Subject Area: Mathematics Grade Level: 2	Bedminster Township School

Unit 1
Numbers Within 20
Addition, Subtraction, and Data

Dates: September-November	**Time Frame:** 39 days

Overview

This unit extends students' understanding of adding and subtracting within 20. Students will refine their understanding of the commutative and associative properties and various problem solving strategies, which will later assist students as they apply number properties to two and three digit numbers. Children will use fact families to find an unknown in one and two step word problems and will begin to recognize the relationship between the difference in a subtraction equation and an addend in an addition equation. Students will organize data into charts and tables and use it for making a graph, recognizing the relationship of two forms of graphs.

Enduring Understandings

- Knowing different strategies, such as making a ten and doubles plus one, will help you add and subtract.
- You can use what you know about the relationship between addition and subtraction to help you solve problems.
- You can organize data into graphs to help you answer questions about the data.
- Knowing how to model a problem with pictures or diagrams can help you solve the problem.

SKILL AND KNOWLEDGE OBJECTIVES

Content Objectives:

- Use the strategies of counting on, making a ten, and doubles plus one to add two one-digit numbers. *(Lesson 1)*
- Interpret models such as pictures, equations, and open number lines that represent the reasoning behind various strategies. *(Lesson 1)*
- Use addition strategies to represent and solve word problems. *(Lesson 1)*
- Use mental math strategies to subtract one-digit numbers within 20. *(Lesson 2)*
- Understand and use the relationship between addition and subtraction to subtract one-digit numbers within 20. *(Lesson 2)*
- Analyze one-step addition and subtraction word problems and write equations to represent the problems. *(Lesson 3)*
- Use fact families as a strategy to solve one-step problems and build number sense. *(Lesson 3)*
- Interpret models that represent one-step problems. *(Lesson 3)*
- Collect data to display in a bar graph or a picture graph. *(Lesson 4)*
- Compare data in a tally chart, table, picture graph, and bar graph. *(Lesson 4)*
- Interpret graphs by reading and comparing the data shown in the graph. *(Lesson 4)*
- Complete a picture graph and bar graph. *(Lesson 4)*

- Create a bar graph from a given set of data. *(Lesson 4)*
- Solve addition and subtraction word problems within 20, based on data. *(Lesson 4)*
- Analyze two step problems to determine the series of operations needed to solve them. *(Lesson 5)*
- Interpret models that represent a two step problem. *(Lesson 5)*

Language Objectives:

- Write and solve equations to represent word problems involving adding two one-digit numbers. *(Lesson 1)*
- Draw an open number line to represent making ten to add. *(Lesson 1)*
- Listen to the ideas of others and compare their strategies. *(Lesson 1)*
- Record counting strategies using tables, number bonds, and number lines. *(Lesson 2)*
- Explain how to make a ten to solve a subtraction problem. *(Lesson 2)*
- Write related addition and subtraction facts to represent a fact family and solve a subtraction problem. *(Lesson 2)*
- Compare strategies for solving a subtraction problem. *(Lesson 2)*
- Listen for understanding of the different approaches used by others; identify and orally make connections among the approaches. *(Lesson 2)*
- Draw a tape diagram to represent and solve a word problem. *(Lesson 3)*
- Write an addition or subtraction fact to represent a word problem. *(Lesson 3)*
- Compare a bar graph and a picture graph for the same data. *(Lesson 4)*
- Use key mathematical vocabulary terms *picture graph, bar graph,* and *data* in discussions. *(Lesson 4)*
- Draw two bar models to represent a two step problem. *(Lesson 5)*
- Draw a picture to model a two step word problem. *(Lesson 5)*
- Restate what information a word problem is asking for. *(Lesson 5)*

ASSESSMENTS

Pre-Assessment:

- Diagnostic Assessment (*i-Ready Classroom Central*)
- Renaissance benchmark

Formative Assessment:

- Whole-class and partner discussion
- Whiteboard work
- Close: Exit Ticket
- Lesson Quizzes

Self-Reflection/Self-Assessment:

- Unit Skills Self-Check (in *Student Worktext*)
- Apply It (in *Student Worktext)*
- Reflect Questions (in *Student Worktext)*
- Self Reflection (in *Student Worktext)*
- Math Journal Questions (in *Student Worktext)*
- Unit Review (in *Student Worktext)*

Summative Assessment:

- Performance Assessment
- Mid-Unit Assessment
- Unit Assessment

RESOURCES

PRINT RESOURCES:

- **In-Class Instruction and Practice:**
  - *Teacher's Guide*
    - Lesson Progression
    - ELL Language Expectations
    - Connect to Culture
    - Discussion Prompts and Instructional Support
  - *Student Worktext* (Use the blue pages for in-class instruction and practice)
    - Instruction

