Curriculum Summary

Content Area: **Mathematics**
Course(s):
Time Period:
Length: **Year Long**
Status: **Awaiting Review**

Summary of the Course

This 2nd Grade Math Envision 2.0 Curriculum will help students develop conceptual understanding, procedural knowledge, and problem solving skills in addition, subtraction, time, money, length, shapes, graphs and data. Topic 1 focuses on using strategies to achieve fluency with addition and subtraction within 20. Topic 2 focuses on determining whether a number is even or odd, and on finding the total number of objects in situations involving equal groups of objects. Topic 3 focuses on addition within 100 using strategies that employ a hundred chart, an open number line, breaking numbers apart, and compensation. Topic 4 focuses on developing computational fluency in addition within 100 by using models, understanding of place value, properties of operation, the partial-sums method, and mental math. Topic 5 focuses on subtraction within 100 using strategies that employ a hundred chart, an open number line, breaking numbers apart, and compensation. Topic 6 focuses on developing computational fluency in subtraction within 100 by using understanding or place value, properties of operations, mental math, and the partial- differences strategy. Topic 7 focuses on representing and solving one and two step word problems involving addition and subtraction situations. Students represent the numerical relationship in the word problems using drawings, bar diagrams, and equations with symbols for the unknown number. Topic 8 focuses on identifying and counting coins, bulls, solving word problems about money, telling time to the nearest 5 minutes using a.m. and p.m., and telling time before and after the hour. Topic 9 focuses on students extending their knowledge of place value to 1,000. This creates a foundation for adding and subtracting within 1,000. Topic 10 focuses on expanding students' understanding of addition to 3-digit numbers using models and strategies. Topic 11 focuses on expanding their subtraction skills within 1,000 using models and different strategies. Topic 12 focuses on using the tools they need to estimate, measure and compare length using units of inches, feet, yards, centimeters and meters. Topic 13 focuses on the attributes of shapes. Topic 14 focuses on applying their understanding of addition and subtraction to 100 to help them solve word problems that involve lengths. Topic 15 focuses on collecting, representing, and interpreting data information.

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Course Name, Length, Date of Revision and Curriculum WriterNew Section

Math Envision 2.0 Grade 2 Pull-Out Resource Curriculum.

Length of an Entire Year.

June 15, 2024

Syra Esteban and Cassidy Ritter

Topic 1: Fluently Add and Subtract Within 20

Content Area: **Mathematics**
Course(s):
Time Period:
Length:
Status: **Not Published**

Summary of the Unit

Topic 1 focuses on students developing understanding of addition and subtraction strategies. These strategies are illustrated by relevant visual models such as number lines and ten-frames. For example, a ten-frame is used to show two different ways students can make 10 to find 13-5.

Enduring Understandings

- Counting on is a strategy that can be used to find sums. The order of the addends does not change the sum.
- Basic addition facts that are near doubles can be found using a related doubles fact.
- Some addition facts can be found by changing to an equivalent fact with 10.
- Patterns in a 0-10 addition facts table are useful for adding numbers and for developing mental math strategies and number sense.
- A number line is a tool you can use to help you count on or count back to subtract.
- Addition and subtraction have an inverse relationship. The inverse relationship between addition and subtraction can be used to find subtraction facts; every subtraction fact has a related addition fact.
- Some subtraction facts can be simplified by making use of the numbers' relationships to 10.
- The addends determine efficient strategies, such as making 10 or using doubles facts, for finding addition facts. "Think of a related addition fact" is an efficient strategy for finding a subtraction fact.
- Objects, diagrams, and equations can help you solve different types of word problems.
- Good math thinkers use math to explain why they are right. They can talk about the math that others do, too.

Essential Questions

- If you add two numbers in a different order, will you get the same sum?
- How can you use a double fact to find a near double fact?
- Why is making a 10 a good strategy to help you add quickly and accurately?
- How can addition patterns help you find an addition fact that you don't remember?
- What are two ways that you can use a number line to subtract?
- How are addition and subtraction related?
- Why is making a 10 a good strategy to help you subtract quickly and accurately?
- How do you decide which strategy to use to add and subtract quickly and accurately?
- Why is writing an equation useful for solving a word problem?
- What are some ways to describe a good math argument?

Summative Assessment and/or Summative Criteria

- I**nformal Observation:** Classroom Observation
- **Formal Assessment:** Topic 1 Modified Assessment, Topic Quick Checks

Resources

Pearson SuccessNet Math Series (digital and offline)

My Math Academy

ST Math online digital platform

Discovery Education math resources

Brain Pop online digital platform

Kahoot!

Unit Plan

*Based on your group, you may do:

- Visual Learning, Solve and Share, and Guided Practice in Whole Group; Independent Practice in Small Group OR
- Visual Learning in Whole Group; Solve and Share, Guided Practice and Independent Practice in Small Group
- You can change order between Visual Learning and Solve & Share

Topic/ Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/ Assessments
1-1: Addition Fact Strategies	SWBAT use counting on to add numbers and add numbers in any order.	Teacher will introduce the vocabulary terms: • Equation • Addend • Sum Visual Learning: Teacher will prompt students by asking the following question, "If you add two numbers in a different order, will you get the same sum?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students add the same two addends in different orders. Their work shows prior and emerging understanding you can build on during the Visual Learning Bridge. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 1-1 (online)

		Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math, or the Envision Math Game: Fancy Flea-Missing Parts to 12 • Practice Center: Students will complete Additional Practice 1-1 numbers 1-5. Optional Activity: • Pick a Project Activity pg. 3 • Problem Solving Leveled Reading Mats Activity 1-1 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 1-1	
1-2: Doubles and Near Doubles	SWBAT use doubles and near doubles to add quickly and accurately	Teacher will introduce the vocabulary terms: • Doubles • Near Doubles Visual Learning: Teacher will prompt students by asking the following question, "How can you use a double fact to find a near double fact?" Teacher will play the video. Teacher will stop to explain when needed.	Guided Practice Independent Practice Additional Practice Reteach to Build

		Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students are asked to use counters to show a double fact, and then near doubles fact. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy or ST Math. • Practice Center: Students will complete Additional Practice 1-2 numbers 1-7. Optional Activity: • Pick a Project Activity pg. 3. Students can choose an activity to build • enVision STEM Activity 1-2 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 1-2	Understanding Practice Buddy (Online) Quick Check 1-2 (online)

1-3: Make a 10 to Add	SWBAT use the strategy of making a ten to add quickly and accurately.	Visual Learning: Teacher will prompt students by asking the following question, “Why is making a 10 a good strategy to help you add quickly and accurately?” Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher.Students are asked to find 9+3 while thinking about 10. They can use a ten-frame and counters to show their work. Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy or ST Math. • Practice Center: Students will complete Additional Practice 1-3 numbers 1-6. Optional Activity: • Pick a Project Activity pg. 3. Students can choose an activity	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 1-3 (online)

		to build • enVision STEM Activity 1-3 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 1-3	
1-4: Addition Fact Patterns	SWBAT use number patterns on an addition facts table to complete addition equations.	Visual Learning: Teacher will prompt students by asking the following question, “How can addition patterns help you find an addition fact that you don’t remember?” Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher.Students use an addition facts table showing sums to 10 to look for and describe addition number patterns. Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math or the • Envision Math Game: Flying Cow Incident-Adding and Subtracting	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 1-4 (online)

		Numbers to 20 found at PearsonRealize.com • Practice Center: Students will complete Additional Practice 1-4 numbers 1-5. Optional Activity: • Pick a Project Activity pg. 3. Students can choose an activity to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 1-4	
1-5: Count On and Count Back to Subtract	SWBAT choose and use any strategy to add two-digit numbers	Teacher will introduce the vocabulary terms: • Difference Visual Learning: Teacher will prompt students by asking the following question, "What are two ways that you can use a number line to subtract?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students demonstrate how to use a number line to count on to solve a subtraction problem. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 1-5 (online)

		Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, or ST Math. • Practice Center: Students will complete Additional Practice 1-5 numbers 1-3, 5. Optional Activity: • Pick a Project Activity pg. 3. Students can choose an activity to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 1-5	
1-6: Think Addition to Subtract	SWBAT think addition to subtract quickly and accurately	Visual Learning: Teacher will prompt students by asking the following question, "How are addition and subtraction related?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students use reasoning to analyze the relationship between addition and subtraction. Guided Practice: Students will complete the "Guided Practice" section	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding

		with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math, or the Envision Math Game: Flying Cow Incident- Adding and Subtracting Numbers to 20 found at PearsonRealize.com • Practice Center: Students will complete Additional Practice 1-6 numbers 1-2, 5-6. Optional Activity: • Pick a Project Activity pg. 3. Students can choose an activity to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 1-6	Practice Buddy (Online) Quick Check 1-6 (online)
1-7: Make a 10 to Subtract	SWBAT make a 10 to subtract quickly and accurately	Visual Learning: Teacher will prompt students by asking the following question, "Why is making a 10 a good strategy to help you subtract quickly and accurately?" Teacher will play the video. Teacher will stop to explain when needed.	Guided Practice Independent Practice Additional

		Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students explain how they can use a 10 to help solve a subtraction fact. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math, or the Envision Math Game: Flying Cow Incident- Adding and Subtracting Numbers to 20 found at PearsonRealize.com. • Practice Center: Students will complete Additional Practice 1-7 number 1-3, 8-9. Optional Activity: • Pick a Project Activity pg. 3. Students can choose an activity to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 1-7	Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 1-7 (online)

1-8: Practice Addition and Subtraction Facts	SWBAT add and subtract quickly and accurately using mental math strategies	Visual Learning: Teacher will prompt students by asking the following question, “How do you decide which strategy to use to add and subtract quickly and accurately?” Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students apply their number sense and knowledge of operations to write related facts. Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math, or the Envision Math Game: Flying Cow Incident- Adding and Subtracting Numbers to 20 found at PearsonRealize.com. • Practice Center: Students will complete Additional Practice 1-8 number 1-9. Optional Activity:	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 1-8 (online)

		• Pick a Project Activity pg. 3. Students can choose an activity to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 1-8	
1-9: Solve Addition and Subtraction Word Problems	SWBAT use addition and subtraction to solve word problems	Teacher will introduce the vocabulary terms: • Bar Diagram Visual Learning: Teacher will prompt students by asking the following question, "Why is writing an equation useful for solving a word problem?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students are asked to make sense of the problem by analyzing the relationship between the numbers. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 1-9 (online)

		guidance when needed. • Technology: Students will work on My Math Academy, ST Math, or the Pearson Realize Power House-Equal Groups to 25 Math Game • Practice Center: Students will complete Additional Practice 1-9 number 1-3. Optional Activity: • Pick a Project Activity pg. 3. Students can choose an activity to build • Problem-Solving Leveled Reading Mats Activity 1-9 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 1-9	
1-10: Problem Solving: Construct Arguments	SWBAT use words, pictures, numbers, and symbols to construct viable math arguments	Visual Learning: Teacher will prompt students by asking the following question, "What are some ways to describe a good math argument?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students consider what constitutes a good written explanation in mathematics. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online)

		Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math, or the Pearson Realize Power House-Equal Groups to 25 Math Game • Practice Center: Students will complete Additional Practice 1-10 number 1-5. Optional Activity: • Pick a Project Activity pg. 3. Students can choose an activity to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 1-10	Quick Check 1-10 (online)
Topic 1 Reteaching/Review	SWBAT fluently add and subtract within 20	Complete Reteaching Sets prior to giving Topic Assessment • Fluency Practice Activity • Vocabulary Review • Topic 1 Reteaching	Reteaching Sets

MATH.2.OA.A	Represent and solve problems involving addition and subtraction
MA.2.OA.B	Add and subtract within 20.
MA.2.OA.B.2	Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.

Suggested Modifications for Special Education, ELL and Gifted Students

Consistent with individual plans, when appropriate.

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment pintables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use center, stations, or contract
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- perimeter, equilateral triangle, centimeter, polygon,

area, square units (use visuals/anchor charts)

- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technological Innovations/Use

- My Math Academy
- ST Math
- Kahoot!
- Tools (Envision 2020)
- Game Center (Envision 2020)
- Create/Complete a Discovery Education Board

Cross Curricular/21st Century Connections

- Pick a Project Activity
- enVision STEM Project
- Problem Solving Reading Activity
- 3 ACT MATH Activity

Topic 2: Work with Equal Groups

Content Area: **Mathematics**
Course(s):
Time Period:
Length:
Status: **Not Published**

Summary of the Unit

Topic 2 focuses on determining whether a number is even or odd, and on finding the total number of objects in situations involving equal groups of objects.

Enduring Understandings

- Numbers can be classified as even or odd by showing numbers as two equal parts.
- A group of objects (or a number) can also be classified as even or odd by analyzing skip-counting patterns. An even number can be written as a sum of equal addends.
- An array shows equal groups, so you can write equations using repeated addition to find the total number of objects in an array.
- You can make arrays and write equations using repeated addition to help solve problems.

Essential Questions

- How can you tell if the number of cubes is even or odd?
- How can you tell if a group of objects is even or odd?
- What are two ways you can use addition to find the total number of objects in an array?
- How can you write an equation, using repeated addition, to find the total number of objects in an array?
- When you need to solve a word problem, why do you draw a picture and write an equation?

Summative Assessment and/or Summative Criteria

- **Informal Observation:** Classroom Observation
- **Formal Assessment:** Topic 2 Modified Assessment, Topic Quick Checks

Resources

Pearson SuccessNet Math Series (digital and offline)

My Math Academy

ST Math online digital platform

Discovery Education math resources

Brain Pop online digital platform

Kahoot!

