%
Low SES	100%

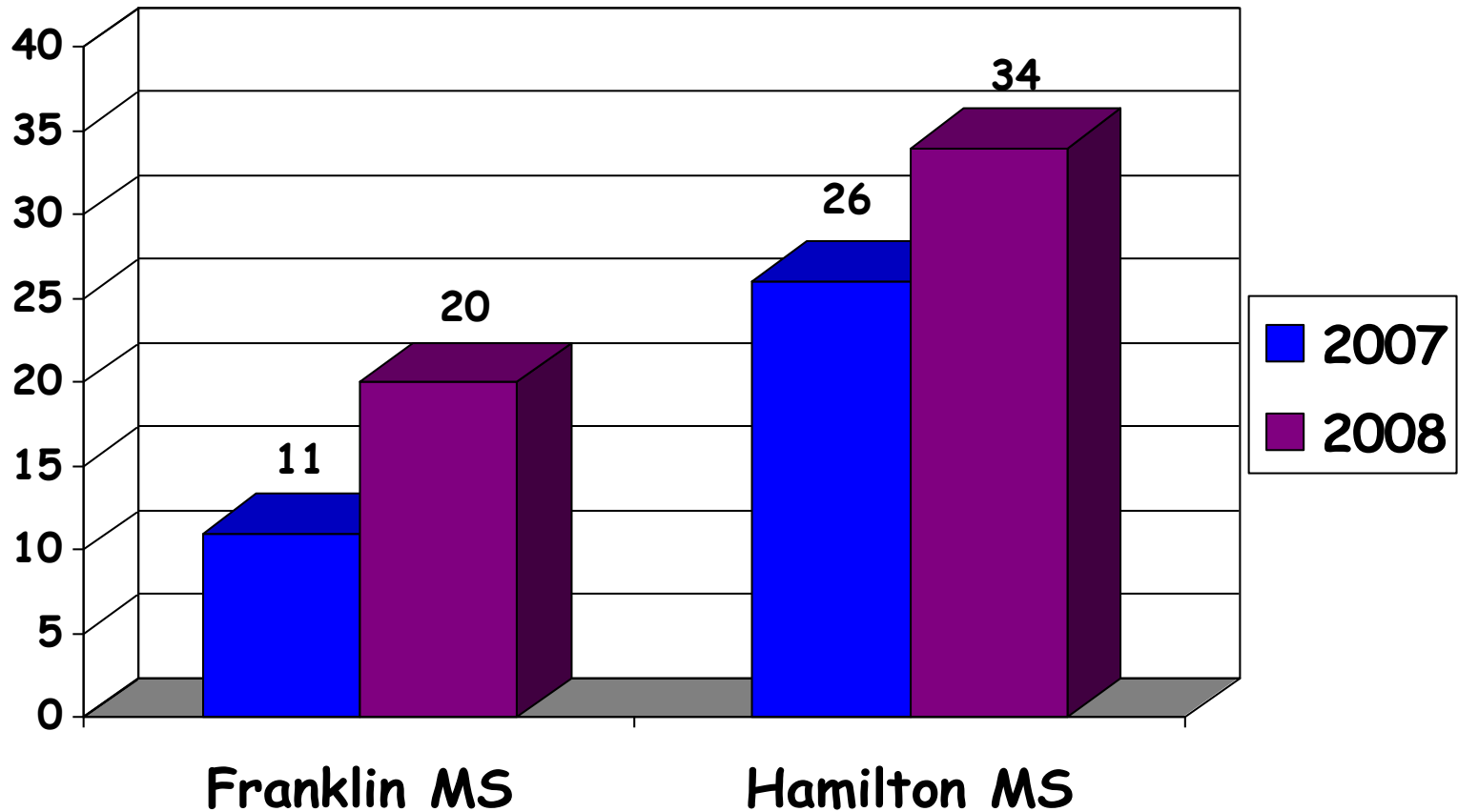
# Edison Elementary

## % Proficient and Advanced Proficient on the