- **Independent Practice for School or Home**
  - *Teacher's Guide*
    - Additional Practice
    - Cumulative Practice
  - *Student Worktext* (Use the green pages for independent practice)
    - Additional Practice
    - Cumulative Practice
  - *Teacher Toolbox*
    - Fluency and Skills Practice
    - Unit Game
    - Cumulative Practice
- **Assessments and Reports**
  - *Teacher's Guide*
    - Starts
    - Support Whole Group/Partner Discussion
    - Ask/Listen Fors
    - Common Misconceptions
    - Error Alerts
    - Close: Exit Ticket
  - *Student Worktext*
    - Self Checks
    - Apply It
    - Reflect Questions
    - Self Reflection
    - Math Journal Questions
    - Unit Review
  - *Teacher Toolbox*
    - Editable Lesson Quizzes
    - Editable Mid-Unit and Unit Assessments
- **Differentiation**
  - *Before the Unit/Lesson: Prerequisites Report*
    - Prerequisites Report: Resources
  - *During the Lesson: Teacher's Guide*
    - Hands-On Activities or Visual Models
    - Deepen Understanding
    - ELL Differentiated Instruction
    - Refine Sessions
  - *After the Lesson: Teacher Toolbox*
    - Reteach: Tools for Instruction
    - Reinforce: Math Center Activities
    - Extend: Enrichment Activities

DIGITAL RESOURCES

- **In-Class Instruction and Practice:**
  - Interactive Tutorials
  - Digital Math Tools
  - PowerPoint Slides
- **Independent Practice for School or Home**
  - Digital Math Tools
  - Learning Games
  - Interactive Practice
- **Assessments and Reports**
  - Diagnostic
  - Lesson, Mid-Unit, and Unit Comprehension Checks
  - Prerequisites Report
  - Comprehension Check Reports
- **Differentiation**
  - *Interactive Tutorials*
  - *Digital Math Tools*

- *Learning Games*

STANDARDS

2016 NJ Student Learning Standards (NJSLS) for Mathematics:

- 2.OA.B.2: Fluently add and subtract within 20 using mental strategies.[2] By end of Grade 2, know from memory all sums of two one-digit numbers.
- 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.
- 2.MD.D.10: 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[4] using information presented in a bar graph.

Standards for Mathematical Practice (SMP):

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

2016 NJ Student Learning Standards (NJSLS) for English Language Arts:

- RL.2.1. Ask and answer such questions as *who, what, where, when, why*, and *how* to demonstrate understanding of key details in a text.
- RL.2.2. Recount stories, including fables and folktales from diverse cultures, and determine their central message/theme, lesson, or moral.
- RI.2.1. Ask and answer such questions as *who, what, where, when, why*, and *how* to demonstrate understanding of key details in a text.
- RI.2.10. Read and comprehend informational texts, including history/social studies, science, and technical texts, at grade level text complexity proficiently with scaffolding as needed.
- SL.2.1. Participate in collaborative conversations with diverse partners about *grade 2 topics and texts* with peers and adults in small and larger groups.
- SL.2.2. Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.
- SL.2.6. Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.

2020 NJ Student Learning Standards (NJSLS) - Standard 9: 21st Century Life and Careers:

Career Ready Practices:

- **CRP2** Apply appropriate academic and technical skills
- **CRP4** Communicate clearly and effectively and with reason
- **CRP8** Utilize critical thinking to make sense of problems and persevere in solving them.
- **CRP11** Use technology to enhance productivity.

NJ Core Curriculum Content Standards - Technology

- **8.1.5.A.1** Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.
- **8.1.P.C.1** Collaborate with peers by participating in interactive digital games or activities.

SOCIAL AND EMOTIONAL COMPETENCIES - activities/topics [optional]

Self-Awareness and Self-Management:

- Lead discussions that encourage students to reflect on their understanding of the concepts covered in the unit, as well as any perceived strengths or weaknesses.
- Routinely give students the opportunity to share the strategies used to solve a problem as well as possible alternate solutions.
- Lead a class activity that asks students to identify feelings they might have in situations involving mathematics using vocabulary (e.g., lead discussions using questions such as, “How would you feel if you solved an easy problem?,” “Would you feel different or the same if you solved a harder problem?,” “How would you feel if a friend was having a hard time in class?”).
- Routinely provide authentic feedback and also ask dialoguing questions that help students reflect on their own strengths and interests. e.g., “I can tell you’re really enjoying this puzzle/problem. Can you tell me what about this puzzle/problem that makes you feel so excited/happy?,” “I can tell you’re really proud of how you did on this project. Can you tell me what about this you’re most proud of?”
- At the end of the unit, have students self-assess progress toward their learning goals and help support a Growth Mindset by reviewing the skills on the **Student Worktext Self Reflection** page. Encourage students to revisit the work they did in each lesson.

Social Awareness:

- When there is a difference of opinion among students (perhaps over solution strategies), allow them to reflect on how they are feeling and then share with a partner or in a small group—to be heard but also to listen to how others feel differently, and why, in the same situation.
- During the *DIscuss It* portion of the daily lessons, build respect for diversity in the classroom by having students share their different perspectives on situations or solution strategies for the same problem.
- Lead a discussion that encourages students to reflect on barriers they may encounter when completing an assignment (e.g., finding a computer) and that also help them think about ways they can overcome them, including how to approach others for help (e.g., how to politely ask the teacher for help).

Relationship Skills:

- Teach lessons to develop communication skills (e.g., how to speak loudly and clearly so that others can hear) as they present solutions.
- Teach lessons on effective listening (e.g., how can we show that we are listening?) and give students a chance to practice listening, taking turns in pair shares. Have students follow each other with responses to what the last student said, e.g. “I heard you say, ‘The next number in the sequence is….’”
- Have students work in pairs during daily lessons. For example, students can play partner games during the Fluency Practice portion of daily lessons to build fluency.