Unit Plan

*Based on your group, you may do:

- Visual Learning, Solve and Share, and Guided Practice in Whole Group; Independent Practice in Small Group OR
- Visual Learning in Whole Group; Solve and Share, Guided Practice and Independent Practice in Small Group
- You can change order between Visual Learning and Solve & Share

Topic/ Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/ Assessments
2-1: Even and Odd Numbers	SWBAT tell if a group of objects are even or odd	Teacher will introduce the vocabulary terms: • Even • Odd Visual Learning: Teacher will	Guided Practice Independent Practice Additional Practice

		prompt students by asking the following question, “How can you tell if the number of cubes in a tower is even or odd?” Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students will be given cubes to help them identify which numbers to 20 can be shown as two equal groups Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy and then go on ST Math. • Practice Center: Students will complete Additional Practice 2-1 numbers 1-9. Optional Activity: • Pick a Project Activity pgs.	Reteach to Build Understanding Practice Buddy (Online) Quick Check 2-1 (online)

		59-60 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 2-1	
2-2: Continue Even and Odd Numbers	SWBAT use different ways to tell if a group of objects shows an even or odd number	Visual Learning: Teacher will prompt students by asking the following question, “How can you tell if a group of objects is even or odd?” Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students are asked to use cubes to determine the number of class members if the class can form pairs plus one student. [Teacher can utilize the kids in the class to make pairs plus one in real life example] Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 2-2 (online)

		and then go on ST Math. • Practice Center: Students will complete Additional Practice 2-2 numbers 1-6. Optional Activity: • Pick a Project Activity pgs. 59-60. Students can choose an activity to build • enVision Stem Activity 2-2 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 2-2	
2-3: Use Arrays to Find Totals	SWBAT find the total number of objects in a set of rows and columns	Teacher will introduce the vocabulary terms: • Array • Rows • Columns Visual Learning: Teacher will prompt students by asking the following question, "What are two ways you can use addition to find the total number of objects in an array?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students show and explain two different ways to find a total. Guided Practice: Students will	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 2-3 (online)

		complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy and then go on ST Math. • Practice Center: Students will complete Additional Practice 2-3 numbers 1-4. Optional Activity: • Pick a Project Activity pgs. 59-60. Students can choose an activity to build • enVision Stem Activity 2-3 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 2-3	
2-4: Make Arrays to Find Totals	SWBAT make arrays with equal rows or equal columns to solve addition problems	Visual Learning: Teacher will prompt students by asking the following question, “How can you write an equation, using repeated addition, to find the total number of objects in an array?” Teacher will play the video. Teacher will stop to explain when needed.	Guided Practice Independent Practice

		Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students solve a word problem by using counters and writing an equation. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy and then go on ST Math. • Practice Center: Students will complete Additional Practice 2-4 numbers 1-3. Optional Activity: • Pick a Project Activity pgs. 59-60. Students can choose an activity to build • Problem-Solving Leveled Reading Activity Mats 2-4 • Practice Buddy (Online)	Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 2-4 (online)

		Closure: Homework - Reteach to Build Understanding 2-4	
2-5: Problem Solving: Model with Math	SWBAT model problem using equations, drawings, and arrays.	Visual Learning: Teacher will prompt students by asking the following question, “When you need to solve a word problem, why do you draw a picture and write an equation?” Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students draw a picture and write an equation to model and solve a word problem. Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy and then go on ST Math or the Envision Math Game: Fluency-Add and Subtract found on Pearson Realize.com	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 2-5 (online)

		• Practice Center: Students will complete Additional Practice 2-5 numbers 1-2. Optional Activity: • Pick a Project Activity pgs. 59-60. Students can choose an activity to build • Problem-Solving Leveled Reading Activity Mats 2-5 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 2-5	
Topic 2 Reteaching/Review	SWBAT work with equal groups	Complete Reteaching Sets prior to giving Topic Assessment • Fluency Practice Activity • Vocabulary Review • Topic 2 Reteaching	Reteaching Sets

MA.2.OA.C	Work with equal groups of objects to gain foundations for multiplication.
MA.2.OA.C.3	Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.
MA.2.OA.C.4	Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

Suggested Modifications for Special Education, ELL and Gifted Students

Consistent with individual plans, when appropriate.

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum

- Envision Enrichment pintables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use center, stations, or contract
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
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- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- perimeter, equilateral triangle, centimeter, polygon, area, square units (use visuals/anchor charts)
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technological Innovations/Use

- My Math Academy
- ST Math
- Kahoot!
- Tools (Envision 2020)
- Game Center (Envision 2020)
- Create/Complete a Discovery Education Board

Cross Curricular/21st Century Connections

- Pick a Project Activity
- enVision STEM Project
- Problem Solving Reading Activity
- 3 ACT MATH Activity

Topic 3: Add Within 100 Using Strategies

Content Area: **Mathematics**
Course(s):
Time Period:
Length:
Status: **Not Published**

Summary of the Unit

Topic 3 focuses on addition within 100 using strategies that employ a hundred chart, an open number line, breaking numbers apart, and compensation.

Enduring Understandings

- Patterns on a hundreds chart can be used to add numbers and to develop mental math strategies and number sense.
- Two-digit numbers can be broken apart using tens and ones and added in different ways. You can represent how you break apart and add numbers with hops or jumps on an open number line.
- Two-digit numbers can be broken apart using tens and ones and added in different ways.
- When adding two-digit numbers, you can add an amount to one addend and subtract the same amount from another addend to make addition easier.
- There are different ways to add two-digit numbers. Certain strategies may be better to use for a problem than others.
- Some problems can be solved in one step. Other problems can be solved in two steps- first by solving a sub-problem, or by answering a hidden question, and then by using that answer to solve the original problem.
- Good math thinkers know how to choose the right strategy to solve problems and use math to explain why they are right. They can talk about the math that others do, too.

Essential Questions

- How can you use patterns on a hundreds chart to help you add numbers mentally?
- How can you use an open number line to help you add two 2-digit numbers?
- How can you break apart the second addend to find the sum of two 2-digit numbers?

- How can you use the compensation strategy to find the sum of two 2-digit numbers?
- What strategies can you use to add two 2-digit numbers?
- What are some things you can do to help you keep track of steps in a problem?
- What are some ways to describe a good math argument?

Summative Assessment and/or Summative Criteria

- **Informal Observation:** Classroom Observation
- **Formal Assessment:** Topic 3 Modified Assessment, Topic Quick Checks

Resources

Pearson SuccessNet Math Series (digital and offline)

My Math Academy

ST Math online digital platform

Discovery Education math resources

Brain Pop online digital platform

Kahoot!

Unit Plan

*Based on your group, you may do:

- Visual Learning, Solve and Share, and Guided Practice in Whole Group; Independent Practice in Small Group OR
- Visual Learning in Whole Group; Solve and Share, Guided Practice and Independent Practice in Small Group
- You can change order between Visual Learning and Solve & Share

Topic/ Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/ Assessments
3-1: Add Tens and Ones on a Hundred Chart	SWBAT add within 100 using place-value strategies and a hundred chart.	Teacher will introduce the vocabulary terms: • Tens • Ones Visual Learning: Teacher will prompt students by asking the following question, "How can you use patterns on a hundred chart to help you add numbers mentally?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students are asked to explain how to use a hundred chart to solve the addition problem 32+43. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 3-1 (online)

		Math, or the Envision Math Game: Robo Launch- 2-Digit Number Practice found on PearsonRealize.com • Practice Center: Students will complete Additional Practice 3-1 numbers 1-6. Optional Activity: • Pick a Project Activity pg. 91 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 3-1	
3-2: Add tens and ones on an open number line	SWBAT use different ways to tell if a group of objects shows an even or odd number	Teacher will introduce the vocabulary terms: • Open Number Line Visual Learning: Teacher will prompt students by asking the following question, "How can you use an open number line to help you add two 2-digit numbers?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students use an open number line to add two 2-digit numbers, and they write an equation to show the sum. Guided Practice: Students will complete the "Guided Practice" section with the teacher together.	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 3-2 (online)

		Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math or the Envision Math Game: Flying Cow Incident-2-Digit Numbers found on PearsonRealize.com • Practice Center: Students will complete Additional Practice 3-2 numbers 1-4. Optional Activity: • Pick a Project Activity pg. 91. Students can choose an activity to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 3-2	
3-3: Break Apart Numbers to Add	SWBAT break apart numbers into tens and ones to find their sum.	Teacher will introduce the vocabulary terms: • Break apart Visual Learning: Teacher will prompt students by asking the following question, "How can you break apart the second addend to find the sum of two 2-digit numbers?" Teacher will play the video. Teacher will stop to explain when needed.	Guided Practice Independent Practice Additional Practice Reteach to Build

		Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students use any strategy they choose, along with drawings and equations, to solve an addition word problem. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math or the Envision Math Game: Launch that Sheep- Add and Subtract 1, 2, 5, 10 • Practice Center: Students will complete Additional Practice 3-3 numbers 1-7. Optional Activity: • Pick a Project Activity pg. 91. Students can choose an activity to build • Problem Solving Leveled Reading Mats Activity 3-3 • Practice Buddy (Online)	Understanding Practice Buddy (Online) Quick Check 3-3 (online)

		Closure: Homework - Reteach to Build Understanding 3-3	
3-4: Add Using Compensation	SWBAT break apart addends and combine them in different ways to make numbers that are easy to add mentally.	Teacher will introduce the vocabulary terms: • Compensation Visual Learning: Teacher will prompt students by asking the following question, “How can you use the compensation strategy to find the sum of two 2-digit numbers?” Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students are asked to change an addend in 27+16 to make it easier for them to find the sum. Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math or theEnvision Math Game: Robo Launch- 2-Digit Number Practice found on	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 3-4 (online)

		PearsonRealize.com. • Practice Center: Students will complete Additional Practice 3-4 numbers 1-7. Optional Activity: • Pick a Project Activity pg. 91. Students can choose an activity to build • enVision STEM Activity 3-4 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 3-4	
3-5: Practice Adding Using Strategies	SWBAT choose and use any strategy to add two-digit numbers	Visual Learning: Teacher will prompt students by asking the following question, "What strategies can you use to add two 2-digit numbers?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students use any strategy to solve a word problem. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 3-5 (online)

		Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math or the Envision Math Game: Robo Launch- 2-Digit Number Practice found on PearsonRealize.com • Practice Center: Students will complete Additional Practice 3-5 numbers 1-5. Optional Activity: • Pick a Project Activity pg. 91. Students can choose an activity to build • enVision STEM Activity 3-5 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 3-5	
3-6: Solve one-step and two-step problems	SWBAT use drawings and equations to solve one-step and two-step problems	Visual Learning: Teacher will prompt students by asking the following question, "What are some things you can do to help you keep track of steps in a problem?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students solve a one-step word problem, and they explain their answer using counters, drawings, or equations. Guided Practice: Students will complete the "Guided Practice" section	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online)

		with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy or ST Math. • Practice Center: Students will complete Additional Practice 3-6 numbers 1-6. Optional Activity: • Pick a Project Activity pg. 91. Students can choose an activity to build • Problem-Solving Leveled Reading Mats/ Activity 3-6 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 3-6	Quick Check 3-6 (online)
3-7: Problem Solving: Construct Arguments	SWBAT use words, pictures, numbers, and symbols to construct viable math arguments	Visual Learning: Teacher will prompt students by asking the following question, "What are some ways to describe a good math argument?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and	Guided Practice Independent Practice Additional

		share with the teacher. Students choose and use a strategy to solve a word problem. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy or ST Math. • Practice Center: Students will complete Additional Practice 3-7 number 1. Optional Activity: • Pick a Project Activity pg. 91. Students can choose an activity to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 3-7	Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 3-7 (online)
Topic 3 Reteaching/Review	SWBAT add within 100 using strategies	Complete Reteaching Sets prior to giving Topic Assessment • Fluency Practice Activity	Reteaching Sets

		• Vocabulary Review • Topic 3 Reteaching	

MA.2.OA.A	Represent and solve problems involving addition and subtraction.
MA.2.OA.B	Add and subtract within 20.
MA.2.OA.B.2	Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.
MA.2.NBT.A	Understand place value.
MA.2.NBT.B.9	Explain why addition and subtraction strategies work, using place value and the properties of operations.

Suggested Modifications for Special Education, ELL and Gifted Students

Consistent with individual plans, when appropriate.

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment pintables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use center, stations, or contract
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used

- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- perimeter, equilateral triangle, centimeter, polygon, area, square units (use visuals/anchor charts)
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technological Innovations/Use

- My Math Academy
- ST Math
- Kahoot!
- Tools (Envision 2020)
- Game Center (Envision 2020)
- Create/Complete a Discovery Education Board

Cross Curricular/21st Century Connections

- Pick a Project Activity
- enVision STEM Project
- Problem Solving Reading Activity
- 3 ACT MATH Activity

Topic 4: Fluently Add Within 100

Content Area: **Mathematics**
Course(s):
Time Period:
Length:
Status: **Not Published**

Summary of the Unit

Topic 4 focuses on developing computational fluency in addition within 100 by using models, understanding of place value, properties of operation, the partial-sums method, and mental math.

Enduring Understandings

- Strategies for adding two-digit numbers involve breaking numbers apart using place value and joining tens and ones in either order.
- Strategies for adding two-digit numbers involve breaking numbers apart using place value and joining tens and ones in either order. Sometimes 10 ones can be composed to make 1 ten.
- One way to add two-digit numbers is to break the numbers into tens and ones, add the tens and add the ones in either order, and then add partial sums to find the total.
- One way to add two-digit numbers is to break the numbers into tens and ones, add the tens and add the ones in either order, and then add these partial sums to find the total.
- One way to add two-digit numbers is to break just one addend into tens and ones, add the tens to the other addend and then add the ones.
- Strategies for adding two 2-digit numbers can be extended to adding more than two 2-digit numbers. Numbers can be added in any order.
- There are several addition strategies that can be used to add more than two numbers. Numbers can be added in any order.
- Some problems can be solved in one step. Other problems can be solved in two steps- first, by solving a sub-problem or by answering a hidden question, and then by using that answer to solve the original problem.
- Good math thinkers use math they know to show and solve problems.

Essential Questions

- How can you use regrouping to add two 2-digit numbers?
- How can you use place-value drawings and breaking addends into tens and ones to solve addition problems?
- How can you use partial sums to add two-digit numbers?
- How can you use mental math and partial sums to add two-digit numbers?
- How can you break apart one addend and add mentally to find the sum of two 2-digit numbers?
- How can you add more than two 2-digits numbers?
- How can you add two or more 2-digit numbers in different ways?
- What are some things you can do to help you solve one - and two-step word problems?
- What are some ways to show (model) and solve word problems?

Summative Assessment and/or Summative Criteria

- **Informal Observation:** Classroom Observation
- **Formal Assessment:** Topic 4 Modified Assessment, Topic Quick Checks

Resources

Pearson SuccessNet Math Series (digital and offline)

My Math Academy

ST Math online digital platform

Discovery Education math resources

Brain Pop online digital platform

Kahoot!