California Standards Test



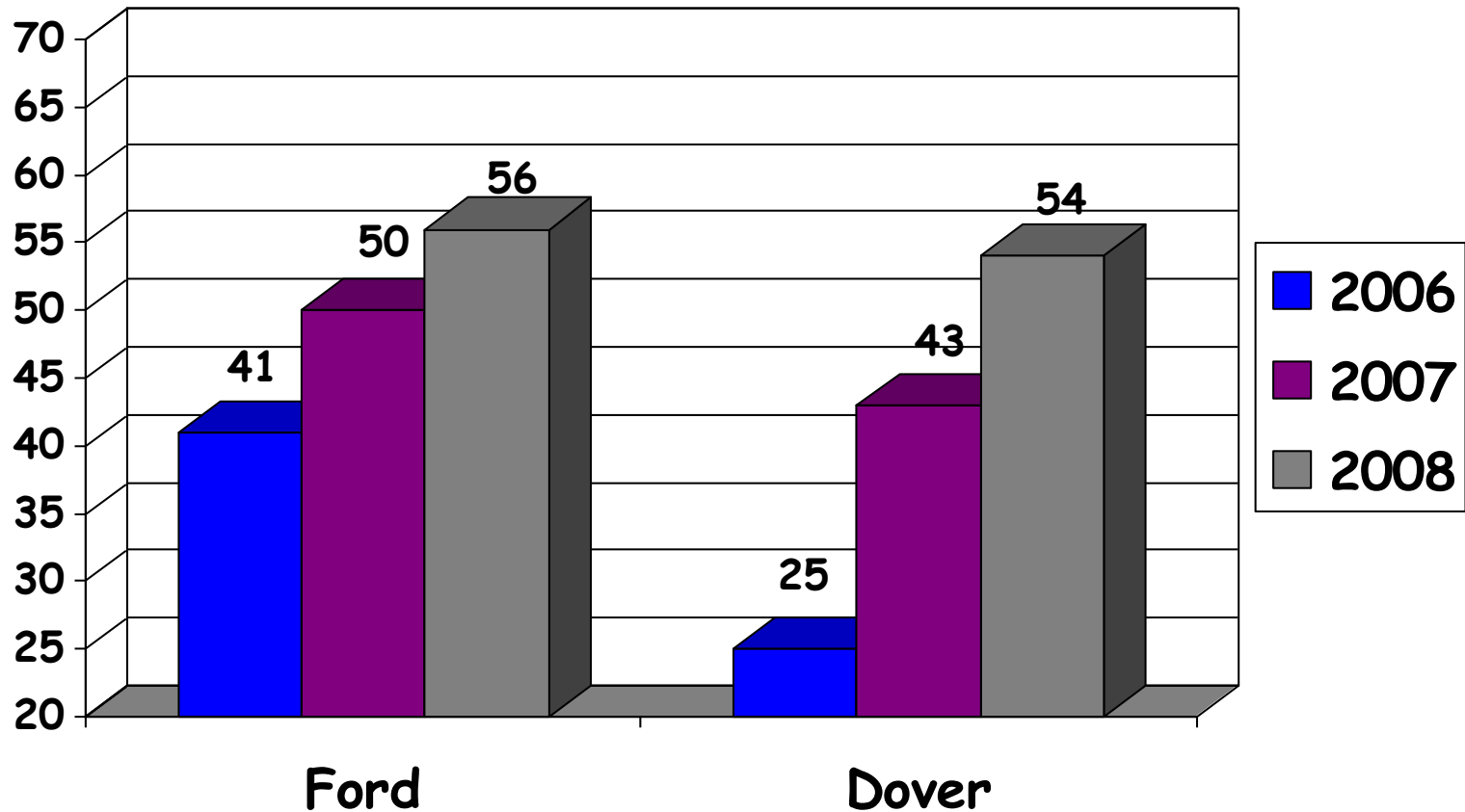
# Long Beach Unified School District CST Math 2007-2008