Responsible Decision-Making:

- Encourage students to reflect on how they approached mathematics “today,” including in journals or pair shares. Ask them to include how their choices could be repeated if successful or improved in order to be more successful.

End of Unit: To support Growth Mindset, have students review the skills on the **Student Worktext Self Reflection** page and work in pairs to respond to the prompts. Encourage students to revisit the work they did in each lesson.

Interdisciplinary Connections

- Read just right books in the content areas
- Use mentor texts to deliver Social Studies content
- Compare content area ideas and issues to what our characters deal with in out read alouds and mentor texts
- Apply reading skills and strategies to the reading we do in the content areas
- Apply spelling strategies
- Apply grammar skills
- Analyze illustrations in books for details
- Illustrate a passage that was just read to show detail ideas and lessons

21st Century Skills Intergration

- Use venn diagrams and T chart to compare and contrast events
- Use highlighters, notecards, post-its and other tools to keep track of sory events details and ideas.

Unit 1: Numbers Within 20

DAYS 1 & 2 **DIAGNOSTIC ASSESSMENT** **Activities:** Students take the Diagnostic Assessment. It takes two days to administer. See i-Ready Classroom Central for information.	**DAY 3** **Lesson 0:** Lessons for the First Five Days **Session 1:** Try - Discuss - Connect Routine - Making 10 **Materials:** ● *Grade 2 Lessons for the First 5 Days* ● *Student Practice Pages (available on the Teacher Toolbox)* **(Lessons can be found under *Classroom Resources* tab on the *Teacher Toolbox* in the *Teacher Digital Experience)*** **Activities:** As outlined on pages 2-3 in *Grade 2 Lessons for the First Five Days* 1) Try-Discuss-Connect routine introduction *(5 min)* 2) Try It *(15 min)* *- Make sense of the problem (10 min)* *- Solve and support your thinking (5 min)* 3) Discuss It *(10 min)* *- Share your thinking with a partner (10 min)*	**DAY 4** **Lesson 0:** Lessons for the First Five Days **Session 2:** Try - Discuss - Connect Routine - Making 10 **Materials:** ● *Grade 2 Lessons for the First 5 Days* ● *Student Practice Pages (available on the Teacher Toolbox)* **(Lessons can be found under *Classroom Resources* tab on the *Teacher Toolbox* in the *Teacher Digital Experience)*** **Activities:** As outlined on pages 4-7 in *Grade 2 Lessons for the First Five Days* 1) Discuss It *(10 min)* - Compare class strategies 2) Connect It *(10 min)* *- Make connections and reflect (15 min)* 3) Apply your Thinking to a New Problem (5 min) **Additional Practice:** *Student practice pages 5 & 6*	**DAY 5** **Lesson 0:** Lessons for the First Five Days **Session 3:** Try - Discuss - Connect Routine - Making a 10 to Add **Materials:** ● *Grade 2 Lessons for the First 5 Days* ● *Student Practice Pages (available on the Teacher Toolbox)* **(Lessons can be found under *Classroom Resources* tab on the *Teacher Toolbox* in the *Teacher Digital Experience)*** **Activities:** As outlined on pages 8-9 in *Grade 2 Lessons for the First Five Days* 1) Try It -Make sense of the problem *(5 min)* -Solve and Support your thinking *(10 min)* 2) Discuss It -Share your thinking with a partner *(10 min)* **Additional Practice: N/A**	**DAY 6** **Lesson 0:** Lessons for the First Five Days **Session 4:** Try - Discuss - Connect Routine - Making a 10 to Add **Materials:** ● *Grade 2 Lessons for the First 5 Days* ● *Student Practice Pages (available on the Teacher Toolbox)* **(Lessons can be found under *Classroom Resources* tab on the *Teacher Toolbox* in the *Teacher Digital Experience)*** **Activities:** As outlined on pages 10-13 in *Grade 2 Lessons for the First Five Days* 1) Discuss It -Compare class strategies *(10 min)* 2) Connect It -Make connections and reflect *(15 min)* -Apply your thinking to a new problem *(5 min)* **Additional Practice:** Student practice pages 11 and 12
DAY 7 **Lesson 0:** Lessons for the First Five Days **Session 5:** Try - Discuss - Connect Routine - Making a 10 to Subtract **Materials:** ● *Grade 2 Lessons for the First 5 Days* ● *Student Practice Pages (available on the Teacher Toolbox)* **(Lessons can be found under *Classroom Resources* tab on the *Teacher Toolbox* in the *Teacher Digital Experience)*** **Activities:** As outlined on pages 14--19 in *Grade 2 Lessons for the First Five Days* 1) Try It **-**Make sense of the problem *(5 min)* -Solve and support your thinking *(10 min)* 2) Discuss It -Share your thinking with a partner *(5 min)* -Compare class strategies *(10 min)* 3) Connect It -Make connections and rellect *(10 min)* -Apply your thinking to a new problem *(5 min)*	**DAY 8** **Lesson 1:** Mental Math Strategies for Addition **Session 1 Explore:** Using Mental Math Strategies for Addition **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 5-8 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It (*15 min)* 5) Close:Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 7-8	**DAY 9** **Lesson 1:** Mental Math Strategies for Addition **Session 2 Develop:** Adding by Counting on and Making a Ten **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 9-14 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It & Model It *(5 min)* 5) Connect It (*10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 13-14 **Fluency:** Adding by Counting On and Making a Ten	**DAY 10** **Lesson 1:** Mental Math Strategies for Addition **Session 3 Develop:** Using Doubles and Doubles Plus 1 **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 15-20 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It & Model It *(5 min)* 5) Connect It (*10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 19-20 **Fluency:** Using Doubles and Doubles Plus 1	**DAY 11** **Lesson 1:** Mental Math Strategies for Addition **Session 4 Refine:** Using Mental Math Strategies for Addition **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 21-24 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Example *(10 min)* 3) Apply It *(25 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 23-24