Unit Plan

*Based on your group, you may do:

- Visual Learning, Solve and Share, and Guided Practice in Whole Group; Independent Practice in Small Group OR
- Visual Learning in Whole Group; Solve and Share, Guided Practice and Independent Practice in Small Group
- You can change order between Visual Learning and Solve & Share

Topic/ Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/ Assessments
4-1: Add 2-Digit Numbers Using Models	SWBAT use models to add 2-digit numbers and then	Teacher will introduce the vocabulary terms: • Regroup Visual Learning: Teacher will prompt students by asking the following question, "How can you use regrouping to add two 2-digit numbers?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. StudentsStudents use place-value blocks to model an addition word problem involving two 2-digit numbers. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 4-1 (online)

		Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math, or the Envision Math Game: Robo Launch- 2-Digit Number Practice found on PearsonRealize.com • Practice Center: Students will complete Additional Practice 4-1 numbers 1-9. Optional Activity: • Pick a Project Activity pg. 135-136 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 4-1	
4-2: Continue to Add 2-Digit Numbers Using Models	SWBAT add 2-digit numbers using models	Visual Learning: Teacher will prompt students by asking the following question, "How can you use place-value drawings and breaking addends into tens and ones to solve addition problems?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students use place-value blocks to solve a word problem involving two 2-digit numbers. Guided Practice: Students will complete the "Guided Practice" section	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online)

		with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math or the Envision Math Game: Flying Cow Incident-2-Digit Numbers found on PearsonRealize.com • Practice Center: Students will complete Additional Practice 4-2 numbers 1-8. Optional Activity: • Pick a Project Activity pgs. 135-136. Students can choose an activity to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 4-2	Quick Check 4-2 (online)
4-3: Add with Partial Sums	SWBAT add using place value and sums	Teacher will introduce the vocabulary terms: • Partial Sum Visual Learning: Teacher will prompt students by asking the following question, "How can you use partial sums to add two-digit numbers?"	Guided Practice Independent Practice Additional

		Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students draw place-value blocks to add two 2-digit numbers. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math or the Envision Math Game:Flying Cow Incident- 2-Digit Number found on PearsonRealize.com • Practice Center: Students will complete Additional Practice 4-3 numbers 1-4, 6. Optional Activity: • Pick a Project Activity pg. 135-136. Students can choose an activity to build • enVision STEM Activity 4-3	Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 4-3 (online)

		• Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 4-3	
4-4: Add Using Mental Math and Partial Sums	SWBAT add using mental math, place value and partial sums	Teacher will introduce the vocabulary terms: • Mental Math Visual Learning: Teacher will prompt students by asking the following question, "How can you use mental math and partial sums to add two-digit numbers?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students solve a two-digit addition problem and explain their work/thinking. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math or the Envision Math	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 4-4 (online)

		Game: Flying Cow Incident- 2-Digit Number found on PearsonRealize.com • Practice Center: Students will complete Additional Practice 4-4 numbers 1-4, 8-9. Optional Activity: • Pick a Project Activity pg. 135-136. Students can choose an activity to build • Problem-Solving Leveled Reading Mats Activity 4-4 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 4-4	
4-5: Break Apart Numbers and Add Using Mental Math	SWBAT add using place value strategies and mental math	Visual Learning: Teacher will prompt students by asking the following question, "How can you break apart one addend and add mentally to find the sum of two 2-digit numbers?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students solve a 2-digit addition problem using place-value blocks or a drawing. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 4-5 (online)

		will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math or the Envision Math Game: Robo Launch- 2-Digit Number Practice found on PearsonRealize.com • Practice Center: Students will complete Additional Practice 4-5 numbers 1-7. Optional Activity: • Pick a Project Activity pg. 135-136. Students can choose an activity to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 4-5	
4-6: Add More Than Two 2-digit Numbers	SWBAT add three or four 2-digit numbers	Visual Learning: Teacher will prompt students by asking the following question, "How can you add more than two 2-digit numbers?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students critique a strategy used to add three 2-digit numbers. Then they solve the problem using a strategy of their choice. This prepares them to add up to four 2-digit numbers.	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding

		Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math or the Envision Math Game: Robo Launch- 2-Digit Number Practice found on PearsonRealize.com. • Practice Center: Students will complete Additional Practice 4-6 numbers 1-8. Optional Activity: • Pick a Project Activity pg. 135-136. Students can choose an activity to build • Problem-Solving Leveled Reading Mats Activity 4-6 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 4-6	Practice Buddy (Online) Quick Check 4-6 (online)
4-7: Practice Adding Using Strategies	SWBAT practice using strategies to add more than two numbers	Teacher will introduce the vocabulary terms:	Guided Practice

		• Compatible Numbers Visual Learning: Teacher will prompt students by asking the following question, "How can you add two or more 2-digit numbers in different ways?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students solve a word problem involving three 2-digit numbers and explain how they found their answer. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math or the Envision Math Game: Flying Cow Incident- 2-Digit Number found on PearsonRealize.com. • Practice Center: Students will complete Additional Practice 4-7 numbers 1-8.	Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 4-7 (online)

		Optional Activity: • Pick a Project Activity pg. 135-136. Students can choose an activity to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 4-7	
4-8: Solve One-Step and Two-Step Problems	SWBAT use drawings, models, and equations to solve one and two-step problems	Visual Learning: Teacher will prompt students by asking the following question, "What are some things you can do to help you solve one and two-step word problems?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students are asked to use drawings, models, or an equation to solve an addition problem Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy or ST	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 4-8 (online)

		Math. • Practice Center: Students will complete Additional Practice 4-8 numbers 1, 2, 4. Optional Activity: • Pick a Project Activity pg. 135-136. Students can choose an activity to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 4-8	
4-9: Problem Solving: Model with Math	SWBAT make models to help solve math problems	Visual Learning: Teacher will prompt students by asking the following question, "What are some ways to show (model) and solve word problems?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students solve a put-together, total-unknown word problem by adding together two 2-digit numbers. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 4-9 (online)

		complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math or the Envision Math Game: Save the World- Grade 2 Topic 1-4. • Practice Center: Students will complete Additional Practice 4-9 number 1-4. Optional Activity: • Pick a Project Activity pg. 135-136. Students can choose an activity to build • enVision STEM Activity 4-9 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 4-9	
Topic 4 Reteaching/Review	SWBAT fluently add within 100	Complete Reteaching Sets prior to giving Topic Assessment • Fluency Practice Activity • Vocabulary Review • Topic 4 Reteaching	Reteaching Sets

MA.2.OA.B	Add and subtract within 20.
MA.2.OA.B.2	Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.
MA.2.NBT.A	Understand place value.
MA.2.NBT.B.9	Explain why addition and subtraction strategies work, using place value and the properties of operations.

Suggested Modifications for Special Education, ELL and Gifted Students

Consistent with individual plans, when appropriate.

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment pintables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use center, stations, or contract
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- perimeter, equilateral triangle, centimeter, polygon,

area, square units (use visuals/anchor charts)

- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technological Innovations/Use

- My Math Academy
- ST Math
- Kahoot!
- Tools (Envision 2020)
- Game Center (Envision 2020)
- Create/Complete a Discovery Education Board

Cross Curricular/21st Century Connections

- Pick a Project Activity
- enVision STEM Project
- Problem Solving Reading Activity
- 3 ACT MATH Activity

Topic 5: Subtract Within 100 Using Strategies

Content Area: **Mathematics**
Course(s):
Time Period:
Length:
Status: **Not Published**

Summary of the Unit

Topic 5 focuses on subtraction within 100 using strategies that employ a hundred chart, an open number line, breaking numbers apart, and compensation.

Enduring Understandings

- Patterns on a hundred chart can be used to subtract numbers and to develop mental math strategies and number sense.
- Two-digit numbers can be broken apart using tens and ones to subtract in different ways. You can represent how you break apart and subtract numbers with hops or jumps on an open number line.
- Two-digit numbers can be broken apart using tens and ones to subtract in different ways.
- One-digit numbers can be broken apart to make it easier to subtract them mentally.
- When subtracting 2-digit numbers, you can add the same amount to both numbers in the problem
- There are different ways to subtract 2-digit numbers. Certain strategies may be better to use for a problem than others.
- You can use bar diagrams, equations, and the relationship between addition and subtraction to help you solve one and two step problems.
- Good math thinkers use math to explain why they are right. They can talk about the math that others do too.

Essential Questions

- How can patterns on a hundred chart help you subtract numbers mentally?
- How can you use an open number line to subtract tens and ones?
- How can you use an open number line to add up to subtract?

- Why is it a good idea to break apart the number you are subtracting into two numbers?
- Why is compensation, and how can you use it to help you subtract?
- What strategies can you use to subtract two 2-digit numbers?
- How can you go about solving one and two step word problems?
- What are some things you can do to critique the thinking of others?

Summative Assessment and/or Summative Criteria

- **Informal Observation:** Classroom Observation
- **Formal Assessment:** Topic 5 Modified Assessment, Topic Quick Checks

Resources

Pearson SuccessNet Math Series (digital and offline)

My Math Academy

ST Math online digital platform

Discovery Education math resources

Brain Pop online digital platform

Kahoot!

Unit Plan

*Based on your group, you may do:

- Visual Learning, Solve and Share, and Guided Practice in Whole Group; Independent Practice in Small Group OR
- Visual Learning in Whole Group; Solve and Share, Guided Practice and Independent Practice in Small Group
- You can change order between Visual Learning and Solve & Share

Topic/ Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/ Assessments
5-1: Subtract Tens and Ones on a Hundred Chart	SWBAT use a hundred chart to subtract tens and ones	Visual Learning: Teacher will prompt students by asking the following question, "How can patterns on a hundred chart help you subtract numbers mentally?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students explain how they use a hundred chart to find the difference of two 2-digit numbers. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math, or the Envision Math Game: Robo Launch- Add and Subtract 2-Digit Numbers found on PearsonRealize.com • Practice Center: Students will complete Additional Practice 5-1 numbers 1-12.	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 5-1 (online)

		Optional Activity: • Pick a Project Activity pg. 187. Students can choose an activity to build. • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 5-1	
5-2: Count Back to Subtract on an Open Number Line	SWBAT use an open number line to subtract tens and ones	Visual Learning: Teacher will prompt students by asking the following question, "How can you use an open number line to subtract tens and ones?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students use an open number line to solve a word problem. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, or ST Math. • Practice Center: Students will	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 5-2 (online)

		complete Additional Practice 5-2 numbers 1-6, 8. Optional Activity: • Pick a Project Activity pgs. 187. Students can choose an activity to build • enVision STEM Activity 5-2 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 5-2	
5-3: Add Up to Subtract Using an Open Number Line	SWBAT add up to subtract using an open number line	Visual Learning: Teacher will prompt students by asking the following question, "How can you use an open number line to add up to subtract?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students use an open number line to solve an addend-unknown word problem. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 5-3 (online)

		guidance when needed. • Technology: Students will work on My Math Academy, or ST Math. • Practice Center: Students will complete Additional Practice 5-3 numbers 1-4. Optional Activity: • Pick a Project Activity pg. 187. Students can choose an activity to build • enVision STEM Activity 5-3 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 5-3	
5-4: Break Apart Numbers to Subtract	SWBAT break apart 1-digit numbers to make it easier to subtract mentally	Visual Learning: Teacher will prompt students by asking the following question, “Why is it a good idea to break apart the number you are subtracting into two numbers?” Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students solve a subtraction problem and explain their answer. Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities:	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 5-4 (online)

		• Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math or theEnvision Math Game: Launch That Sheep- Add and Subtract 1, 2, 5, 10 found on PearsonRealize.com • Practice Center: Students will complete Additional Practice 5-4 numbers 1-6. Optional Activity: • Pick a Project Activity pg. 187. Students can choose an activity to build • Problem-Solving Leveled Reading Mats Activity 5-4 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 5-4	
5-5: Subtract Using Compensation	SWBAT make numbers that are easier to subtract, and use mental math to find the difference	Visual Learning: Teacher will prompt students by asking the following question, "What is compensation, and how can you use it to help you subtract?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students use mental math to subtract 2-digit	Guided Practice Independent Practice Additional Practice Reteach to Build

		numbers. Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math or the Envision Math Game: Robo Launch- Add and Subtract 2-Digit Numbers found on PearsonRealize.com • Practice Center: Students will complete Additional Practice 5-5 numbers 1-5. Optional Activity: • Pick a Project Activity pg. 187. Students can choose an activity to build • Problem-Solving Leveled Reading Mats Activity 5-5 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 5-5	Understanding Practice Buddy (Online) Quick Check 5-5 (online)
5-6: Practice Using Subtraction	SWBAT choose and use any strategy to	Visual Learning: Teacher will prompt students by asking the following	Guided Practice

Strategies	subtract 2-digit numbers	question, “What strategies can you use to subtract two 2-digit numbers?” Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students use any strategy to solve a take-apart, total-unknown word problem, and they show and explain their work. Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math or the Envision Math Game: Robo Launch- Add and Subtract 2-Digit Numbers found on PearsonRealize.com • Practice Center: Students will complete Additional Practice 5-6 numbers 1-3. Optional Activity: • Pick a Project Activity pg. 187. Students can choose an activity	Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 5-6 (online)

		to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 5-6	
5-7: Solve One-Step and Two-Step Problems	SWBAT solve one and two-step problems using addition or subtraction	Visual Learning: Teacher will prompt students by asking the following question, “How can you go about solving one-and two-step word problems?” Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students solve an add-to, start-unknown word problem. Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math or the Envision Math Game: Fluency- Add and Subtract within 20 found on PearsonRealize.com • Practice Center: Students will	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 5-7 (online)

		complete Additional Practice 5-7 numbers 1-3. Optional Activity: • Pick a Project Activity pg. 187. Students can choose an activity to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 5-7	
5-8: Problem Solving: Critique Reasoning	SWBAT critique the thinking of others by using what is known about addition and subtraction	Visual Learning: Teacher will prompt students by asking the following question, "What are some things you can do to critique the thinking of others?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students are asked if they agree with another student's solution to a word problem and to explain their reasoning. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 5-8 (online)

		guidance when needed. • Technology: Students will work on My Math Academy, ST Math and Envision Math Game: Save the Word: Grade 2, Topic 1-4 found on PearsonRealize.com. • Practice Center: Students will complete Additional Practice 5-8 number 1-4 [modify as needed]. Optional Activity: • Pick a Project Activity pg. 187. Students can choose an activity to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 5-8	
Topic 5 Reteaching/Review	SWBAT subtract within 100 using strategies	Complete Reteaching Sets prior to giving Topic Assessment • Fluency Practice Activity • Vocabulary Review • Topic 5 Reteaching	Reteaching Sets

MA.2.OA.A	Represent and solve problems involving addition and subtraction.
MA.2.OA.B	Add and subtract within 20.
MA.2.OA.B.2	Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know fron memory all sums of two one-digit numbers.
MA.2.NBT.B.9	Explain why addition and subtraction strategies work, using place value and the propertie of operations.

Suggested Modifications for Special Education, ELL and Gifted Students

Consistent with individual plans, when appropriate.

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment pintables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use center, stations, or contract
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- perimeter, equilateral triangle, centimeter, polygon, area, square units (use visuals/anchor charts)

- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technological Innovations/Use

- My Math Academy
- ST Math
- Kahoot!
- Tools (Envision 2020)
- Game Center (Envision 2020)
- Create/Complete a Discovery Education Board

Cross Curricular/21st Century Connections

- Pick a Project Activity
- enVision STEM Project
- Problem Solving Reading Activity
- 3 ACT MATH Activity

Topic 6: Fluently Subtract Within 100

Content Area: **Mathematics**
Course(s):
Time Period:
Length:
Status: **Not Published**

Summary of the Unit

Topic 6 focuses on developing computational fluency in subtraction within 100 by using understanding or place value, properties of operations, mental math, and the partial- differences strategy.

Enduring Understandings

- When you use place-value materials to subtract a one-digit whole number from a two-digit whole number, sometimes you need to decompose 1 ten as 10 ones.
- When you use place-value materials to subtract a two-digit whole number from a two-digit whole number, sometimes you need to decompose 1 ten as 10 ones. When subtracting, you can start with the tens or the ones.
- When subtracting two-digit numbers, you can subtract the tens and then subtract the ones by making a 10.
- Two-digit numbers can be broken apart to make it easier to subtract them mentally.
- Subtraction problems involving two-digit numbers can be solved using different subtraction strategies.
- Two-step-word-problems can be solved by first identifying and solving a hidden question. The answer to the hidden question is then used to answer the question given in the problem.
- A bar diagram can be used to identify the relationship between quantities in a word problem and the operation(s) needed to solve it.

Essential Questions

- Why do you sometimes need to regroup when you subtract?
- How is subtracting a 2-digit number like subtracting a 1-digit number from a 2-digit number?