Percent of School Proficient and  
Advanced Proficient in Math



# West Contra Costa Unified School District CST Math 2006-2008

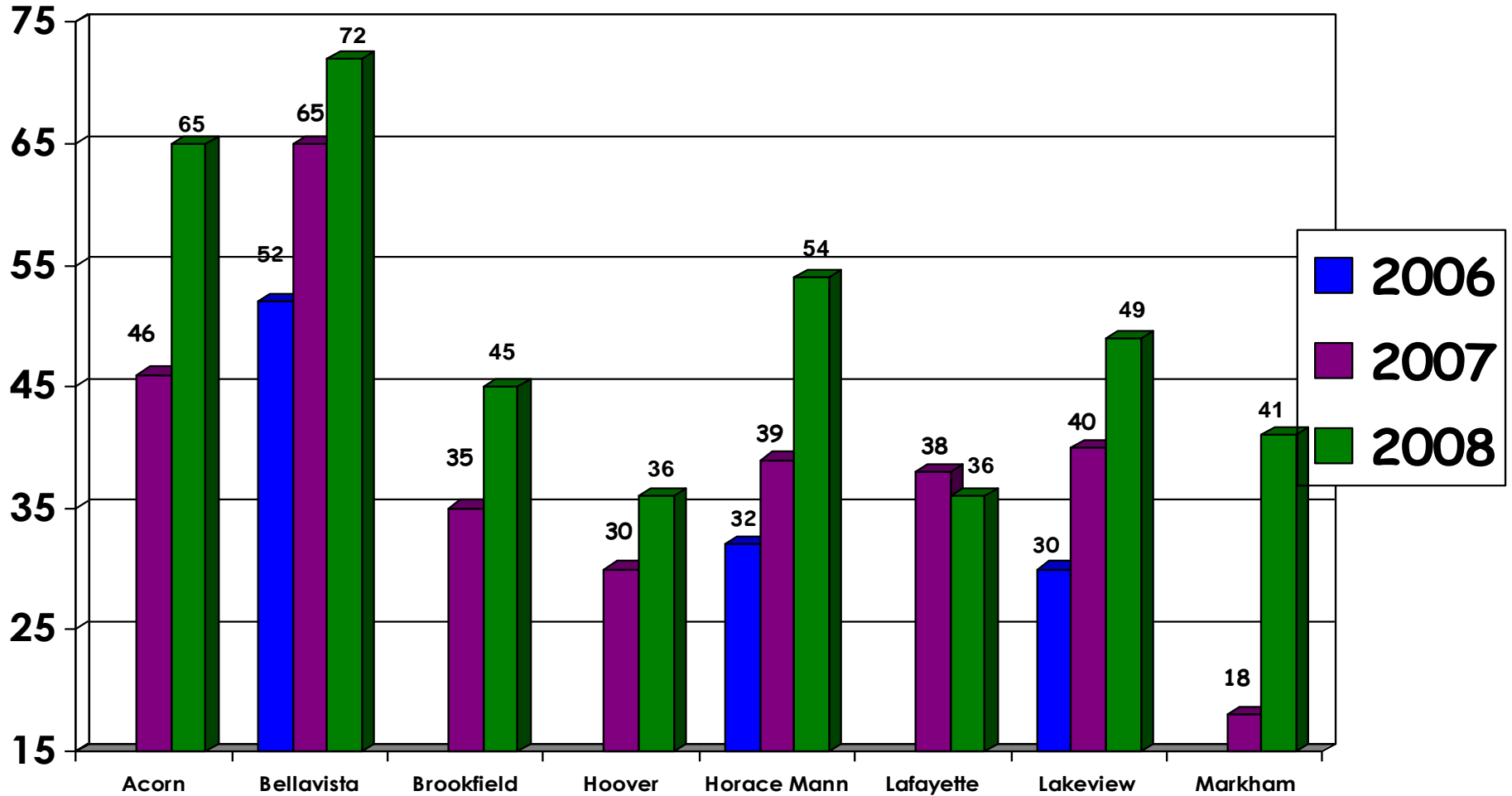
Percent of School Proficient and  
Advanced Proficient in Math



# Oakland Unified School District

## CST Math 2006-2008

Percent of School Proficient and  
Advanced Proficient in Math



# What is Swun Math ?

## **Content Standards Instruction** *(1-hour per day)*

- Innovative Lesson Delivery and Structure  
*(Swun-Math Lesson Design)*
- Mastery of Content
- Alignment of Instructional Strategies

## **Basic Facts Instruction** ***“Beyond the Basic Facts”*** *(30 minutes a day)*

- Focuses on Automaticity  
(Memorization)
- Accuracy
- Computational Skills

# Swun Math Basic Facts Instruction

## “Beyond the Basic Facts”

- ABC's of Math
- Taught using the commutative property for addition and multiplication
- 2-3 Facts introduced per day (14 Lessons)
- Lays down the foundation for Algebra

$$2 \times 3 = 6$$
$$3 \times 2 = 6$$

$$6 \times 7 = 42$$
$$7 \times 6 = 42$$

$$2 + 3 = 5$$
$$3 + 2 = 5$$



# “Beyond the Basic Facts” Multiplication Diagonal

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<u>2x2=4</u>	3x2=6	4x2=8	5x2=10	6x2=12	7x2=14	8x2=16	9x2=18
2x3=6	<u>3x3=9</u>	4x3=12	5x3=15	6x3=18	7x3=21	8x3=24	9x3=27
2x4=8	3x4=12	<u>4x4=16</u>	5x4=20	6x4=24	7x4=28	8x4=32	9x4=36
2x5=10	3x5=15	4x5=20	<u>5x5=25</u>	6x5=30	7x5=35	8x5=40	9x5=45
2x6=12	3x6=18	4x6=24	5x6=30	<u>6x6=36</u>	7x6=42	8x6=48	9x6=54
2x7=14	3x7=21	4x7=28	5x7=35	6x7=42	<u>7x7=49</u>	8x7=56	9x7=63
2x8=16	3x8=24	4x8=32	5x8=40	6x8=48	7x8=56	<u>8x8=64</u>	9x8=72
2x9=18	3x9=27	4x9=36	5x9=45	6x9=54	7x9=63	8x9=72	<u>9x9=81</u>