Additional Practice: Student practice pages 17 and 18				
DAY 12 **Lesson 1:** Mental Math Strategies for Addition **Session 5 Refine:** Using Mental Math Strategies for Addition **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *LESSON QUIZ* **Activities:** As outlined on pages 25-26b in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Small Group Differentiation *(20 min)* 4) Close: Exit Ticket *(5 min)* **ASSESSMENT**: LESSON QUIZ	**DAY 13** **Lesson 2:** Mental Math Strategies for Subtraction **Session 1 Explore:** Using Mental Math Strategies for Subtraction **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 29-32 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It (*15 min)* 5) Close:Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 31-32	**DAY 14** **Lesson 2:** Mental Math Strategies for Subtraction **Session 2 Develop:** Counting on and Making a Ten to Subtract **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 33-38 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Model It *(5 min)* 5) Connect It (*10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 37-38 **Fluency:** Counting On and Making a Ten to Subtract	**DAY 15** **Lesson 2:** Mental Math Strategies for Subtraction **Session 3 Develop:** Using Fact Families to Help Subtract **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 39-44 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Model It *(5 min)* 5) Connect It (*10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 43-44 **Fluency:** Using Fact Families to Help Subtract	**DAY 16** **Lesson 1:** Mental Math Strategies for Subtraction **Session 4 Refine:** Using Mental Math Strategies for Subtraction **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 45-48 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Example *(10 min)* 3) Apply It *(25 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 47-48
DAY 17 **Lesson 2:** Mental Math Strategies for Subtraction **Session 5 Refine:** Using Mental Math Strategies for Subtraction **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *LESSON QUIZ* **Activities:** As outlined on pages 49-50b in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Small Group Differentiation *(20 min)* 4) Close: Exit Ticket *(5 min)* **ASSESSMENT**: LESSON QUIZ	**DAY 18** **Lesson 3:** Solve One-Step Word Problems **Session 1 Explore:** Solving One Step Word Problems **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 53-56 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It (*15 min)* 5) Close:Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 55-56	**DAY 19** **Lesson 3:** Solve One-Step Word Problems **Session 2 Develop:** Solving Take-Apart Word Problems **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 57-62 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It & Model It *(5 min)* 5) Connect It (*10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 61-62 **Fluency:** Solving Take Apart Word Problems	**DAY 20** **Lesson 3:** Solve One-Step Word Problems **Session 3 Develop:** Solving Comparison Word Problems **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 63-68 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Explain It & Picture It *(5 min)* 5) Connect It (*10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 67-68 **Fluency:** Solving Comparison Word Problems	**DAY 21** **Lesson 3:** Solve One-Step Word Problems **Session 4 Refine:** Solving Different Kinds of Word Problems **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 69-72 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Example *(10 min)* 3) Apply It *(25 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 71-72
DAY 22 **Lesson 3:** Solve One-Step Word Problems **Session 5 Refine:** Solving Different Kinds of Word Problems **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *LESSON QUIZ* **Activities:** As outlined on pages 73-74b in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Small Group Differentiation *(20 min)* 4) Close: Exit Ticket *(5 min)*	**DAY 23** **Unit 1: Mid-Unit Assessment** **Materials:** ● *Unit 1 Mid-Unit Assessment* ● *Teacher Guide Volume 1* **Activities:** Students will take their Unit 1 Mid-Unit Assessment. ***See the Scoring Guide on page 74f in Teacher Guide Volume 1.***	**DAY 24** **Lesson 4:** Draw and Use Bar Graphs and Picture Graphs **Session 1 Explore:** Drawing and Using Bar Graphs and Picture Graphs **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 77-80 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It (*15 min)* 5) Close:Exit Ticket *(5 min)*	**DAY 25** **Lesson 4:** Draw and Use Bar Graphs and Picture Graphs **Session 2 Develop:** Using Bar Graphs and Picture Graphs **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 81-86 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It *(5 min)* 5) Connect It (*10 min)*	**DAY 26** **Lesson 4:** Draw and Use Bar Graphs and Picture Graphs **Session 3 Develop:** Making Bar Graphs and Picture Graphs **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 87-92 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Model It *(5 min)* 5) Connect It (*10 min)*