- How can you use partial differences to subtract two-digit numbers?
- How could you break apart a two-digit number that you are subtracting in order to make it easier to subtract?
- What are some strategies you could use to solve a subtraction problem?
- Why is it helpful to complete a bar diagram and write an equation to solve word problems?
- How can you use a bar diagram and an equation to show how the numbers in a word problem are related?

Summative Assessment and/or Summative Criteria

- **Informal Observation:** Classroom Observation
- **Formal Assessment:** Topic 6 Modified Assessment, Topic Quick Checks

Resources

Pearson SuccessNet Math Series (digital and offline)

My Math Academy

ST Math online digital platform

Discovery Education math resources

Brain Pop online digital platform

Kahoot!

Unit Plan

*Based on your group, you may do:

- Visual Learning, Solve and Share, and Guided Practice in Whole Group; Independent Practice in Small Group OR
- Visual Learning in Whole Group; Solve and Share, Guided Practice and Independent Practice in Small Group

- You can change order between Visual Learning and Solve & Share

Topic/ Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/ Assessments
6-1: Subtract 1-Digit Numbers Using Models	SWBAT use place value and models to subtract one-digit numbers	Visual Learning: Teacher will prompt students by asking the following question, "Why do you sometimes need to regroup when you subtract?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students explain how to subtract a one-digit number from a two-digit number. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math, or the Envision Math Game: Flying Cow Incident- 2-Digit Numbers Found on PearsonRealize.com • Practice Center: Students will complete Additional Practice 6-1 numbers 1-7.	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 6-1 (online)

		Optional Activity: • Pick a Project Activity pg. 235-236. Students can choose an activity to build. • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 6-1	
6-2: Subtract 2-Digit Numbers Using Models	SWBAT use place value and models to subtract two-digit numbers	Visual Learning: Teacher will prompt students by asking the following question, "How is subtracting a 2-digit number like subtracting a 1-digit number from a 2-digit number?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students use place-value blocks to model two-digit subtraction. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math or the Envision Math Game: Robo Launch- Add and	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 6-2 (online)

		Subtract 2-Digit Numbers found on Pearsonrealize.com. • Practice Center: Students will complete Additional Practice 6-2 numbers 1-7, 9. Optional Activity: • Pick a Project Activity pgs. 235-236. Students can choose an activity to build • Problem-Solving Reading Mats Activity 6-2 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 6-2	
6-3: Subtract Using Partial Difference	SWBAT subtract using place value and partial differences	Teacher will introduce the vocabulary terms: • Partial Differences Visual Learning: Teacher will prompt students by asking the following question, “How can you use partial differences to subtract two-digit numbers?” Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher.Students draw place-value blocks to solve a two-digit-from-two-digit subtraction problem. Guided Practice: Students will complete the “Guided Practice” section with the teacher together.	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 6-3 (online)

		Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math or the Envision Math Game: Robo Launch- Add and Subtract 2-Digit Numbers found on Pearsonrealize.com . • Practice Center: Students will complete Additional Practice 6-3 numbers 1-8. Optional Activity: • Pick a Project Activity pg. 235-236. Students can choose an activity to build • enVision STEM Activity 6-3 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 6-3	
6-4:Continue to Subtract Using Partial Differences	SWBAT break apart two-digit numbers to make it easier to subtract	Visual Learning: Teacher will prompt students by asking the following question, "How could you break apart a two-digit number that you are subtracting in order to make it easier to subtract? Explain." Teacher will play the video. Teacher will stop to explain when needed.	Guided Practice Independent Practice Additional

		Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students solve a two-digit subtraction problem in two different ways. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math or theEnvision Math Game: Launch That Sheep- Add and Subtract 1, 2, 5, 10 found on PearsonRealize.com • Practice Center: Students will complete Additional Practice 6-4 numbers 1-6, 8-9. Optional Activity: • Pick a Project Activity pg. 235-236. Students can choose an activity to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 6-4	Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 6-4 (online)

6-5: Practice Subtracting	SWBAT subtract two-digit numbers using a variety of subtraction strategies	Visual Learning: Teacher will prompt students by asking the following question, “What are some strategies you could use to solve a subtraction problem?” Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students choose any strategy to solve a two-digit subtraction problem. Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math or the Envision Math Game: Fluency- Add and Subtract within 100 found on PearsonRealize.com • Practice Center: Students will complete Additional Practice 6-5 numbers 1-5. Optional Activity: • Pick a Project Activity pg. 235-	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 6-5 (online)

		236. Students can choose an activity to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 6-5	
6-6: Solve One-Step and Two-Step Problems	SWBAT use models and equations to solve word problems	Visual Learning: Teacher will prompt students by asking the following question, "Why is it helpful to complete a bar diagram and write an equation to solve a word problem?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students solve a two-step problem any way they choose, and show their work. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy or ST Math. • Practice Center: Students will complete Additional Practice 6-	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 6-6 (online)

		6 numbers 1-3. Optional Activity: • Pick a Project Activity pg. 235-236. Students can choose an activity to build • enVision STEM Activity 6-6 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 6-6	
6-7: Problem Solving: Reasoning	SWBAT reason about word problems and use bar diagrams and equations to solve them	Visual Learning: Teacher will prompt students by asking the following question, "How can you use a bar diagram and an equation to show how the numbers in a word problem are related?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students solve a word problem and explain the operation they chose. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 6-7 (online)

		teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy or ST Math. • Practice Center: Students will complete Additional Practice 6-7 numbers 1-4. Optional Activity: • Pick a Project Activity pg. 235-236. Students can choose an activity to build • Problem-Solving Leveled Reading Mats Activity 6-7 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 6-7	
Topic 6 Reteaching/Review	SWBAT fluently subtract within 100	Complete Reteaching Sets prior to giving Topic Assessment • Fluency Practice Activity • Vocabulary Review • Topic 6 Reteaching	Reteaching Sets

MA.2.OA.A	Represent and solve problems involving addition and subtraction.
MA.2.OA.B	Add and subtract within 20.
MA.2.OA.B.2	Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know fron memory all sums of two one-digit numbers.
MA.2.NBT.B.9	Explain why addition and subtraction strategies work, using place value and the propertie of operations.

Suggested Modifications for Special Education, ELL and Gifted Students

Consistent with individual plans, when appropriate.

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment pintables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use center, stations, or contract
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- perimeter, equilateral triangle, centimeter, polygon, area, square units (use visuals/anchor charts)

- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technological Innovations/Use

- My Math Academy
- ST Math
- Kahoot!
- Tools (Envision 2020)
- Game Center (Envision 2020)
- Create/Complete a Discovery Education Board

Cross Curricular/21st Century Connections

- Pick a Project Activity
- enVision STEM Project
- Problem Solving Reading Activity
- 3 ACT MATH Activity

Topic 7: More Problem Solving Involving Addition and Subtraction

Content Area: **Mathematics**
Course(s):
Time Period:
Length:
Status: **Not Published**

Summary of the Unit

Topic 7 focuses on representing and solving one and two step word problems involving addition and subtraction situations. Students represent the numerical relationship in the word problems using drawings, bar diagrams, and equations with symbols for the unknown number. Then they fluently add and subtract within 100 to find the solution. They also determine the unknown quantity in addition and subtraction equations.

Enduring Understandings

- A bar diagram can be used to show the relationship between quantities in a real-world problem, and an equation can be written to represent that relationship.
- A bar diagram can be used to show the relationship between quantities in a real-world problem, and an equation can be written to represent that relationship. Strategies for adding and subtracting whole numbers can be used to find unknowns.
- A bar diagram can be used to show the relationship between quantities in a real-world problem, and an equation can be written to represent that relationship. Strategies for adding and subtracting whole numbers can be used to find the unknowns.
- Sometimes a problem has an unstated, or hidden, question that you need to answer before you can find the final answer.
- Sometimes the answer to one problem is needed to find the answer to another problem.
- An equation can have different numerical expressions on each side of the equal sign, but each has the same value.
- Reasoning can be used to identify relationships between quantities in real-world problems. Equations can be written to represent relationships.

Essential Questions

- How can you write an equation to show and solve a word problem?
- What are some things you can do to help you solve word problems?
- How can you use a bar diagram to help you solve a word problem?
- How do you decide if you need to solve a problem in two steps?
- How can you figure out if there is a hidden question that you need to answer first in order to solve a word problem?
- How can you find the missing number in an equation that relates two numbers on each side?
- How can you find the missing number in an equation that relates up to three numbers on each side?
- How can you use an equation to write a number story?

Summative Assessment and/or Summative Criteria

- **Informal Observation:** Classroom Observation
- **Formal Assessment:** Topic 7 Modified Assessment, Topic Quick Checks

Resources

Pearson SuccessNet Math Series (digital and offline)

My Math Academy

ST Math online digital platform

Discovery Education math resources

Brain Pop online digital platform

Kahoot!

Unit Plan

*Based on your group, you may do:

- Visual Learning, Solve and Share, and Guided Practice in Whole Group; Independent Practice in Small Group OR

- Visual Learning in Whole Group; Solve and Share, Guided Practice and Independent Practice in Small Group
- You can change order between Visual Learning and Solve & Share

Topic/ Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/ Assessments
7-1: Represent Addition and Subtraction Problems	SWBAT model problems using equations with unknowns in any position	Visual Learning: Teacher will prompt students by asking the following question, "How can you write an equation to show and solve a word problem?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students are asked to critique another's thinking about how to represent and solve a word problem using an equation. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math, or the Envision Math Game: Flying Cow Incident- 2-Digit Numbers Found on PearsonRealize.com	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 7-1 (online)

		• Practice Center: Students will complete Additional Practice 7-1 numbers 1-7. Optional Activity: • Pick a Project Activity pg. 279. Students can choose an activity to build. • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 7-1	
7-2: Mixed Practice: Solve Addition and Subtraction Problems	SWBAT use drawings and equations to make sense of the words in problems	Visual Learning: Teacher will prompt students by asking the following question, "What are some things you can do to help you solve word problems?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students solve a comparison word problem any way they choose. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 7-2 (online)

		guidance when needed. • Technology: Students will work on My Math Academy or ST Math. • Practice Center: Students will complete Additional Practice 7-2 numbers 1-3. Optional Activity: • Pick a Project Activity pg. 279. Students can choose an activity to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 7-2	
7-3: Continue Practice with Addition and Subtraction Problems	SWBAT use drawings and equations to make sense of the words in problems	Visual Learning: Teacher will prompt students by asking the following question, "How can you use a bar diagram to help you solve a word problem?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students solve a comparison word problem any way they choose. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 7-3 (online)

		the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy or ST Math. • Practice Center: Students will complete Additional Practice 7-3 numbers 1-3. Optional Activity: • Pick a Project Activity pg. 279. Students can choose an activity to build • enVision STEM Activity 7-3 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 7-3	
7-4: Solve Two-Step Problems	SWBAT model and solve two-step problems using equations	Visual Learning: Teacher will prompt students by asking the following question, "How do you decide if you need to solve a problem in two steps?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students identify the steps needed to solve a two-step word problem with 1-digit and 2-digit numbers. Guided Practice: Students will complete the "Guided Practice" section	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy

		with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math or theEnvision Math Game: Robo Launch- Add and Subtract 2-Digit Numbers • Practice Center: Students will complete Additional Practice 7-4 numbers 1-2. Optional Activity: • Pick a Project Activity pg. 279. Students can choose an activity to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 7-4	(Online) Quick Check 7-4 (online)
7-5: Continue to Solve Two-Step Problems	SWBAT use different ways to solve two-step problems	Visual Learning: Teacher will prompt students by asking the following question, "How can you figure out if there is a hidden question that you need to answer first in order to solve a word problem." Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the	Guided Practice Independent Practice Additional Practice

		lesson with completing the solve and share with the teacher.Students determine the steps needed to solve a two-step word problem. Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math or the Envision Math Game: Robo Launch- Add and Subtract 2-Digit Numbers. • Practice Center: Students will complete Additional Practice 7-5 numbers 1-2, 4-5. Optional Activity: • Pick a Project Activity pg. 279. Students can choose an activity to build • enVision STEM Activity 7-5 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 7-5	Reteach to Build Understanding Practice Buddy (Online) Quick Check 7-5 (online)

7-6 Make True Equations	SWBAT find unknown numbers in equations that relate four whole numbers.	Visual Learning: Teacher will prompt students by asking the following question, “How can you find the missing number in an equation that relates two numbers on each side?” Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students find the missing number that makes the equation true and explain strategies they used, such as counting on, to find it. Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy or ST Math. • Practice Center: Students will complete Additional Practice 7-6 numbers 1-4, 6. Optional Activity: • Pick a Project Activity pg. 279. Students can choose an activity	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 7-6 (online)

		to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 7-6	
7-7: Continue to Make Ture Equations	SWBAT find unknown numbers in equations that relate four or more whole numbers	Visual Learning: Teacher will prompt students by asking the following question, "How can you find the missing number in an equation that relates up to three numbers on each side?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students find a missing number to make an equation true. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy or ST Math. • Practice Center: Students will complete Additional Practice 7-	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 7-7 (online)

		7 numbers 1-4. Optional Activity: • Pick a Project Activity pg. 279. Students can choose an activity to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 7-7	
7-8: Problem Solving: Reasoning	SWBAT use reasoning to write and solve number stories	Visual Learning: Teacher will prompt students by asking the following question, "How can you use an equation to write a number story?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Given the answer to a problem, students use it to write a number story. Then they write an equation to match their story. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed.	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 7-8 (online)

		• Technology: Students will work on My Math Academy or ST Math. • Practice Center: Students will complete Additional Practice 7-8 numbers 1-4. Optional Activity: • Pick a Project Activity pg. 279. Students can choose an activity to build • 7-8 Problem-Solving Leveled Reading Mats Activity • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 7-8	
Topic 7 Reteaching/Review	SWBAT continue practicing fluently adding and subtracting within 20	Complete Reteaching Sets prior to giving Topic Assessment • Fluency Practice Activity • Vocabulary Review • Topic 7 Reteaching	Reteaching Sets

MA.2.OA.A	Represent and solve problems involving addition and subtraction.
MA.2.OA.B	Add and subtract within 20.
MA.2.OA.B.2	Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.
MA.2.NBT.B	Use place value understanding and properties of operations to add and subtract.
MA.2.NBT.B.9	Explain why addition and subtraction strategies work, using place value and the properties of operations.

Suggested Modifications for Special Education, ELL and Gifted Students

Consistent with individual plans, when appropriate.

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment pintables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use center, stations, or contract
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- perimeter, equilateral triangle, centimeter, polygon, area, square units (use visuals/anchor charts)
- Use visuals/visual learning videos/”Another Look” videos and the Animated glossary

- “Listen and Look For” when beginning the topic
- Envision reteach/intervention kit

Suggested Technological Innovations/Use

- My Math Academy
- ST Math
- Kahoot!
- Tools (Envision 2020)
- Game Center (Envision 2020)
- Create/Complete a Discovery Education Board

Cross Curricular/21st Century Connections

- Pick a Project Activity
- enVision STEM Project
- Problem Solving Reading Activity
- 3 ACT MATH Activity

Topic 8: Work With Time and Money

Content Area: **Mathematics**
Course(s):
Time Period:
Length:
Status: **Not Published**

Summary of the Unit

Topic 8 focuses on identifying and counting coins and bills, solving word problems about money, telling time to the nearest 5 minutes using a.m. and p.m., and telling time before and after the hour.

