

Within a well-balanced mathematics curriculum, the primary focal points at Grade 3 are multiplying and dividing whole numbers, connecting fraction symbols to fractional quantities, and standardizing language and procedures in geometry and measurement.

NEISD 4: Patterns, Addition, and Subtraction
4 - 5 weeks

Uses place value to communicate about increasingly large whole numbers in verbal and written form; uses patterns to solve problems; recognizes congruence and symmetry

- 3.1A** *use* place value to **read, write** (in symbols and words), and **describe** the value of whole numbers through 999,999
- 3.1B** *use* place value to **compare** and **order** whole numbers through 9,999
- 3.3A** *model* addition and subtraction **using** pictures, words and numbers
- 3.3B** *select* addition or subtraction and **use** the operation to *solve* problems involving whole numbers through 999
- 3.5A** **round** whole numbers to the nearest ten or hundred to **approximate** reasonable results in problem situations
- 3.5B** *use* strategies including rounding and compatible numbers to **estimate** solutions to addition and subtraction problems
- 3.6A** **identify** and **extend** whole number and geometric patterns to **make** predictions and solve problems
- 3.7A** **generate** a table of paired numbers based on real-life situation
- 3.7B** **identify** and **describe** patterns in a table of related number pairs based on a meaningful problem and extend the table
- 3.14A **identify** the mathematics in everyday situations
- 3.14B **solve** problems by *understanding* the problem, *making* a plan, *carrying* out the plan, and *evaluating* the solution for reasonableness
- 3.14C **select** or **develop** an appropriate problem-solving plan or strategy, including *drawing* a picture, *looking* for a pattern, systematic *guessing and checking*, *acting* it out, *making* a table, *working* a simpler problem, or *working* backwards to **solve** a problem
- 3.14D **use** tools such as real objects, manipulatives, technology to **solve** problems
- 3.15A **explain** and **record** observations using objects, words, pictures, numbers, and technology
- 3.15B **relate** informal language to mathematical language and symbols
- 3.16A **make** generalizations from patterns or sets of examples and non-examples
- 3.16B **justify** why an answer is reasonable and **explain** the solution process

TEKS have been color coded to show if they are at an *introductory point*, an *ongoing TEKS*, or at a *mastery level*. Below is the key for the color coding.

- 3.10A** - A **TEKS** is introduced for the first time as a focus of learning within a unit of instruction.
- 3.10A** - Last time a **TEKS** will be a focus of learning within the regular unit of instruction.
- * **3.10A** - ***TEKS** is both introduced and expected to be mastered.
- 3.10A** - A **TEKS** has already been introduced and does not yet need to be mastered.

NEISD Unit 4: Patterns, Addition, Subtraction
(4-5 weeks)

Content TEKS	3.1A	3.1B	3.3A	3.3B	3.5A	3.5B	3.6A	3.7A	3.7B
Processing TEKS	3.14A	3.14B	3.14C	3.14D	3.15A	3.15B	3.16A	3.16B	
Continuing Threads	3.1C	3.2A	3.2B	3.2C	3.4A	3.6C			
	3.12 A	3.12B	3.13A	3.13B	3.13C				

[Clarifying Activities](#)
Link to Dana Center

[TAKS Study Guide English](#)
[TAKS Study Guide Spanish](#)

Assessment History

[TEA Released Tests](#)

[2008 TAKS Info Bk English](#)
[2008 TAKS Info Bk Spanish](#)

K – 5 Vocabulary

[English](#) [Spanish](#)

TAKS Question Stems

[English](#) [Spanish](#)