ASSESSMENT: LESSON QUIZ		**Additional Practice:** *Student Worktext* pages 79-80	6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 85-86 **Fluency:** Using Bar Graphs and Picture Graphs	6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 91-92 **Fluency:** Making Bar Graphs and Picture Graphs
DAY 27 **Lesson 4:** Draw and Use Bar Graphs and Picture Graphs **Session 4 Refine:** Drawing and Using Graphs **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 93-96 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Example *(10 min)* 3) Apply It *(25 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 95-96	**DAY 28** **Lesson 4:** Draw and Use Bar Graphs and Picture Graphs **Session 5 Refine:** Drawing and Using Bar Graphs and Picture Graphs **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *LESSON QUIZ* **Activities:** As outlined on pages 97-98b in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Small Group Differentiation *(20 min)* 4) Close: Exit Ticket *(5 min)* **ASSESSMENT**: LESSON QUIZ	**DAY 29** **Lesson 5:** Solve Two Step Word Problems **Session 1 Explore:** Solving Two Step Word Problems **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 101-104 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It (*15 min)* 5) Close:Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 103-104	**DAY 30** **Lesson 5:** Solve Two Step Word Problems **Session 2 Develop:** Ways to Solve Two Step Problems **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 105-110 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It & Model It *(5 min)* 5) Connect It (*10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 109-110 **Fluency:** Ways to Solving Two Step Problems	**DAY 31** **Lesson 5:** Solve Two Step Word Problems **Session 3 Develop:** More Ways to Solve Two Step Problems **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 111-116 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It & Model It *(5 min)* 5) Connect It (*10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 115-116 **Fluency:** More Ways to Solving Two Step Problems
DAY 32 **Lesson 5:** Solve Two Step Word Problems **Session 4 Refine:** Solving Two Step Word Problems **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 117-120 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Example *(10 min)* 3) Apply It *(25 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 119-120	**DAY 33** **Lesson 5:** Solve Two Step Word Problems **Session 5 Refine:** Solving Two Step Word Problems **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *LESSON QUIZ* **Activities:** As outlined on pages 121-122b in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Small Group Differentiation *(20 min)* 4) Close: Exit Ticket *(5 min)* **ASSESSMENT**: LESSON QUIZ	**DAY 34** **Math in Action:** Solve Addition and Subtraction Problems **Session 1** **Materials (for each student):** ● 16 buttons ● 1 sheet of paper ● Activity Sheet: *Solution Sheet 2* **Activities:** As outlined on page 124-129 in *Teacher Guide Volume 1*: 1) Example Problem and Solution *(15 min)* 2) Plan It *(5 min)* 3) Solve It *(10 min)* 4) Reflect *(5 min)* 5) Plan It & Solve It *(10 min)* 6) Reflect *(5 min)*	**DAY 35** **Math in Action:** Solve Addition and Subtraction Problems **Session 2** **Activities:** As outlined on page 130-131 in *Teacher Guide Volume 1*: 1) Solve it *(20 min)* 2) Reflect *(5 min)* 3) Solve It *(20 min)* 4) Reflect *(5 min)*	**DAY 36** **Unit Game:** Model Match! **(OPTIONAL)** **Materials (for each pair):** ● *Recording Sheet* ● *Equation Cards* ● *Model Cards* **Activities:** As outlined on page 132 in *Teacher Guide Volume 1*: Have students play *Model Match!* In pairs to reinforce matching equations to models that represent the equation.
DAY 37 **Literacy Connection (Folktale): "**The Monkey and the Peas" **(OPTIONAL)** **Materials:** ● *"The Monkey and the Peas"* from Ready Reading ● Literacy Connection Problems (from Teacher Toolbox) **Activities:** As outlined on page 133 in *Teacher Guide Volume 1*: Students read a folktale and use their understanding of solving two step word problems to solve the literacy connection problems.	**DAY 38** **Unit 1: Unit Review** **Materials:** ● *Teacher Guide Volume 1* ● *Student Worktext* **Activities:** 1) Have students complete the Unit 1 Self-Reflection on page 123. 2) Students will complete pages 132-134 in their *Student Worktext*. 3) As a class, review and discuss student answers and strategies. ***Use pages 132-134ain Teacher Guide Volume 1 to guide the discussion.***	**DAY 39** **Unit 1: Unit Assessment** **Materials:** ● *Unit 1 Assessment:* ● T*eacher Guide Volume 1* **ASSESSMENT:** Students will take their Unit 1 Assessment. ***See the Scoring Guide on page 134e in Teacher Guide Volume 1.***		

Differentiate Instruction, depending on individual student needs (students with an IEP, 504, or Intervention Plan; ELL Students; Students At Risk; Gifted Students) **by:**

Presentation Accommodations

- Use alternate texts at lower readability level
- Work with fewer items per page or line and/or materials in a larger print size
- Use magnification device, screen reader, or Braille / Nemeth Code
- Use audio amplification device (e.g., hearing aid(s), auditory trainer, sound-field system (which may require teacher use of microphone)
- Be given a written list of instructions
- Record a lesson, instead of taking notes
- Have another student share class notes with him
- Be given an outline of a lesson
- Be given a copy of teacher's lecture notes
- Be given a study guide to assist in preparing for assessments
- Use visual presentations of verbal material, such as word webs and visual organizers
- Use manipulatives to teach or demonstrate concepts

Response Accommodations

- Use sign language, a communication device, Braille, other technology, or native language other than English
- Dictate answers to a scribe
- Capture responses on an audio recorder
- Use a spelling dictionary or electronic spell-checker
- Use a word processor to type notes or give responses in class

Setting Accommodations

- Work or take a test in a different setting, such as a quiet room with few distractions
- Sit where he learns best (for example, near the teacher & away from distractions)
- Use special lighting or acoustics
- Take a test in small group setting
- Use sensory tools such as an exercise band that can be looped around a chair's legs (so fidgety kids can kick it and quietly get their energy out)
- Use noise buffers such as headphones, earphones, or earplugs