Enduring Understandings

- Each kind of coin has a specific value unrelated to the physical size.
- Money is measurable, and the value of coins can be quantified using cent amounts.
- Money measurable and can be quantified using dollar and cent amounts. Each kind of bill has a specific value. You can count to find the total value of a group of dollar bills.
- Each kind of bill has a specific value, ant the value of the bills can be used to solve problems about money. Word problems about money can often be solved by adding and subtracting.
- Good math thinkers know how to think about words and numbers to solve problems.
- Time can be told and written to the nearest 5 minutes. Time can be expressed using different units that are related to each other.
- Time can be described before and after the hour in different ways.
- Certain time periods can be described using the abbreviations a.m and p.m.

Essential Questions

- How can you find the total value of a group of coins?
- What are some strategies you can use to help you solve word problems about money?
- How can you find the total value of a group of dollar bills?
- What are some strategies you can use to help you solve word problems about money?

- How can you find all the different ways to make a total amount of money?
- How can you use clocks to tell time?
- What are some different ways to say the time of day?
- When do you use a.m. and when do you use p.m. to describe the time of day?

Summative Assessment and/or Summative Criteria

- **Informal Observation:** Classroom Observation
- **Formal Assessment:** Topic 8 Modified Assessment, Topic Quick Checks

Resources

Pearson SuccessNet Math Series (digital and offline)

My Math Academy

ST Math online digital platform

Discovery Education math resources

Brain Pop online digital platform

Kahoot!

Unit Plan

*Based on your group, you may do:

- Visual Learning, Solve and Share, and Guided Practice in Whole Group; Independent Practice in Small Group OR
- Visual Learning in Whole Group; Solve and Share, Guided Practice and Independent Practice in Small Group
- You can change order between Visual Learning and Solve & Share

Topic/ Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/ Assessments
8-1: Solve Problems with Coins	SWBAT solve problems with coins	Teacher will introduce the vocabulary terms: • Dime • Nickel • Penny • Quarter • Half-dollar • Cents Visual Learning: Teacher will prompt students by asking the following question, "How can you find the total value of a group of coins?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students are asked to add three given values expressed in cents. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 8-1 (online)

		Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, or ST Math. • Practice Center: Students will complete Additional Practice 8-1 numbers 1-2, 4-5. Optional Activity: • Pick a Project Activity pg. 327-328. Students can choose an activity to build. • enVision STEM Activity 8-1 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 8-1	
8-2: Continue to Solve Problems with Coins	SWBAT solve problems with coins	Visual Learning: Teacher will prompt students by asking the following question, "What are some strategies you can use to help you solve word problems about money?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students solve a subtraction word problem involving coins. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 8-2

		Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy or ST Math. • Practice Center: Students will complete Additional Practice 8-2 numbers 1-5, 7. Optional Activity: • Pick a Project Activity pg. 327-328. Students can choose an activity to build • Problem Solving Leveled Reading Mat Activity 8-2 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 8-2	(online)
8-3: Solve problems with Dollar Bills	SWBAT solve problem with dollar bills and coins that model 100 cents	Teacher will introduce the vocabulary terms: • Dollar • Dollar sign ($) • Dollar bill Visual Learning: Teacher will prompt students by asking the following question, "How can you find the total value of a group of dollar bills?" Teacher will play the video. Teacher	Guided Practice Independent Practice Additional Practice Reteach to Build

		will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students use coins to find one way to make 100 cents. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy or ST Math. • Practice Center: Students will complete Additional Practice 8-3 numbers 1-4. Optional Activity: • Pick a Project Activity pg. 327-328. Students can choose an activity to build • Problem Solving Leveled Reading Mats Activity 8-3 • Practice Buddy (Online)	Understanding Practice Buddy (Online) Quick Check 8-3 (online)

		Closure: Homework - Reteach to Build Understanding 8-3	
8-4: Continue to Solve Problems with Dollar Bills	SWBAT solve more problems with dollar bills	Visual Learning: Teacher will prompt students by asking the following question, “What are some strategies you can use to help you solve word problems about money?” Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students solve a word problem by determining the number of dimes and nickels that are equal to a $1 bill. Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy or ST Math. • Practice Center: Students will complete Additional Practice 8-4 numbers 1-4.	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 8-4 (online)

		Optional Activity: • Pick a Project Activity pg. 327-328. Students can choose an activity to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 8-4	
8-5: Problem Solving: Reasoning	SWBAT reason about values of coins and find different ways to make the same total value	Teacher will introduce the vocabulary terms: • Tally Marks Visual Learning: Teacher will prompt students by asking the following question, "How can you find all the different ways to make a total amount of money." Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students find ways to make 35 cents using quarters, dimes, and nickels. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 8-5 (online)

		teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy, ST Math or theEnvision Math Game: Fluency-Add and Subtract Within 100. • Practice Center: Students will complete Additional Practice 8-5 numbers 1-5. Optional Activity: • Pick a Project Activity pg. 327-328. Students can choose an activity to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 8-5	
8-6 Tell and Write Time to Five Minutes	SWBAT find unknown numbers in equations that relate four whole numbers.	Visual Learning: Teacher will prompt students by asking the following question, “Ask the following Essential Question: How can you use clocks to tell time?” Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students identify activities that take about 15 minutes and less than 15 minutes. Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 8-6 (online)

		Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy or ST Math. • Practice Center: Students will complete Additional Practice 8-6 numbers 1-3, 8. Optional Activity: • Pick a Project Activity pg. 327-328. Students can choose an activity to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 8-6	
8-7: Tell Time Before and After the Hour	SWBAT say the time in different ways	Teacher will introduce the vocabulary terms: • Quarter past • Half past • Quarter to Visual Learning: Teacher will prompt students by asking the following question, "What are some different ways to say the time of day?" Teacher will play the video. Teacher will stop to explain when needed.	Guided Practice Independent Practice Additional Practice Reteach to Build Understanding

		Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students describe various ways to say the time using both digital and analog clocks. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy or ST Math. • Practice Center: Students will complete Additional Practice 8-7 numbers 1-3, 6. Optional Activity: • Pick a Project Activity pg. 327-328. Students can choose an activity to build • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 8-7	Practice Buddy (Online) Quick Check 8-7 (online)
8-8: A.M and P.M.	SWBAT tell time and use reasoning to	Teacher will introduce the vocabulary	Guided Practice

	state if the event is happening in the A.M. or P.M.	terms: • A.M. • P.M. Visual Learning: Teacher will prompt students by asking the following question, “When do you use a.m. and when do you use p.m.to describe the time of day?” Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students write something they do in the morning, something they do in the evening, and some things they do in both the morning and evening. Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. • Technology: Students will work on My Math Academy or ST Math. • Practice Center: Students will complete Additional Practice 8-	Independent Practice Additional Practice Reteach to Build Understanding Practice Buddy (Online) Quick Check 8-8 (online)

		8 numbers 1-3, 5-6. Optional Activity: • Pick a Project Activity pg. 327-328. Students can choose an activity to build • enVision STEM Activity 8-8 • Practice Buddy (Online) Closure: Homework - Reteach to Build Understanding 8-8	
Topic 8 Reteaching/Review	SWBAT work with time and money	Complete Reteaching Sets prior to giving Topic Assessment • Fluency Practice Activity • Vocabulary Review • Topic 8 Reteaching	Reteaching Sets

MA.2.MD.C.7	Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
MA.2.MD.C.8	Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately.

Suggested Modifications for Special Education, ELL and Gifted Students

Consistent with individual plans, when appropriate.

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment pintables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use center, stations, or contract

- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- perimeter, equilateral triangle, centimeter, polygon, area, square units (use visuals/anchor charts)
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technological Innovations/Use

- My Math Academy
- ST Math
- Kahoot!

- Tools (Envision 2020)
- Game Center (Envision 2020)
- Create/Complete a Discovery Education Board

Cross Curricular/21st Century Connections

- Pick a Project Activity
- enVision STEM Project
- Problem Solving Reading Activity
- 3 ACT MATH Activity

Topic 9: Number to 1,000

Content Area: **Mathematics**
Course(s):
Time Period:
Length:
Status: **Not Published**

Summary of the Unit

Topic 9 focuses on students extending their knowledge of place value to 1,000. This creates a foundation for adding and subtracting within 1,000.

Enduring Understandings

- Numbers can be used to tell how many. The number system is based on groups of ten. Whenever there are 10 in one place value, you move to the next greater place value.
- The number system is based on groups of ten. Whenever there are 10 in one place value, you move to the next greater place value. Place-value blocks and drawings can be used to model and write three-digit numbers.
- The position of a digit in a number tells its value. It takes 10 of a number in one place value to make a number in the next greater place value.
- There are three common ways to write numbers-standard form, word form, and expanded form. Each way involves using place value to tell the value of each digit.
- Numbers can be made in many ways. Recalling and using facts about equal amounts (such as 100 is equal to 10 tens, and 10 is equal to 10 ones) can help you name numbers in different ways.
- Place-value patterns can help you mentally count by 1s and 10s from a given number.
- Place-value patterns and number lines can be used to help you skip count by 5s, 10s and 100s.
- Place-value strategies can be used to compare numbers. The symbols >,=,and < can be used to show how the numbers are related.
- Number lines go on forever in both directions. For every number, there is another number that is greater than it, and another number that is less than it. A number line can be used to help you find the numbers that are greater than or less than a given number.
- Good math thinkers look for patterns in math to help solve problems.

Essential Questions

- How can you find the value of a group of hundreds?
- How can you show and write 3-digit numbers?
- How does the position of a digit help you name its value?
- How can you write a 3-digit number in three different forms?
- How can you use hundreds, tens and ones to make a number in different ways?
- How can you use place-value patterns to help you count by 1s and 10s from a given number, such as 346?
- How can you use skip counting to find missing numbers on a number line?
- How can you compare two numbers?
- How can you use a number line to help you find a number that is greater than or less than a given number?
- How can you find the number that comes next in a number pattern?

Summative Assessment and/or Summative Criteria

Informal Observation: Classroom Observation

Formal Assessment: Topic 9 Modified Assessment; Topic Quick Checks

Resources

Pearson SuccessNet Math Series (digital and offline)

My Math Academy

ST Math online digital platform

Discovery Education math resources

Brain Pop online digital platform

Kahoot!

Unit Plan

*Based on your group, you may do:

- Visual Learning, Solve and Share, and Guided Practice in Whole Group; Independent Practice in Small Group OR
- Visual Learning in Whole Group; Solve and Share, Guided Practice and Independent Practice in Small Group
- You can change order between Visual Learning and Solve & Share

Topic/ Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/ Assessments
9-1: Compare Numbers on the Number Line	SWBAT understand place value and count by hundreds to 1,000	Teacher will introduce the vocabulary terms: • Thousand Visual Learning: Teacher will prompt the following question: "How can you find the value of a group of hundreds?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students will be ones and tens place value blocks (Teaching Tools 19 & 20). Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game: Gobbling Globs- Hundreds found on PearsonRealize.com • Practice Center: Students will complete Additional Practice 9-1 #1-4. Students will play Place Value and addition activities. Optional Activity: • Interactive Notebook 9-1 • Practice Buddy (Online) • Pick a Project Activity (pg 375) Closure: Exit Ticket Homework: Reteach to Build Understanding 9-1	
9-2: Models and 3-Digit Numbers	SWBAT use place value blocks and drawings to model and write 3-digit numbers	Teacher will introduce the vocabulary terms: • Place Value Chart • Digit	Guided Practice Independent Practice

		Visual Learning: Teacher will prompt the following question: “How can you show and write 3-digit numbers?” Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students will be given place value blocks (Teaching Tools 19 & 20). Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game: Gobbling Globs- Hundreds found on PearsonRealize.com • Practice Center: Students will complete Additional Practice 9-2 #1-3. Students will play Place Value and addition activities.	Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		Optional Activity: • Interactive Notebook 9-2 • Practice Buddy (Online) • Pick a Project Activity (pg 375) Closure: Exit Ticket Homework: Reteach to Build Understanding 9-2	
9-3: Name Place Values	SWBAT tell the value of a digit by where it is placed in a number	Visual Learning: Teacher will prompt the following question: "How does the position of a digit help you name its value?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students will be given place value blocks (Teaching Tools 19). Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game: Gobbling Globs- Hundreds found on PearsonRealize.com • Practice Center: Students will complete Additional Practice 9-2 #1-3. Students will play Place Value and addition activities. Optional Activity: • Interactive Notebook 9-3 • Practice Buddy (Online) • Pick a Project Activity (pg 375) Closure: Exit Ticket Homework: Reteach to Build Understanding 9-3	
9-4: Read and Write 3-Digit Numbers	SWBAT read and write 3-digit numbers in expanded form, standard form, and word form	Teacher will introduce the vocabulary terms: • Expanded Form • Standard Form • Word Form Visual Learning: Teacher will prompt the following question: "How can you	Guided Practice Independent Practice Additional Practice

		write a 3-digit number in three different form?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students will be given place value blocks (Teaching Tools 19 & 20). Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game: Gobbling Globs- Hundreds in PearsonRealize.com • Practice Center: Students will complete Additional Practice 9-4 #1-4. Students will play Place Value and addition activities. Optional Activity:	Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		• Interactive Notebook 9-4 • Practice Buddy (Online) • Pick a Project Activity (pg 375) Closure: Exit Ticket Homework: Reteach to Build Understanding 9-4	
9-5: Different Ways to Name the Same Number	SWBAT make and name a number in different ways to show the same value	Visual Learning: Teacher will prompt the following question: "How can you use hundreds, tens, and ones to make a number in different ways?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students will be given place value blocks (Teaching Tools 19). Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game: Gobbling Globs- Hundreds in PearsonRealize.com • Practice Center: Students will complete Additional Practice 9-5 #1-2. Students will play Place Value and addition activities. Optional Activity: • Interactive Notebook 9-5 • Practice Buddy (Online) • Pick a Project Activity (pg 375) Closure: Exit Ticket Homework: Reteach to Build Understanding 9-5	
9-6: Place Value Patterns with Numbers	SWBAT use place value patterns to mentally count by 1s and 10s from a given number	Visual Learning: Teacher will prompt the following question: "How can you use place value patterns to help you count by 1s and 10s from a given number, such as 346?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and	Guided Practice Independent Practice Additional Practice

		share with the teacher. Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game: Gobbling Globs- Hundreds in PearsonRealize.com • Practice Center: Students will complete Additional Practice 9-6 #1-4. Students will play Place Value and addition activities. Optional Activity: • Interactive Notebook 9-6 • Practice Buddy (Online) • Pick a Project Activity (pg 375)	Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		Closure: Exit Ticket Homework: Reteach to Build Understanding 9-6	
9-7: Skip Count by 5s, 10s, and 100s to 1,000	SWBAT skip count by 5s, 10s, and 100s using a number line	Visual Learning: Teacher will prompt the following question: "How can you use skip counting to find missing numbers on a number line?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game: Gobbling Globs- Hundreds in PearsonRealize.com • Practice Center: Students will	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		complete Additional Practice 9-7 #1-4. Students will play Place Value and addition activities. Optional Activity: • Interactive Notebook 9-7 • Practice Buddy (Online) • Pick a Project Activity (pg 375) Closure: Exit Ticket Homework: Reteach to Build Understanding 9-7	
9-8: Compare Numbers Using Place Value	SWBAT compare numbers using place value	Teacher will introduce the vocabulary terms: • Greater than • Less than • Equal Visual Learning: Teacher will prompt the following question: "How can you compare two numbers?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game: Gobbling Globs- Hundreds in PearsonRealize.com • Practice Center: Students will complete Additional Practice 9-8 #1-6. Students will play Place Value and addition activities. Optional Activity: • Interactive Notebook 9-8 • Practice Buddy (Online) • Pick a Project Activity (pg 375) Closure: Exit Ticket Homework: Reteach to Build Understanding 9-8	