# Instructional Strategies

## Let's Round Numbers!

Manhattan Beach Lifeguards reported to the Press Telegram that there were 2,857 people at the beach on Sunday. Round this to the nearest \_\_\_\_\_

- 1 Underline the word that comes after "nearest".
- 2 Underline the digit in the indicated place.
- 3 Circle the digit to the right of the underlined place.
- 4 If the circled digit is 5 or greater, add one to the underlined place and change all digits to the right to zeros. *or*
- 5 If the circled digit is 4 or less, keep the underlined place and change all digits to the right to zeros.

- Instructional Strategies stay consistent from grade level to grade level
- Instructional strategies are student friendly.

# Swun Math Pacing

## 2<sup>nd</sup> Grade Math Pacing Chart Oakland Unified School District 2008-2009

### Important Notes:

- **Beyond the Basic Facts**- Memorization of the math facts and the application of these facts will be practiced everyday to facilitate mastery of units 1, 3 and 6. You will need to spend time modeling addition and subtraction with regrouping, during your 1-hour content lesson, to complete the "Application portion" of Beyond the Basic Facts.

Aug. 27 – Aug. 28

Pre- Assessment

- ◆ Administer Trimester One Practice Exam
- ◆ "It's All About the Facts" Diagnostic

Aug. 29 – Mar. 7

Use Beyond the Basic Facts to ensure the memorization of addition and subtraction facts, as well as addition and subtraction with regrouping (N.S. 2.2)

Aug.29 – Sept. 28

Instructional Days: 22

Approx. days per lesson: 2.2

**Numbers to 100 & 1000**

CA Standards: NS 1.0 Tens/Hundreds-pgs.45-46, 307-308

CA Standards: NS1.0 Tens and Ones/Hundred, Tens, Ones-pgs. 47-48, 309-310

CA Standards: NS 1.0 Understand Place Value-pgs. 49-50, 311-312

CA Standards: NS 1.1 Read and Write Numbers-pgs. 51-52, 313-314

CA Standards: NS 1.0, MR 2.1 100 Less, 100 More-pgs. 321-322

CA Standards: NS 1.3 Compare Numbers: >, <, or = -pgs. 61-62, 323-324

CA Standards: NS 1.0 Order Number: Before, After, Between-pgs. 63-64, 325-326

CA Standards: NS 1.0 Order Numbers on a Number Line-pgs. 327-328

CA Standards: MR 1.2 MR 3.0 Even and Odd-pgs. 65-66

CA Standards: MR 3.0 Skip-Count-pgs. 67-68

Oct. 1 – Oct. 26

**Addition**

Addition is integrated throughout this section. (Beyond the Basic Facts)

Instructional Days: 20

Approx. days per lesson: 2.9

CA Standards: AF 1.1 Add 3 Numbers-pgs.11-12

CA Standards: NS 2.1 Missing Numbers-pgs. 35-36

CA Standards: AF 1.0 Problem Solving-pgs. 39-40

CA Standards: NS 2.2 Add 2-Digit Numbers-pgs. 171-172

CA Standards: NS 2.2 Rewrite 2-Digit Addition 175-176

CA Standards: NS 2.2 Add 3-Digit Numbers-pgs. 373-374

CA Standards: NS 5.1 Add Money-pgs. 377-378

- Order of the textbook lessons are changed to ensure mastery of content
- Natural progression of learning for students
- Specific to California Content Standards
- Paced so that all content is taught **two weeks prior to the CST**

# Swun Math Assessment Tools Accountability for Students

- **Facts Component**
  - Pre/Post diagnostic assessments
  - Application Assessments
  - Math Facts Assessment
- **1-Hour Content Component**
  - Trimester pre-post exams (item analysis grid/test specs)
  - Unit Assessments (grade level specific)



# Swun Math Monthly Support

- Comprehensive Trimester Trainings (3)
  - Lesson Design
  - Beyond the Basic Facts
  - Instructional Strategies
- Blueprint Training
- Monthly On-site Support
  - Monthly Demo Lessons
  - Team Teaching
  - Grade Level/ Staff Meetings
  - Principal/Administrative Support

# Swun Math Team

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