Timing Accommodations

- Take more time to complete a task or a test
- Have extra time to process oral information and directions
- Take frequent breaks, such as after completing a task

Scheduling Accommodations

- Take more time to complete a project
- Take a test in several timed sessions or over several days
- Take sections of a test in a different order
- Take a test at a specific time of day

Organization Skills Accommodations

- Use an alarm to help with time management
- Mark texts with a highlighter

Assignment Modifications

- Answer fewer or different test questions
- Create alternate projects or assignments

Curriculum Modifications

- Learn different material (such as continuing to work on multiplication while classmates move on to fractions, or moving ahead to an extension concept/skill while classmates continue to work on a core skill)
- Get graded or assessed using a different standard than the one for classmate

Grade Level: 2	

Unit 2
Numbers Within 20
Addition, Subtraction, Time, and Money

Dates: November-January	**Time Frame:** 38 days

Overview

This unit extends students' understanding of adding and subtracting within 100. Students will add and subtract two digit numbers using a variety of strategies (composing and decomposing a ten, counting on, counting back, etc.). Students will apply inverse operations to find sums and differences and use picture models, number models, number bonds, number lines, and equations to solve problems.

Students will learn to identify, name, and count the values of pennies, nickels, dimes, and quarters. They count on to find the value of a set of coins and they combine coins to equal the value of other coins. Students determine the coins needed to equal one dollar, and use notation to label dollars and cents. Students will solve one and two step word problems involving money.

Students will learn to read analog and digital clocks to the nearest five minutes. They will recognize that the structure of an analog clock enables them to use skip counting in order to read or place the minute hand. Students will draw clock hands to indicate two different times and to show the number of minutes that have passed between those times.

Enduring Understandings

- You can use what you know about tens and ones to help you add numbers by place value.
- Adding or subtracting from a tens number can make the problem easier. Knowing how to break apart numbers to get you to the nearest ten can help you solve addition and subtraction problems.
- Models help you represent word problems. Knowing how to create a good model will help you solve one or two step word problems.
- You can use what you know about skip counting by fives to help you tell time to the nearest five minutes.

SKILL AND KNOWLEDGE OBJECTIVES

Content Objectives:

- Break apart two digit numbers into tens and ones as a place value strategy for adding. *(Lesson 6)*
- Recognize that in adding, tens are added to tens and ones to ones. *(Lesson 6)*
- Determine when grouping a ten is necessary and carry out the regrouping to find a sum. *(Lesson 6)*
- Decompose a ten as a strategy for subtracting. *(Lesson 7)*
- Recognize that addition can be used to solve a subtraction problem. *(Lesson 7)*
- Evaluate mental strategies for subtracting a number from a two digit number. *(Lesson 7)*
- Fluently break apart two digit numbers into tens and ones as a place value strategy for addition and

subtraction. *(Lesson 8)*
- Fluently determine when regrouping a ten is necessary and carry out the regrouping to find a sum. *(Lesson 8)*
- Fluently determine when decomposing a ten is necessary and carry out the decomposition to find a difference. *(Lesson 8)*
- Use addition to solve a subtraction problem. *(Lesson 8)*
- Use addition to check the solution to a subtraction problem. *(Lesson 8)*
- Analyze word problems to determine the operation needed to solve them. *(Lesson 9)*
- Apply the use of fact families as a strategy to solve one step problems and build number sense. *(Lesson 9)*
- Interpet models that represent a one step problem with two digit numbers. *(Lesson 9)*
- Recognize and name the coins penny, nickel, dime, and quarter. *(Lesson 10)*
- Know the value of coins and paper denominations. *(Lesson 10)*
- Count the amount of money represented by a set of coins or bills. *(Lesson 10)*
- Read time to the nearest 5-minute interval. *(Lesson 11)*
- Write time to 5 minute intervals using proper notation. *(Lesson 11)*
- Show time on an analog clock to 5 minute intervals using proper hour hand and minute hand placement. *(Lesson 11)*
- Determine when a digital clock should read AM or PM. *(Lesson 11)*

Language Objectives:
- Record sums by modeling addition with base ten blocks. *(Lesson 6)*
- Draw an open number line to model adding two digit numbers. *(Lesson 6)*
- Make a quick drawing to model adding two-digit numbers. *(Lesson 6)*
- Write an addition equation to solve a word problem involving two digit addition. *(Lesson 6)*
- Orally describe how to add up to solve subtraction problems. *(Lesson 7)*
- Draw an open number line to model subtracting two digit numbers. *(Lesson 7)*
- Write a subtraction problem to solve a word problem. *(Lesson 7)*
- Listen to the ideas of others and compare their strategies. *(Lesson 7,11)*
- Record sums and differences found by using models. *(Lesson 8)*
- Draw an open number line to model adding or subtracting two digit numbers. *(Lesson 8)*
- Write addition and subtraction equations to represent word problems. *(Lesson 8)*
- Explain how to solve addition and subtraction problems with two digit numbers *(Lesson 8)*
- Explain why and how addition and subtraction strategies work. *(Lesson 8)*
- Write an equation to represent a word problem. *(Lesson 9)*
- Compare two models for solving a problem and tell how they are the same or different. *(Lesson 9)*
- Talk with a partner about strategies used to solve a problem. *(Lesson 9)*
- Write the value of a set of coins. *(Lesson 10)*
- Write the value of a set of bills. *(Lesson 10)*
- List coins that have a given total value. *(Lesson 10)*
- Skip count by fives to read time on an analog clock. *(Lesson 11)*
- Talk with a partner about strategies used to solve a problem. *(Lesson 11)*
- Use the terms AM and PM correctly in discussions. *(Lesson 11)*