9-9: Compare Numbers on the Number Line	SWBAT compare and write a three-digit number that is greater than or less than another three-digit number	Visual Learning: Teacher will prompt the following question: "How can you use a number line to help you find a number that is greater or less than a given number?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game: Gobbling Globs- Hundreds in PearsonRealize.com • Practice Center: Students will complete Additional Practice 9-9 #1-6. Students will play Place Value and addition activities.	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		Optional Activity: • Interactive Notebook 9-9 • Practice Buddy (Online) • Pick a Project Activity (pg 375) Closure: Exit Ticket Homework: Reteach to Build Understanding 9-9	
9-10: Problem Solving - Look For and Use Structure	SWBAT look for patterns to help me solve problems	Teacher will introduce the vocabulary terms: • Increase • Decrease Visual Learning: Teacher will prompt the following question: "How can you compare two numbers?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities:	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		• Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game: Gobbling Globs- Hundreds in PearsonRealize.com • Practice Center: Students will complete Additional Practice 9-8 #1-3. Students will play Place Value and addition activities. Optional Activity: • Interactive Notebook 9-10 • Practice Buddy (Online) • Pick a Project Activity (pg 375) Closure: Exit Ticket Homework: Reteach to Build Understanding 9-10	
Topic 9 Reteaching	SWBAT understand place value to 1,000	Complete Reteaching Sets prior to giving Topic Assessment	Reteaching Sets

MATH.2.NBT.A	Understand place value
MATH.2.NBT.A.1	Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:
MATH.2.NBT.A.1.a	100 can be thought of as a bundle of ten tens — called a “hundred.”
MATH.2.NBT.A.1.b	The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).
MATH.2.NBT.A.2	Count within 1000; skip-count by 5s, 10s, and 100s.
MATH.2.NBT.A.3	Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.
MATH.2.NBT.A.4	Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.
MATH.2.NBT.B	Use place value understanding and properties of operations to add and subtract

Suggested Modifications for Special Education, ELL and Gifted Students

Consistent with individual plans, when appropriate.

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment pintables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use center, stations, or contract
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.

- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- perimeter, equilateral triangle, centimeter, polygon, area, square units (use visuals/anchor charts)
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technological Innovations/Use

- My Math Academy
- ST Math
- Kahoot!
- Tools (Envision 2020)
- Game Center (Envision 2020)
- Create/Complete a Discovery Education Board

Cross Curricular/21st Century Connections

- Pick a Project Activity
- enVision STEM Project

- Problem Solving Reading Activity
- 3 ACT MATH Activity

Topic 10: Add within 1,000 Using Models and Strategies

Content Area: **Mathematics**
Course(s):
Time Period:
Length:
Status: **Not Published**

Summary of the Unit

Topic 10 focuses on expanding students' understanding of addition to 3-digit numbers using models and strategies. Students explain why addition strategies work using place value and properties of operations.

Enduring Understandings

- Place-value patterns and basic facts can be used to help you mentally add 10 and 100 to any given 3-digit number.
- Three-digit numbers can be broken apart using hundreds, tens, and ones and added in different ways.
- When adding three-digit numbers, hundreds are added to hundreds, tens to tens, and ones to ones.
- When adding three-digit numbers, different strategies can be used to find the correct sum.
- Good math thinkers look for things that repeat in a problem. They use what they learn from one person to help them solve other problems.

Essential Questions

- How can you use mental math to add 10 (or100) to a 3-digit number?
- How can you use an open number line to add 3-digit numbers?
- How can you use models to add 3-digit numbers?
- How can you use Partial sums to add 3-digit numbers?
- How can you use place value and partial sums to add 3-digit numbers?
- How can you explain why addition strategies work?

- How can repeated reasoning help you add 3 digit numbers?

Summative Assessment and/or Summative Criteria

Informal Observation: Classroom Observation

Formal Assessment: Topic 10 Modified Assessment; Topic Quick Checks

Resources

Pearson SuccessNet Math Series (digital and offline)

My Math Academy

ST Math online digital platform

Discovery Education math resources

Brain Pop online digital platform

Kahoot!

Unit Plan

*Based on your group, you may do:

- Visual Learning, Solve and Share, and Guided Practice in Whole Group; Independent Practice in Small Group OR
- Visual Learning in Whole Group; Solve and Share, Guided Practice and Independent Practice in Small Group
- You can change order between Visual Learning and Solve & Share

Topic/ Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/ Assessments

10-1: Add 10 and 100	SWBAT add 10 and 100 mentally using what they know about place value	Visual Learning: Teacher will prompt the following question: “How can you use mental math to add 10 (or 100) to a 3-digit number?” Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students will be ones and tens place value blocks (Teaching Tools 19 & 20). Optional: Use dollar bills (Teaching Tools 30 & 31) Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game: Gobbling Globs- Add It- 2-Digit Numbers found on PearsonRealize.com	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		• Practice Center: Students will complete Additional Practice 10-1 #1-11. Students will play Place Value and addition activities. Optional Activity: • Interactive Notebook 10-1 • Practice Buddy (Online) • Pick a Project Activity (pg 432) Closure: Exit Ticket Homework: Reteach to Build Understanding 10-1	

10-2: Add on an Open Number Line	SWBAT use an open number line to add 3-digit numbers	Visual Learning: Teacher will prompt the following question: "How can you use an open number line to add 3-digit numbers?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game: Gobbling Globs- Add It- 2-Digit Numbers found on PearsonRealize.com • Practice Center: Students will complete Additional Practice 10-2 #1-4. Students will play Place Value and addition	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		activities. Optional Activity: • Interactive Notebook 10-2 • Practice Buddy (Online) • Pick a Project Activity (pg 432) Closure: Exit Ticket Homework: Reteach to Build Understanding 10-2	

10-3: Add Using Models	SWBAT use models to add 3-digit numbers and then explain my work	Visual Learning: Teacher will prompt the following question: “How can you use models to add 3-digit numbers?” Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students will be given place value blocks (Teaching Tools 19 & 20). Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game: Gobbling Globs- Add It- 2-Digit Numbers found on PearsonRealize.com • Practice Center: Students will complete Additional Practice 10-3 #1-8. Students will play Place Value and addition	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		activities. Optional Activity: • Interactive Notebook 10-3 • Practice Buddy (Online) • Pick a Project Activity (pg 432) Closure: Exit Ticket Homework: Reteach to Build Understanding 10-3	

10-4: Continue to Add Using Models and place Value	SWBAT use models and place value to add 3-digit numbers	Visual Learning: Teacher will prompt the following question: "How can you write a 3-digit number in three different form?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students will be given place value blocks (Teaching Tools 19 & 20). Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game: Gobbling Globs- Add It- 2-Digit Numbers found on PearsonRealize.com • Practice Center: Students will complete Additional Practice 10-4 #1-6. Students will play	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		Place Value and addition activities. Optional Activity: • Interactive Notebook 10-4 • Practice Buddy (Online) • Pick a Project Activity (pg 432) Closure: Exit Ticket Homework: Reteach to Build Understanding 10-4	

10-5: Add Using Place Value and Partial Sums	SWBAT add 3-digit numbers using place value and partial sums	Visual Learning: Teacher will prompt the following question: "How can you use place value and partial sums to add 3-digit numbers?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students will be given place value blocks (Teaching Tools 19 & 20). Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game: Gobbling Globs- Hundreds in PearsonRealize.com • Practice Center: Students will complete Additional Practice 10-5 #1-7. Students will play	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		Place Value and addition activities. Optional Activity: • Interactive Notebook 10-5 • Practice Buddy (Online) • Pick a Project Activity (pg 432) Closure: Exit Ticket Homework: Reteach to Build Understanding 10-5	

10-6: Explain Addition Strategies	SWBAT use different addition strategies to add and explain why the strategies work	Visual Learning: Teacher will prompt the following question: “How can you explain why addition strategies work?” Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game: Gobbling Globs- Hundreds in PearsonRealize.com • Practice Center: Students will complete Additional Practice 10-6 #1-4. Students will play Place Value and addition activities.	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		Optional Activity: • Interactive Notebook 10-6 • Practice Buddy (Online) • Pick a Project Activity (pg 432) Closure: Exit Ticket Homework: Reteach to Build Understanding 10-6	

10-7: Problem Solving - Repeated Reasoning	SWBAT solve problems and explain the patterns they see	Visual Learning: Teacher will prompt the following question: "How can repeated reasoning help you add 3-digit numbers?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game: Gobbling Globs-Hundreds in PearsonRealize.com • Practice Center: Students will complete Additional Practice 10-7 #1-2. Students will play Place Value and addition	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		activities. Optional Activity: • Interactive Notebook 10-7 • Practice Buddy (Online) • Pick a Project Activity (pg 432) Closure: Exit Ticket Homework: Reteach to Build Understanding 10-7	
Topic 10 Reteaching	SWBAT understand place value to 1,000	Complete Reteaching Sets prior to giving Topic Assessment	Reteaching Sets

MATH.2.OA.A	Represent and solve problems involving addition and subtraction
MATH.2.OA.A.1	Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
MATH.2.NBT.B	Use place value understanding and properties of operations to add and subtract
MATH.2.NBT.B.5	With accuracy and efficiency, add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
MATH.2.NBT.B.6	Add up to four two-digit numbers using strategies based on place value and properties of operations.
MATH.2.NBT.B.7	Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.
MATH.2.NBT.B.8	Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.
MATH.2.NBT.B.9	Explain why addition and subtraction strategies work, using place value and the properties of operations.

Suggested Modifications for Special Education, ELL and Gifted Students

Consistent with individual plans, when appropriate.

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment pintables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use center, stations, or contract
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.

- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- perimeter, equilateral triangle, centimeter, polygon, area, square units (use visuals/anchor charts)
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technological Innovations/Use

- My Math Academy
- ST Math
- Kahoot!
- Tools (Envision 2020)
- Game Center (Envision 2020)
- Create/Complete a Discovery Education Board

Cross Curricular/21st Century Connections

- Pick a Project Activity
- enVision STEM Project
- Problem Solving Reading Activity
- 3 ACT MATH Activity

Topic 11: Subtract Within 1,000 Using Models and Strategies

Content Area: **Mathematics**
Course(s):
Time Period:
Length:
Status: **Not Published**

Summary of the Unit

In this unit, students will work on expanding their subtraction skills within 1,000 using models and different strategies. They will explain how their skills will improve by using place value and operation properties.

Enduring Understandings

- Place-value patterns and basic facts can be used to help you mentally subtract 10 or 100 from any given three-digit number.
- Three-digit numbers can be broken apart using hundreds, tens and ones.
- When subtracting three-digit numbers, hundreds are subtracted from hundreds, tens from tens, and ones from ones.
- When subtracting three-digit numbers, different strategies can be used to find the correct difference.
- Good math thinkers know what the problem is about.

Essential Questions

- How can you use mental math to subtract 10 (or 100) from a 3-digit number?
- How can you use an open number line to solve a subtraction problem?
- How can models help you regroup to subtract 3-digit numbers?
- How can you use models and place value to subtract 3-digit numbers?
- How can you explain why subtraction strategies work?
- How can you make sense of a word problem that has a hidden question, and what steps can you use to solve it?

Summative Assessment and/or Summative Criteria

Informal Observation: Classroom Observation

Formal Assessment: Topic 11 Modified Assessment; Topic Quick Checks

Resources

Pearson SuccessNet Math Series (digital and offline)

My Math Academy

ST Math online digital platform

Discovery Education math resources

Brain Pop online digital platform

Kahoot!

Unit Plan

*Based on your group, you may do:

- Visual Learning, Solve and Share, and Guided Practice in Whole Group; Independent Practice in Small Group OR
- Visual Learning in Whole Group; Solve and Share, Guided Practice and Independent Practice in Small

Group

- You can change order between Visual Learning and Solve & Share

Topic/ Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/ Assessments
11-1: Subtract 10 and 100	SWBAT subtract 10 and 100 mentally using what they know about place value	Visual Learning: Teacher will prompt the following question: "How can you use mental math to subtract to 10 (or 100) to a 3-digit number?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students will be ones and tens place value blocks (Teaching Tools 19 & 20). Optional: Use dollar bills (Teaching Tools 30 & 31) Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		finishers can work on ST Math. • Practice Center: Students will complete Additional Practice 11-1 #1-9. Students will play Place Value and subtraction activities. Optional Activity: • Interactive Notebook 11-1 • Practice Buddy (Online) • Pick a Project Activity (pg 471) Closure: Exit Ticket Homework: Reteach to Build Understanding 11-1	
10-2: Subtract on an Open Number Line	SWBAT use an open number line to subtract 3-digit numbers	Visual Learning: Teacher will prompt the following question: "How can you use an open number line to add 3-digit numbers?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online)

		Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math Practice Center: Students will complete Additional Practice 11-2 #1-4. Students will play Place Value and subtraction activities. Optional Activity: • Interactive Notebook 11-2 • Practice Buddy (Online) • Pick a Project Activity (pg 471) Closure: Exit Ticket Homework: Reteach to Build Understanding 11-2	Reteach to Build for Understanding
11-3: Subtract Using Models	SWBAT use models to subtract 3-digit numbers	Visual Learning: Teacher will prompt the following question: "How can you use models to add 3-digit numbers?" Teacher will play the video. Teacher will stop to explain when needed.	Guided Practice Independent Practice

		Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students will be given place value blocks (Teaching Tools 19 & 20). Optional: Draw squares for hundred, lines for tens, and dots for ones Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math • Practice Center: Students will complete Additional Practice 11-3 #1-3. Students will play Place Value and subtraction activities. Optional Activity: • Interactive Notebook 11-3	Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		• Practice Buddy (Online) • Pick a Project Activity (pg 471) Closure: Exit Ticket Homework: Reteach to Build Understanding 11-3	
11-4: Subtraction Models and Place Value	SWBAT use models and place value to subtract	Visual Learning: Teacher will prompt the following question: "How can you use models and place value to subtract 3-digit numbers?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students will be given place value blocks (Teaching Tools 19 & 20). Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math • Practice Center: Students will complete Additional Practice 11-4 #1-6. Students will play Place Value and subtraction activities. Optional Activity: • Interactive Notebook 11-4 • Practice Buddy (Online) • Pick a Project Activity (pg 471) Closure: Exit Ticket Homework: Reteach to Build Understanding 11-4	
11-5: Explain Subtraction Strategies	SWBAT explain why subtraction strategies work using models, place value, and mental math	Visual Learning: Teacher will prompt the following question: "How can you use place value and partial sums to add 3-digit numbers?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students will be given place value blocks (Teaching Tools 19 & 20).	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online)

		Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game: Gobbling Globs- Hundreds in PearsonRealize.com • Practice Center: Students will complete Additional Practice 11-5 #1-2. Students will play Place Value and subtraction activities. Additional Resources: Place Value subtraction template and number line template in communicator Optional Activity: • Interactive Notebook 11-5 • Practice Buddy (Online)	Reteach to Build for Understanding

		• Pick a Project Activity (pg 471) Closure: Exit Ticket Homework: Reteach to Build Understanding 11-5	
11-6: Persevere	SWBAT solve problems that take more than one step	Visual Learning: Teacher will prompt the following question: "How can you make sense of a word problem that has a hidden question, and what steps can you use to solve it?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		finishers can work on ST Math and Envision Math Game: Gobbling Globs- Hundreds in PearsonRealize.com • Practice Center: Students will complete Additional Practice 11-6 #1-3. Students will play Place Value and addition activities. Optional Activity: • Interactive Notebook 11-6 • Practice Buddy (Online) • Pick a Project Activity (pg 471) Closure: Exit Ticket Homework: Reteach to Build Understanding 11-6	
Topic 11 Reteaching	SWBAT understand subtract within 1,000	Complete Reteaching Sets prior to giving Topic Assessment	Reteaching Sets

MATH.2.OA.A	Represent and solve problems involving addition and subtraction
MATH.2.OA.A.1	Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
MATH.2.NBT.B	Use place value understanding and properties of operations to add and subtract
MATH.2.NBT.B.5	With accuracy and efficiency, add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
MATH.2.NBT.B.6	Add up to four two-digit numbers using strategies based on place value and properties of operations.
MATH.2.NBT.B.7	Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and

	tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.
MATH.2.NBT.B.8	Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.
MATH.2.NBT.B.9	Explain why addition and subtraction strategies work, using place value and the properties of operations.

