Revision Date	April 20, 2020

Department of Curriculum & Instruction

First Grade Math

Unit	1-13 Bridge
Time Frame	5/24-6/2
Big Ideas	1. Whenever you have 10 in one place value you move to the next greater place value 2. Adding and subtracting tens is like adding and subtracting ones 3. Repeated addition and subtraction involve joining and separating equal groups
Essential Questions	1. How can I use place value to represent and compare numbers beyond 120? 2. How can I use mental math strategies to help me add two-digit numbers? 3. How can is skip counting and repeated subtraction similar to multiplication and division?

TEKS / Student Expectations	Skills	Concepts
Second Grade TEKs		
2.2 Number and operations. The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value.	Applies	Whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value.
2.2D use place value to compare and order whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value.	Compare Order	whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value.
2.4B add up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations	Add Subtract	Two-digit numbers using mental math strategies and algorithms based on knowledge of place value and properties of operations
2.6 Number and operations. The student applies mathematical process standards to connect repeated addition and subtraction to multiplication and division situations that involve equal groupings and shares.	applies	Repeated addition and subtraction to multiplication and division situations that involve equal groupings and shares

TEKS / Student Expectations	Skills	Concepts
(Process Skill) TEKS		
1.1(A) apply mathematics to problems arising in everyday life, society, and the workplace	Apply	Mathematics to problems arising in everyday life, society, and the workplace
1.1(B) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution	Use	Problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution
1.1(C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems	Select	Tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems
1.1(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;	Communicate	Mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;
1.1(E) create and use representations to organize, record, and communicate mathematical ideas	Create	Representations to organize, record, and communicate mathematical ideas
1.1(F) analyze mathematical relationships to connect and communicate mathematical ideas	Analyze	Mathematical relationships to connect and communicate mathematical ideas
1.1(G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	Display Explain Justify	Mathematical ideas and arguments using precise mathematical language in written or oral communication.

Tier I Instructional Strategies – Classroom Instruction for All Students

Envision Topic 17

This Unit will help prepare students for second grade. Students will represent and compare three-digit numbers beyond 120. Students will also use the addition and subtraction strategies to add a two digit numbers.

2.(2) Number and operations. The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value.

• Utilizing a Place Value Mat have students practice representing three-digit numbers beyond 120. Sample Lessons"
o Teacher shows the student students a three-digit number represented with base-ten blocks and students use a place value mat to write the number in standard form
o Represent a given number with base ten blocks and expanded form
o Utilize place value concepts to compare and order three-digit numbers (TEK2.2A-D)
o If students demonstrate mastery over three-digit numbers, introduce four digit numbers and the thousand place. Students can use base-ten blocks to represent, compare, and order three and four digit numbers.

2.(4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy.

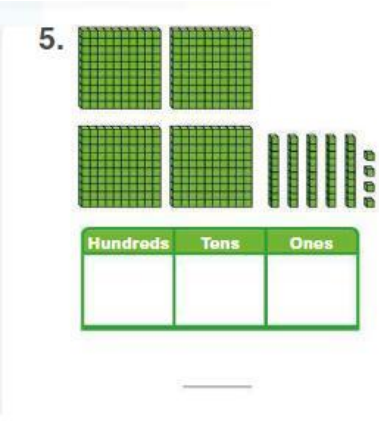
• Envision Lessons 17.5 and 17.7 Students use mental math to add tens (44 + 12)

○ Explain to students that they can use Mental Math and basic math facts to help them add tens

56 + 30

- 50 + 30 = 80 [5 + 3 =80]
- [80 + 6 =86]
- 56 + 30 = 86

○ Encourage struggling students to use base-ten blocks or pictorial models



2.(6) Number and operations. The student applies mathematical process standards to connect repeated addition and subtraction to multiplication and division situations that involve equal groupings and shares.

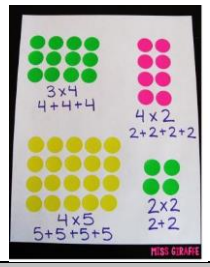
• Students use prior knowledge of addition and skip counting to explore the relation between addition and multiplication (or subtraction and division)
o Use objects and pictorial models to bridge the connection between the connections between addition/subtraction and multiplication/division o Introduce the multiplication symbol

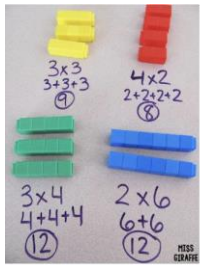
3 girls collected rocks. Each girl found 6 rocks. How many rocks did the friends find in all? • 6 + 6 + 6 =18 so 3 X 6 + 18

o Introduce the division symbol

A dog had 6 bones. He ate 2 a day. How many days will it take to eat all the bones?

[Teach arrays]





Stations/Centers

Fluency-
• "Think Fast" Board Game

Recursive/Practice/Application-

- Spin/Board Game with Recording Sheet
- Place Value Scoot with Recording Sheet

Hands On-

• Students roll three dice to create numbers. Students will use base ten blocks and a place value mat to represent the numbers

○ Place Value Mat

• Use manipulatives to represent equal grouping for repeated addition/arrays. (See image in Instructional Strategies section)

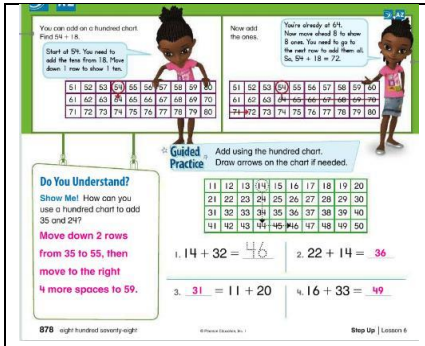
Exemplar- *"On my way to the park I saw 3 red flowers. Each flower had 6 pretty petals. Each pretty petal had 2 tiny black bugs. How many pretty petals did I see? How many black bugs dis I see?"*

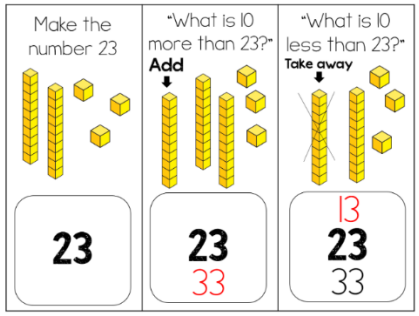
Strategies for Struggling Students (S^3)

For struggling students, use smaller groups to focus on comprehension, analysis, and /or application of content.

Hen adding multiples of ten, encourage struggling students to use manipulatives such as base ten blocks or hundreds chart

- • Envision Lesson 17.6 and 17.8
- • Independent Practice with Base Ten Block pictures
- • Review 10 more 10 less
- • Review skip counting
- • Utilize manipulatives to create arrays and model repeated addition





Vocabulary

Hundreds
Digit
Thousands
Expanded Form
Standard Form
Multiplication
Division
Array

Resources

**The suggested resources are one of many ways to address the TEKS student expectation.*

TEA vertical alignment chart

A formal district level assessment is not provided for this unit.