Primary Resources

Investigations in Number, Data, and Space	
Unit 6: Stories Tables, and Graphs	
Investigation 2: Cube Train Patterns	3.6A 3.7A, B
Unit 8: How Many Hundreds? How Many Miles?	
Investigation 1: Numbers in the Hundreds	3.3A, B 3.4; 3.6A, B
Investigation 2: Addition Strategies	3.2A; 3.3A, B; 3.5A, B; 3.6A
Investigation 3: Subtraction	3.1B, 3.3A, B 3.5B; 3.6A, B
Approximate Timeframe: 23 days	
Content TEKS NOT addressed: 3.1A, 3.1B	

enVisionMATH Texas	
Topic	TEKS
Topic 3: Adding Whole Number to Solve Problems	3.3, 3.5A,B 3.14C
Topic 5: Subtracting Whole Numbers to Solve Problems	3.3A, B; 3.5A, B 3.14B, C
Topic 12: Patterns & Relationships 12-3, 12-4	3.7A, B
Approximate Timeframe: 16 Days	
Content TEKS NOT addressed: 3.1A, 3.1B	

Texas Curriculum Unit	When to Implement	Texas Student Activity Book	TEKS
Activity 2: Writing Numbers p. 22	With Unit 1, Session 1.8	P6	3.1A
Activity 3: Rounding Whole Numbers p.23	With Unit 1, Session 2.2	P7	3.5A
Activity 4: Comparing Whole Numbers p.24	With Unit 1, Session 2.7	P10	3.1B
Activity 5: Ordering Whole Numbers p. 25	With Unit 1, Session 2.7	P11	3.1B
Activity 8: Estimating Sums, p 28	After Unit 3, Session 1.3	P18	3.5B
Activity 10: Estimating Differences, p30	With Session 3.3	P20	3.5B
Activity 18, Using a Calculator to Skip Count	With Unit 5, Session 2.2	P34	3.6B, 3.15A
Activity 19, Related Number Pairs	After Unit 5, Session 2.3	P35	3.7A, B

Joint Usage Suggestion

The following suggestion incorporates enVisionMATH and Investigations curriculum together in a sequenced plan to address the TEKS for this unit of study. The suggestion is listed in a sequence that incorporates the use of both resources for designing your instruction.

When the joint usage plan exceeds the allotted timeframe according to the NEISD Math Sequence, choices should be made by the teacher based on the needs of the students. For example, lessons might be shortened, combined or used as supplemental reinforcement materials (workstations, homework, tutoring, etc.).

Resource	Lesson	TEKS
Begin with: Unit 6: Stories, Tables, and Graphs	Investigation 2: Cube Train Patterns Sessions: 2.1: Cube Patterns: Red, Blue, Green 2.2: Where Are the Greens? 2.3: What Color Is It?	3.6A 3.7A,B
Unit 6: Stories, Tables and Graphs	Investigation 3: Representing a Constant Rate of Change Sessions: 3.1 The Marbles of Rhomar 3.2 Working with Table 3.3 Describing a Rule	3.7A, B
Incorporate in: enVisionMATH Texas:	Topic: 12 Patterns and Relationships 12-2 Number Sentences 12-3 Extending Tables	3.6A 3.7A, B
Unit 8: How Many Hundreds? How Many Miles?	Investigation 1: Numbers in the Hundreds Sessions: 1.1 Paper Clip Problems 1.2 Capture from 300 to 600 1.3 Related Subtraction Problems Combine: 1.4 Assessment: Multiplication Combinations 1.5 Assessment: Operations with Multiples of 10 and 100	3.3A,B 3.5B 3.6A,B
Unit 8: How Many Hundreds? How Many Miles?	Investigation 2: Addition Strategies Sessions: 2.1 Making an Easier Problem 2.2 Addition Starter Problems 2.3 Categorizing Addition Strategies <i>Assess after Investigation 3, Session 3.6</i> 2.5 Assessment: Addition Strategies	3.3A,B 3.5A,B 3.6A
Incorporate in: enVisionMATH Texas	Topic: 3 Adding Whole Numbers to Solve Problems 3-1 Adding 2 Digit Numbers 3-5 Try, Check, and Revise	3.3A,B 3.14C
Unit 8: How Many Hundreds? How Many Miles?	Investigation 3: Subtraction Sessions: 3.1 Collections Compare 3.2 Travel Problems 3.6 Strategies for Subtraction Combine: 2.5 Assessment: Addition Strategies (only assessment) 3.3 Assessment: Subtraction Strategies	3.3A, B 3.6A, B