Suggested Modifications for Special Education, ELL and Gifted Students

Consistent with individual plans, when appropriate.

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment pintables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use center, stations, or contract
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.

- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- perimeter, equilateral triangle, centimeter, polygon, area, square units (use visuals/anchor charts)
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technological Innovations/Use

- My Math Academy
- ST Math
- Kahoot!
- Tools (Envision 2020)
- Game Center (Envision 2020)
- Create/Complete a Discovery Education Board

Cross Curricular/21st Century Connections

- Pick a Project Activity
- enVision STEM Project
- Problem Solving Reading Activity
- 3 ACT MATH Activity

Topic 12: Measuring Length

Content Area: **Mathematics**
Course(s):
Time Period:
Length:
Status: **Not Published**

Summary of the Unit

In this unit, students will be using the tools they need to estimate, measure and compare length using units of inches, feet, yards, centimeters and meters. Students will use the inverse relationship between the size of a unit and the number of units that are needed to measure a given object.

Enduring Understandings

- The length of a known object can be used to estimate the length of another object to the nearest inch, foot, or yard.
- Length and height are measurable in inches.
- Length and height are measurable in inches, feet, and yards.
- When measuring length, the longer the chosen unit, the fewer the units needed; the shorted the unit, the more units needed.
- Length and height are measurable in centimeters.
- Length and height are measurable in centimeters and meters.
- The lengths of two objects can be compared by subtracting to find the distance.
- Good math thinkers are careful about what they write and say, so their ideas about math are clear.

Essential Questions

- How can you use the length of objects you know to estimate the lengths of other objects?
- How can you use a ruler to measure the length or height of an object?

- How can you measure the length or height of an object in inches, feet, or yards?
- Why do you need more or fewer of some units to measure the length of an object in inches, feet, or yards?
- How can you use a centimeter ruler to measure length or height to the nearest centimeter?
- How can you measure the length or height of an object in meters or centimeters?
- Why do you need more or fewer of some units to measure the length of an object in meters or centimeters?
- How can you find how much longer one length is than another?
- How can you tell if your work is precise when measuring length?

Summative Assessment and/or Summative Criteria

Informal Observation: Classroom Observation

Formal Assessment: Topic 12 Modified Assessment; Topic Quick Checks

Resources

Pearson SuccessNet Math Series (digital and offline)

My Math Academy

ST Math online digital platform

Discovery Education math resources

Brain Pop online digital platform

Kahoot!

Unit Plan

*Based on your group, you may do:

- Visual Learning, Solve and Share, and Guided Practice in Whole Group; Independent Practice in Small

Group OR

- Visual Learning in Whole Group; Solve and Share, Guided Practice and Independent Practice in Small Group
- You can change order between Visual Learning and Solve & Share

Topic/ Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/ Assessments
12-1: Estimating Length	SWBAT estimate the length of an object by relating the length of the object to a measurement they know	Visual Learning: Teacher will prompt the following question: "How can you use the lengths of objects you know to estimate the length of other objects?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		PearsonRealize.com • Practice Center: Students will complete Additional Practice 12-1 #1-3. Students will play measuring activities. Optional Activity: • Interactive Notebook 12-1 • Practice Buddy (Online) • Pick a Project Activity (pg 507-508) Closure: Exit Ticket Homework: Reteach to Build Understanding 12-1	
12-2: Measure with Inches	SWBAT estimate measures and use a ruler to measure length and height to the nearest inch	Visual Learning: Teacher will prompt the following question: "How can you use a ruler to measure the length or height of an object?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build

		Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 12-2 #1-2. Students will play measuring activities. Optional Activity: • Interactive Notebook 12-2 • Practice Buddy (Online) • Pick a Project Activity (pg 507-508) Closure: Exit Ticket Homework: Reteach to Build Understanding 12-2	for Understanding
12-3: Inches, Feet, and Yards	SWBAT estimate measures and use tools to measure the length and height of objects to the nearest, inch, foot and yard	Visual Learning: Teacher will prompt the following question: "How can you measure the length or height of an object in inches, feet or yards?"	Guided Practice Independent Practice

		Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students will be given ruler or Teaching Tool 38. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 12-3 #1-3. Students will play measuring activities. Optional Activity: • Interactive Notebook 12-3	Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		• Practice Buddy (Online) • Pick a Project Activity (pg 471) Closure: Exit Ticket Homework: Reteach to Build Understanding 12-3	
12-4: Measure Length Using Different Customary units	SWBAT estimate and measure the length and height of objects in inches, feet and yards	Visual Learning: Teacher will prompt the following question: "Why do you need more or fewer of some units to measure the length of an object in inches, feet or yards?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students will be given inch rulers or Teaching Tool 38. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 12-4 #1-2. Students will play measuring activities. Optional Activity: • Interactive Notebook 12-4 • Practice Buddy (Online) • Pick a Project Activity (pg 507-508) Closure: Exit Ticket Homework: Reteach to Build Understanding 12-4	
12-5: Measure with Centimeters	SWBAT estimate measures and use a ruler to measure length and height to the nearest centimeter	Visual Learning: Teacher will prompt the following question: "How can you use a centimeter ruler to measure length or height to the nearest centimeter?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Students will be given 20 centimeter cubes (Teaching Tool 19)	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy

			(Online) Reteach to Build for Understanding

Guided Practice: Students will complete the "Guided Practice" section with the teacher together.

Independent Practice/ Centers Activities:

- Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt.
- Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com
- Practice Center: Students will complete Additional Practice 12-5 #1-5. Students will play measuring activities.

Optional Activity:

- Interactive Notebook 12-5
- Practice Buddy (Online)
- Pick a Project Activity (pg 507-508)

		Closure: Exit Ticket Homework: Reteach to Build Understanding 12-5	
12-6: Centimeters and Meters	SWBAT estimate measures and use a ruler, a meter stick, or a tape measure to measure length and height to the nearest centimeter or meter	Visual Learning: Teacher will prompt the following question: "How can you measure the length or height of an object in meters or centimeters?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		• Practice Center: Students will complete Additional Practice 12-6 #1-3. Students will play Place Value and additional activities. Optional Activity: • Interactive Notebook 12-6 • Practice Buddy (Online) • Pick a Project Activity (pg 507-508) Closure: Exit Ticket Homework: Reteach to Build Understanding 12-6	
12-7: Measure Length Using Different Metric Units	SWBAT measure the length and height of objects using different metric units	Visual Learning: Teacher will prompt the following question: "Why do you need more or fewer of some units to measure the same object in meters or centimeters?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 12-7 #1-3. Students will play Place Value and additional activities. Optional Activity: • Interactive Notebook 12-7 • Practice Buddy (Online) • Pick a Project Activity (pg 507-508) Closure: Exit Ticket Homework: Reteach to Build Understanding 12-7	
12-8: Compare Lengths	SWBAT tell how much longer one object is than another	Visual Learning: Teacher will prompt the following question: "How can you find how much longer one length is than another?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and	Guided Practice Independent Practice Additional Practice

		share with the teacher. Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 12-8 #1-6. Students will play Place Value and additional activities. Optional Activity: • Interactive Notebook 12-8 • Practice Buddy (Online) • Pick a Project Activity (pg 507-508) Closure: Exit Ticket	Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		Homework: Reteach to Build Understanding 12-8	
12-9: Problem Solving - Precision	SWBAT choose tools, units and methods that help to be precise when measuring	Visual Learning: Teacher will prompt the following question: "How can you tell if your work is precise when measuring length?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 12-9 #1-3. Students will play Place Value and additional activities.	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		Optional Activity: • Interactive Notebook 12-9 • Practice Buddy (Online) • Pick a Project Activity (pg 507-508) Closure: Exit Ticket Homework: Reteach to Build Understanding 12-9	
Topic 12 Reteaching	SWBAT understand the measurement process when measuring objects	Complete Reteaching Sets prior to giving Topic Assessment	Reteaching Sets

MATH.2.M.A	Measure and estimate lengths in standard units
MATH.2.M.A.1	Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
MATH.2.M.A.2	Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.
MATH.2.M.A.3	Estimate lengths using units of inches, feet, centimeters, and meters.
MATH.2.M.A.4	Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.
MATH.2.M.B.5	Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.

Suggested Modifications for Special Education, ELL and Gifted Students

Consistent with individual plans, when appropriate.

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment pintables

- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use center, stations, or contract
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- perimeter, equilateral triangle, centimeter, polygon, area, square units (use visuals/anchor charts)
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technological Innovations/Use

- My Math Academy
- ST Math
- Kahoot!
- Tools (Envision 2020)
- Game Center (Envision 2020)
- Create/Complete a Discovery Education Board

Cross Curricular/21st Century Connections

- Pick a Project Activity
- enVision STEM Project
- Problem Solving Reading Activity
- 3 ACT MATH Activity

Topic 13: Shapes and Their Attributes

Content Area: **Mathematics**
Course(s):
Time Period:
Length:
Status: **Not Published**

Summary of the Unit

In this unit, students will learn about the attributes of shapes. Using the attributes, students will be able to identify and draw triangles, quadrilaterals, pentagons, hexagons, and cubes. They will also partition plane figures into equal shares. Also, they will use fraction terms to describe the shapes.

Enduring Understandings

- Two-dimensional shapes can be classified and sorted based on their attributes.
- Polygons can be described by their number of sides and angles.
- Two-dimensional shapes can be defined and differentiated based on attributes. These attributes can be used to draw a specific 2-dimensional shape.
- You can describe a cube by talking about its faces, edges, and vertices. Knowing these attributes help you draw a cube.
- A rectangle can be partitioned into rows and columns of squares that are all the same size; you can count or add in different ways to find the total number of squares.
- A whole can have equal shares called halves, thirds, and fourths. You can show halves, thirds, and fourths of the same whole in different ways.
- You can partition a whole into equal shares in different ways. Equal shares of the same whole do not have to have the same shape.
- Good math thinkers look for things that repeat in a problem. They use what they learn from one problem to help them solve other problems.

Essential Questions

- How can you tell the name of a 2-dimensional shape?
- How can you tell if a shape is a polygon?
- What information should you give to others if you want them to draw a particular polygon?
- How do you use the words faces, edges, and vertices to describe a cube?
- What are two different ways to find the total number of equal-sized squares that cover a rectangle?
- When you show a shape with two/three/four equal shares, what are the shares called?
- Do equal shares have to be the same size and shape? Explain.
- How can you use repeated reasoning to divide shapes into equal shares?

Summative Assessment and/or Summative Criteria

Informal Observation: Classroom Observation

Formal Assessment: Topic 13 Modified Assessment; Topic Quick Checks

Resources

Pearson SuccessNet Math Series (digital and offline)

My Math Academy

ST Math online digital platform

Discovery Education math resources

Brain Pop online digital platform

Kahoot!