21st Century LIfe and Careers Objectives:
- Students explore various candies to purchase, trying to get the most quantity. (*Lesson 10)*
- Students will solve word problems revolving around career decisions and purchasing power. (*Lesson 10)*

ASSESSMENTS

Pre-Assessment:
- Diagnostic Assessment (*i-Ready Classroom Central*)
- Renaissance benchmark

Formative Assessment:
- Whole-class and partner discussion
- Whiteboard work
- Close: Exit Ticket
- Lesson Quizzes

Self-Reflection/Self-Assessment:
- Unit Skills Self-Check (in *Student Worktext*)
- Apply It (in *Student Worktext)*

- Reflect Questions (in *Student Worktext)*
- Self Reflection (in *Student Worktext)*
- Math Journal Questions (in *Student Worktext)*
- Unit Review (in *Student Worktext)*

Summative Assessment:

- Performance Assessment
- Mid-Unit Assessment
- Unit Assessment

RESOURCES

PRINT RESOURCES:

- **In-Class Instruction and Practice:**
  - *Teacher's Guide*
    - Lesson Progression
    - ELL Language Expectations
    - Connect to Culture
    - Discussion Prompts and Instructional Support
  - *Student Worktext* (Use the blue pages for in-class instruction and practice)
    - Instruction
- **Independent Practice for School or Home**
  - *Teacher's Guide*
    - Additional Practice
    - Cumulative Practice
  - *Student Worktext* (Use the green pages for independent practice)
    - Additional Practice
    - Cumulative Practice
  - *Teacher Toolbox*
    - Fluency and Skills Practice
    - Unit Game
    - Cumulative Practice
- **Assessments and Reports**
  - *Teacher's Guide*
    - Starts
    - Support Whole Group/Partner Discussion
    - Ask/Listen Fors
    - Common Misconceptions
    - Error Alerts
    - Close: Exit Ticket
  - *Student Worktext*
    - Self Checks
    - Apply It
    - Reflect Questions
    - Self Reflection
    - Math Journal Questions
    - Unit Review
  - *Teacher Toolbox*
    - Editable Lesson Quizzes
    - Editable Mid-Unit and Unit Assessments
- **Differentiation**
  - *Before the Unit/Lesson: Prerequisites Report*
    - Prerequisites Report: Resources
  - *During the Lesson: Teacher's Guide*
    - Hands-On Activities or Visual Models
    - Deepen Understanding
    - ELL Differentiated Instruction
    - Refine Sessions
  - *After the Lesson: Teacher Toolbox*
    - Reteach: Tools for Instruction

- Reinforce: Math Center Activities
- Extend: Enrichment Activities

DIGITAL RESOURCES

- **In-Class Instruction and Practice:**
  - Interactive Tutorials
  - Digital Math Tools
  - PowerPoint Slides
- **Independent Practice for School or Home**
  - Digital Math Tools
  - Learning Games
  - Interactive Practice
- **Assessments and Reports**
  - Diagnostic
  - Lesson, Mid-Unit, and Unit Comprehension Checks
  - Prerequisites Report
  - Comprehension Check Reports
- **Differentiation**
  - *Interactive Tutorials*
  - *Digital Math Tools*
  - *Learning Games*

STANDARDS

2016 NJ Student Learning Standards (NJSLS) for Mathematics:

- 2.NBT.B.5: Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
- 2.NBT.B.9: Explain why addition and subtraction strategies work, using place value and the properties of operations.
- 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.
- 2.MD.C.8: Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. *Example: If you have 2 dimes and 3 pennies, how many cents do you have?*
- 2.MD.C.7: Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
- 2.NBT.A.2: Count within 1000; skip-count by 5s, 10s, and 100s.

Standards for Mathematical Practice (SMP):

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

2016 NJ Student Learning Standards (NJSLS) for English Language Arts:

- RL.2.1. Ask and answer such questions as *who, what, where, when, why*, and *how* to demonstrate understanding of key details in a text.
- RL.2.2. Recount stories, including fables and folktales from diverse cultures, and determine their central message/theme, lesson, or moral.
- RI.2.1. Ask and answer such questions as *who, what, where, when, why*, and *how* to demonstrate understanding of key details in a text.
- RI.2.10. Read and comprehend informational texts, including history/social studies, science, and technical texts,

at grade level text complexity proficiently with scaffolding as needed.

- SL.2.1. Participate in collaborative conversations with diverse partners about *grade 2 topics and texts* with peers and adults in small and larger groups.
- SL.2.2. Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.
- SL.2.6. Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.

2020 NJ Student Learning Standards (NJSLS) - Standard 9: 21st Century Life and Careers:

Career Ready Practices:

- **CRP2** Apply appropriate academic and technical skills
- **CRP4** Communicate clearly and effectively and with reason
- **CRP8** Utilize critical thinking to make sense of problems and persevere in solving them.
- **CRP11** Use technology to enhance productivity.
- **9.1.4.E.2:** Apply comparison shopping skills to purchasing decisions.
- **9.2.4.A.1:** Identify reasons why people work, different types of work, and how work can help a person achieve personal and professional goals.
- **9.4.2.CT.2:** Identify possible approaches and resources to execute a plan.
- **9.4.2.CT.3:** Uses a variety of types of thinking to solve problems.