Grade 3 NEISD Unit 4

Incorporate in: enVisionMATH Texas	Topic: 5 Subtracting Whole Numbers to Solve Problems 5-1 Models for Subtracting 2-Digit Numbers 5-2 Subtracting Across Zeros 5-3 Draw A Picture and Write a Number Sentence	3.3A, B 3.14B
End of Unit Assessment Options:	<ul style="list-style-type: none"> • enVisionMATH Topics 3, 5 and 12 Tests, Student Book • enVisionMATH ExamView Test Generator, Topics 3, 5 and 12 	
Assessment Link	www.pearsonsuccessnet.com	
Investigations Links	Unit 6 Masters Unit 8 Masters	Sp. Sp. Unit 6 Transp. Sp Unit 8 Transp. Sp
Approximate Timeframe: 27 days		

Supplemental Resources

Problem Solving
<p>Exemplars</p> <p>Differentiated Best of Math II</p> <ul style="list-style-type: none"> • Getting Ready • Lost Count <p>More Accessible Version on NEISD Math Exemplar's Website from Differentiated Math II:</p> <ul style="list-style-type: none"> • Bridge Building on Lake Champlain • Goodbye Party • Skating Trip <p>Exemplars Alignment with Investigations Units</p> <p>Exemplars Alignment with TEKS</p> <p>NEISD Exemplars site</p> <p>NEISD Problems</p>

Literature Connections
<p>Fiction: World Scapes enVisionMATH TE - Guided Problem Solving for the Math Library <i>Magic Squares and More</i> <i>Fiji Facts and Figures</i></p> <p>Non-Fiction: <i>The King's Commissioners</i> <i>A Hundred Hungry Ants</i> <i>Two of Everything</i> <i>Count to a Million</i> <i>Bats on Parade</i> <i>The 512 Ants on Sullivan Street</i> <i>1001 Things to Spot in the Sea</i> <i>Pigs Will Be Pigs</i> <i>Alexander, Who Used to Be Rich Last Sunday</i> <i>Peter's Pockets</i> <i>Six Dinner Sid</i> <i>Mrs. Fits's Flamigos</i> <i>The Doorbell Rang</i> <i>Dawn to Dusk</i> <i>The Philharmonic Gets Dressed</i></p>

Math Solutions Publications												
<p>About Teaching Mathematics</p>												
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Other										
<p>Investigation Student Math Handbook Unit 6: p 42, 66-87 Unit 8: p 10-12, 16-38, 40-41, 47-49</p>										
Supporting Lessons										
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Technology Links	
*	NCTM Illuminations: Internet Based Lessons
*	TAKS Information Booklets
*	Mathbenchmarks.org
*	PBS Mathline Lessons
*	Discovery School: Lesson Plans and Clip Art
*	www.pearsonsuccessnet.com
*	NEISD Integrated Lessons
*	NEISD Technology Resources
*	Interactive TAKS Study Guide
*	Pearson In-Service on Demand

Clarifying Lessons	
<p style="text-align: center;"><u>Related Number Pairs</u></p> <p>Students use tables to organize and display related pairs of numbers, such as the relationship of the number of insects to the total number of legs.</p> <p>TEKS addressed in this lesson: 3.6A; 3.7A, B; 3.15A, B, C, D; 3.16B; 3.17A, B.</p>	
<p style="text-align: center;"><u>Palindrome Puzzles</u></p> <p>Students use addition to create numbers that are palindromes and organize their results to look for patterns. Students make generalizations from patterns and practice reading large numbers and addition with regrouping.</p> <p>TEKS addressed in this lesson: 3.1A; 3.3B; 3.6A;3.14C;3.16A</p>	