Unit Plan

*Based on your group, you may do:

- Visual Learning, Solve and Share, and Guided Practice in Whole Group; Independent Practice in Small Group OR
- Visual Learning in Whole Group; Solve and Share, Guided Practice and Independent Practice in Small Group
- You can change order between Visual Learning and Solve & Share

Topic/ Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/ Assessments
13-1: 2-Dimensional Shapes	SWBAT recognize shapes by how they look	Teacher will introduce the vocabulary terms: • Vertices • Quadrilaterals • Pentagons • Hexagons Visual Learning: Teacher will prompt the following question: "How can you tell the name of a 2-dimensional shape?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 13-1 #1-6. Students will complete shapes activities. Optional Activity: • Interactive Notebook 13-1 • Practice Buddy (Online) • Pick a Project Activity (pg 559) Closure: Exit Ticket Homework: Reteach to Build Understanding 13-1	
13-2: Polygons and Angles	SWBAT describe plane shapes by how they look	Teacher will introduce the vocabulary terms: • Polygon • Angle • Right Angle	Guided Practice Independent Practice Additional

		Visual Learning: Teacher will prompt the following question: “How can you tell if a shape is a polygon?” Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 13-2 #1-5. Students will complete shapes activities. Optional Activity:	Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		• Interactive Notebook 13-2 • Practice Buddy (Online) • Pick a Project Activity (pg 559) Closure: Exit Ticket Homework: Reteach to Build Understanding 13-2	
13-3: Draw 2-Dimensional Shapes	SWBAT draw polygon shapes	Visual Learning: Teacher will prompt the following question: "What information should you give to others if you want them to draw a particular polygon?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 13-3 #1-5. Students will complete shapes activities. Optional Activity: • Interactive Notebook 13-3 • Practice Buddy (Online) • Pick a Project Activity (pg 559) Closure: Exit Ticket Homework: Reteach to Build Understanding 13-3	
13-4: Cubes	SWBAT draw cubes and describe how they look	Teacher will introduce the vocabulary terms: • Cube • Face • Edges Visual Learning: Teacher will prompt the following question: "How do you use the words face, edges and vertices to describe a cube?" Teacher will play the video. Teacher will stop to explain when needed.	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy

		Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 13-4 #1-3. Students will complete shapes activities. Optional Activity: • Interactive Notebook 13-4 • Practice Buddy (Online) • Pick a Project Activity (pg 559)	(Online) Reteach to Build for Understanding

		Closure: Exit Ticket Homework: Reteach to Build Understanding 13-4	
13-5: Equal Shares	SWBAT cover rectangles with equal-size squares and count to find the total number of them	Visual Learning: Teacher will prompt the following question: "What are two different ways to find the total number of equal-sized squares that cover a rectangle?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		complete Additional Practice 13-5 #1-6. Students will complete shapes activities. Optional Activity: • Interactive Notebook 13-5 • Practice Buddy (Online) • Pick a Project Activity (pg 559) Closure: Exit Ticket Homework: Reteach to Build Understanding 13-5	
13-6: Partition Shapes	SWBAT partition circles and rectangles into halves, thirds, and fourths	Teacher will introduce the vocabulary terms: • Equal Shares • Halves • Thirds • Fourths Visual Learning: Teacher will prompt the following question: "When you show a shape with two/three/four equal shares, what are the shares called?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher.	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 13-6 #1-7. Students will complete shapes activities. Optional Activity: • Interactive Notebook 13-6 • Practice Buddy (Online) • Pick a Project Activity (pg 559) Closure: Exit Ticket Homework: Reteach to Build Understanding 13-6	

13-7: Equal Shares, Different Shapes	SWBAT make equal shares that do not have the same shape	Visual Learning: Teacher will prompt the following question: “Do equal shares have to be the same size and shape?” Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 13-7 #1-4. Students will complete shapes activities. Optional Activity:	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		• Interactive Notebook 13-7 • Practice Buddy (Online) • Pick a Project Activity (pg 559) Closure: Exit Ticket Homework: Reteach to Build Understanding 13-7	
13-8: Problem Solving: Repeated Reasoning	SWBAT use repeated reasoning to show rectangles with rows and columns and create designs with equal shares	Visual Learning: Teacher will prompt the following question: "How can you use repeated reasoning to divide shapes into equal shares?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 13-8 #1-3. Students will complete shapes activities. Optional Activity: • Interactive Notebook 13-8 • Practice Buddy (Online) • Pick a Project Activity (pg 559) Closure: Exit Ticket Homework: Reteach to Build Understanding 13-8	
Topic 13 Reteaching	SWBAT describe and compare shapes	Complete Reteaching Sets prior to giving Topic Assessment	Reteaching Sets

MATH.2.G.A	Reason with shapes and their attributes
MATH.2.G.A.1	Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.
MATH.2.G.A.2	Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.
MATH.2.G.A.3	Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.

Suggested Modifications for Special Education, ELL and Gifted Students

Consistent with individual plans, when appropriate.

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment pintables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use center, stations, or contract
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- perimeter, equilateral triangle, centimeter, polygon,

area, square units (use visuals/anchor charts)

- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technological Innovations/Use

- My Math Academy
- ST Math
- Kahoot!
- Tools (Envision 2020)
- Game Center (Envision 2020)
- Create/Complete a Discovery Education Board

Cross Curricular/21st Century Connections

- Pick a Project Activity
- enVision STEM Project
- Problem Solving Reading Activity
- 3 ACT MATH Activity

Topic 14: More Addition, Subtraction, and Length

Content Area: **Mathematics**
Course(s):
Time Period:
Length:
Status: **Not Published**

Summary of the Unit

In this unit, students apply their understanding of addition and subtraction to 100 to help them solve word problems that involve lengths. They will write and solve addition and subtraction equations by using symbols for unknown values. They will use a number line to represent the whole number sum/difference within 100.

Enduring Understandings

- Measurements in the same unit, such as inches, can be added or subtracted in the same way as adding and subtracting whole numbers. The measurement unit needs to be written with the sum or difference.
- Pictures and equations can be used to solve word problems involving measurement. Measurement can be added and subtracted in the same way as other whole numbers.
- A sum can be represented as the total length of two line segments on a number line. A subtraction problem can be represented as the difference of two line segments on a number line.
- Good math thinkers know how to pick the right tools to solve math problems.

Essential Questions

- How do you know when to add or subtract when solving problems involving measurement?
- How can you solve addition and subtraction problems involving length?
- How can drawing a picture and writing an equation help you solve measurement word problems?
- How can you use a number line to help solve addition and subtraction problems involving length measurements?
- How can you pick the best tool to solve a problem?

Summative Assessment and/or Summative Criteria

Informal Observation: Classroom Observation

Formal Assessment: Topic 14 Modified Assessment; Topic Quick Checks

Resources

Pearson SuccessNet Math Series (digital and offline)

My Math Academy

ST Math online digital platform

Discovery Education math resources

Brain Pop online digital platform

Kahoot!

Unit Plan

*Based on your group, you may do:

- Visual Learning, Solve and Share, and Guided Practice in Whole Group; Independent Practice in Small Group OR
- Visual Learning in Whole Group; Solve and Share, Guided Practice and Independent Practice in Small Group
- You can change order between Visual Learning and Solve & Share

Topic/ Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/ Assessments
14-1: Add and Subtract with Measurements	SWBAT solve problems by adding or subtracting length measurements	Visual Learning: Teacher will prompt the following question: "How do you know when to add or subtract when solving problems involving measurement?" Teacher will play the video. Teacher will stop to explain when needed.	Guided Practice Independent Practice Additional Practice

		Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 14-1 #1-3. Students will complete measurement activities. Optional Activity: • Interactive Notebook 14-1 • Practice Buddy (Online) • Pick a Project Activity (pg 607-608)	Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		Closure: Exit Ticket Homework: Reteach to Build Understanding 14-1	
14-2: Find Unknown Measurements	SWBAT add or subtract to solve problems about measurement	Visual Learning: Teacher will prompt the following question: "How can you solve addition and subtraction problems involving length?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 14-2 #1-3. Students will	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		complete measurement activities. Optional Activity: • Interactive Notebook 14-2 • Practice Buddy (Online) • Pick a Project Activity (pg 607-608) Closure: Exit Ticket Homework: Reteach to Build Understanding 14-2	
14-3: Continue to Find Unknown Measurements	SWBAT add and subtract to solve measurement problems by using drawings and equations	Visual Learning: Teacher will prompt the following question: "How can drawing a picture and writing an equation help you solve measurement word problems?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 14-3 #1-2. Students will complete measurement activities. Optional Activity: • Interactive Notebook 14-3 • Practice Buddy (Online) • Pick a Project Activity (pg 607-608) Closure: Exit Ticket Homework: Reteach to Build Understanding 14-3	
14-4: Add and Subtract on a Number Line	SWBAT add and subtract on a number line	Visual Learning: Teacher will prompt the following question: "How can you use a number line to help solve addition and subtraction problems involving length measurements?" Teacher will play the video. Teacher will stop to explain when needed.	Guided Practice Independent Practice Additional

		Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 14-4 #1-7. Students will complete measurement activities. Optional Activity: • Interactive Notebook 14-4 • Practice Buddy (Online) • Pick a Project Activity (pg 607-608)	Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		Closure: Exit Ticket Homework: Reteach to Build Understanding 14-4	
14-5: Problem Solving: Use Appropriate Tools	SWBAT choose the best tool to use to solve problems	Visual Learning: Teacher will prompt the following question: "How can you pick the best tool to solve a problem?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 14-5 #1-3. Students will	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		complete measurement activities. Optional Activity: • Interactive Notebook 14-5 • Practice Buddy (Online) • Pick a Project Activity (pg 607-608) Closure: Exit Ticket Homework: Reteach to Build Understanding 14-5	
Topic 14 Reteaching	SWBAT add and subtract length using the number line	Complete Reteaching Sets prior to giving Topic Assessment	Reteaching Sets

MATH.2.M.A.4	Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.
MATH.2.M.B.5	Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.
MATH.2.M.B.6	Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.

Suggested Modifications for Special Education, ELL and Gifted Students

Consistent with individual plans, when appropriate.

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment pintables

- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use center, stations, or contract
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- perimeter, equilateral triangle, centimeter, polygon, area, square units (use visuals/anchor charts)
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technological Innovations/Use

- My Math Academy
- ST Math
- Kahoot!
- Tools (Envision 2020)
- Game Center (Envision 2020)
- Create/Complete a Discovery Education Board

Cross Curricular/21st Century Connections

- Pick a Project Activity
- enVision STEM Project
- Problem Solving Reading Activity
- 3 ACT MATH Activity

Topic 15: Graphs and Data

Content Area: **Mathematics**
Course(s):
Time Period:
Length:
Status: **Not Published**

Summary of the Unit

In this unit, students will focus on collecting, representing, and interpreting data information. They will practice measurement skills to generate measurement data to display in a line plot. They will use categorical data to create and read bar and picture graphs.

Enduring Understandings

- The lengths of objects can be organized in different ways.
- Different types of data can be displayed on a line plot. Line plots are useful for organizing large sets of data.
- Bar graphs can be used to organize and display data. The height, or length, of bars in a bar graph makes it easy to compare data.
- Picture graphs use a single symbol to show data. This makes it easy to compare two or more categories.
- Picture graphs and bar graphs are useful tools for comparing data and drawing conclusions.
- Good math thinkers know how to think about words and numbers to solve problems.

Essential Questions

- Why is it helpful to use a line plot to display data?
- Why are line plots a useful way to organize large amounts of data?
- Why is making a bar graph from a table of data a good way to compare those data?
- How does a picture graph help you compare data?

- Why are picture graphs and bar graphs useful tools for drawing conclusions about data?
- How can you use graphs to write and solve problems about data?

Summative Assessment and/or Summative Criteria

Informal Observation: Classroom Observation

Formal Assessment: Topic 15 Modified Assessment; Topic Quick Checks

Resources

Pearson SuccessNet Math Series (digital and offline)

My Math Academy

ST Math online digital platform

Discovery Education math resources

Brain Pop online digital platform

Kahoot!

Unit Plan

*Based on your group, you may do:

- Visual Learning, Solve and Share, and Guided Practice in Whole Group; Independent Practice in Small Group OR
- Visual Learning in Whole Group; Solve and Share, Guided Practice and Independent Practice in Small Group
- You can change order between Visual Learning and Solve & Share

Topic/ Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/ Assessments
15-1: Line Plots	SWBAT measure the lengths of objects and make a line plot to organize the data	Visual Learning: Teacher will prompt the following question: "Why is it helpful to use a line plot to display data?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 15-1 #1-7. Students will complete graphing activities.	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		Optional Activity: • Interactive Notebook 15-1 • Practice Buddy (Online) • Pick a Project Activity (pg 639) Closure: Exit Ticket Homework: Reteach to Build Understanding 15-1	
15-2: More Line Plots	SWBAT measure the lengths of objects, then make a line plot to organize the data	Visual Learning: Teacher will prompt the following question: "Why are line plots a useful way to organize large amounts of data?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 15-2 #1-3. Students will complete graphing activities. Optional Activity: • Interactive Notebook 15-2 • Practice Buddy (Online) • Pick a Project Activity (pg 639) Closure: Exit Ticket Homework: Reteach to Build Understanding 15-2	
15-3: Bar Graphs	SWBAT draw bar graphs and use them to solve problems	Visual Learning: Teacher will prompt the following question: "Why is making a bar graph from a table of data a good way to compare those data?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher.	Guided Practice Independent Practice Additional Practice

		Guided Practice: Students will complete the “Guided Practice” section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the “Independent Practice” independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 15-3 #1-6. Students will complete graphing activities. Optional Activity: • Interactive Notebook 15-3 • Practice Buddy (Online) • Pick a Project Activity (pg 639) Closure: Exit Ticket	Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		Homework: Reteach to Build Understanding 15-3	
15-4: Picture Graphs	SWBAT draw picture graphs and use them to solve problems	Visual Learning: Teacher will prompt the following question: "How does a picture graph help you compare data?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 15-4 #1-3. Students will	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		complete graphing activities. Optional Activity: • Interactive Notebook 15-4 • Practice Buddy (Online) • Pick a Project Activity (pg 639) Closure: Exit Ticket Homework: Reteach to Build Understanding 15-4	
15-5: Draw Conclusions from Graphs	SWBAT draw conclusions from graphs	Visual Learning: Teacher will prompt the following question: "Why are picture graphs and bar graphs useful tools for drawing conclusions about data?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided	Guided Practice Independent Practice Additional Practice Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 15-5 #1-8. Students will complete graphing activities. Optional Activity: • Interactive Notebook 15-5 • Practice Buddy (Online) • Pick a Project Activity (pg 639) Closure: Exit Ticket Homework: Reteach to Build Understanding 15-5	
15-1: Problem Solving - Reasoning	SWBAT reason about data in bar graphs and picture grapes to write and solve problems	Visual Learning: Teacher will prompt the following question: "How can you use graphs to write and solve problems about data?" Teacher will play the video. Teacher will stop to explain when needed. Solve & Share: Students will begin the lesson with completing the solve and	Guided Practice Independent Practice Additional Practice

		share with the teacher. Guided Practice: Students will complete the "Guided Practice" section with the teacher together. Independent Practice/ Centers Activities: • Work with Teacher: Students will work in small groups with the teacher completing the Solve & Share and Guided Practice together. Students will complete the "Independent Practice" independently with teacher monitoring and offering guidance when needed. Students will complete the Exit Ticket Prompt. • Technology: Students will work at My Math Academy. Early finishers can work on ST Math and Envision Math Game in PearsonRealize.com • Practice Center: Students will complete Additional Practice 15-6 #1-4. Students will complete graphing activities. Optional Activity: • Interactive Notebook 15-6 • Practice Buddy (Online) • Pick a Project Activity (pg 639)	Exit Ticket Practice Buddy (Online) Reteach to Build for Understanding

		Closure: Exit Ticket Homework: Reteach to Build Understanding 15-6	
Topic 15 Reteaching	SWBAT solve problems using data and graphs	Complete Reteaching Sets prior to giving Topic Assessment	Reteaching Sets

MATH.2.M.A.1	Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
MATH.2.M.A.2	Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.
MATH.2.M.A.3	Estimate lengths using units of inches, feet, centimeters, and meters.
MATH.2.M.A.4	Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.
MATH.2.DL.A.1	Understand that people collect data to answer questions. Understand that data can vary.
MATH.2.DL.A.2	Identify what could count as data (e.g., visuals, sounds, numbers).
MATH.2.DL.B.3	Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.
MATH.2.DL.B.4	Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put together, take-apart, and compare problems using information presented in a bar graph.

Suggested Modifications for Special Education, ELL and Gifted Students

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Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment pintables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use center, stations, or contract
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
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- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
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- Allow for preferential seating within groups and the whole class.
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- Read word problems and directions aloud
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- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- perimeter, equilateral triangle, centimeter, polygon, area, square units (use visuals/anchor charts)
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technological Innovations/Use

- My Math Academy
- ST Math
- Kahoot!
- Tools (Envision 2020)
- Game Center (Envision 2020)

- Create/Complete a Discovery Education Board

Cross Curricular/21st Century Connections

- Pick a Project Activity
- enVision STEM Project
- Problem Solving Reading Activity
- 3 ACT MATH Activity