NJ Core Curriculum Content Standards - Technology

- **8.1.5.A.1** Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.
- **8.1.P.C.1** Collaborate with peers by participating in interactive digital games or activities.

SOCIAL AND EMOTIONAL COMPETENCIES - activities/topics [optional]

Self-Awareness and Self-Management:

- Lead discussions that encourage students to reflect on their understanding of the concepts covered in the unit, as well as any perceived strengths or weaknesses.
- Routinely give students the opportunity to share the strategies used to solve a problem as well as possible alternate solutions.
- Lead a class activity that asks students to identify feelings they might have in situations involving mathematics using vocabulary (e.g., lead discussions using questions such as, “How would you feel if you solved an easy problem?,” “Would you feel different or the same if you solved a harder problem?,” “How would you feel if a friend was having a hard time in class?”).
- Routinely provide authentic feedback and also ask dialoguing questions that help students reflect on their own strengths and interests. e.g., “I can tell you’re really enjoying this puzzle/problem. Can you tell me what about this puzzle/problem that makes you feel so excited/happy?,” “I can tell you’re really proud of how you did on this project. Can you tell me what about this you’re most proud of?”
- At the end of the unit, have students self-assess progress toward their learning goals and help support a Growth Mindset by reviewing the skills on the **Student Worktext Self Reflection** page. Encourage students to revisit the work they did in each lesson.

Social Awareness:

- When there is a difference of opinion among students (perhaps over solution strategies), allow them to reflect on how they are feeling and then share with a partner or in a small group—to be heard but also to listen to how others feel differently, and why, in the same situation.
- During the *DIscuss It* portion of the daily lessons, build respect for diversity in the classroom by having students share their different perspectives on situations or solution strategies for the same problem.
- Lead a discussion that encourages students to reflect on barriers they may encounter when completing an assignment (e.g., finding a computer) and that also help them think about ways they can overcome them, including how to approach others for help (e.g., how to politely ask the teacher for help).

Relationship Skills:

- Teach lessons to develop communication skills (e.g., how to speak loudly and clearly so that others can hear) as they present solutions.
- Teach lessons on effective listening (e.g., how can we show that we are listening?) and give students a chance to

practice listening, taking turns in pair shares. Have students follow each other with responses to what the last student said, e.g. “I heard you say, ‘The next number in the sequence is….’”
- Have students work in pairs during daily lessons. For example, students can play partner games during the Fluency Practice portion of daily lessons to build fluency.

Responsible Decision-Making:
- Encourage students to reflect on how they approached mathematics “today,” including in journals or pair shares. Ask them to include how their choices could be repeated if successful or improved in order to be more successful.

End of Unit: To support Growth Mindset, have students review the skills on the **Student Worktext Self Reflection** page and work in pairs to respond to the prompts. Encourage students to revisit the work they did in each lesson.

Interdisciplinary Connections
- Read just right books in the content areas
- Use mentor texts to deliver Social Studies content
- Compare content area ideas and issues to what our characters deal with in out read alouds and mentor texts
- Apply reading skills and strategies to the reading we do in the content areas
- Apply spelling strategies
- Apply grammar skills
- Analyze illustrations in books for details
- Illustrate a passage that was just read to show detail ideas and lessons

21st Century Skills Intergration
- Use venn diagrams and T chart to compare and contrast events
- Use highlighters, notecards, post-its and other tools to keep track of sory events details and ideas.

Unit 2: Numbers Within 100

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
Lesson 6: Add Two Digit Numbers **Session 1 Explore:** Adding Two Digit Numbers **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 141-144 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It (*15 min)* 5) Close:Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 132-144	**Lesson 6:** Add Two Digit Numbers **Session 2 Develop:** Different Ways to Show Addition **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 145-150 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It & Model It *(5 min)* 5) Connect It (*10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 149-150 **Fluency:** Different Ways to Show Addition	**Lesson 6:** Add Two Digit Numbers **Session 3 Develop:** More Ways to Show Addition **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 151-156 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It & Model It *(5 min)* 5) Connect It (*10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 155-156 **Fluency:** More Ways to Show Addition	**Lesson 6:** Add Two Digit Numbers **Session 4 Refine:** Adding Two Digit Numbers **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 157-160 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Example *(10 min)* 3) Apply It *(25 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 159-160	**Lesson 6:** Add Two Digit Numbers **Session 5 Refine:** Adding Two Digit Numbers **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *LESSON QUIZ* **Activities:** As outlined on pages 161-162b in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Small Group Differentiation *(20 min)* 4) Close: Exit Ticket *(5 min)* **ASSESSMENT**: LESSON QUIZ
DAY 6	**DAY 7**	**DAY 8**	**DAY 9**	**DAY 10**
Lesson 7: Subtract Two Digit Numbers **Session 1 Explore:** Subtracting Two Digit Numbers **Materials:** ● *Student Worktext*	**Lesson 7:** Subtract Two Digit Numbers **Session 2 Develop:** Subtracting by Adding Up **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1*	**Lesson 7:** Subtract Two Digit Numbers **Session 3 Develop:** Subtracting by Regrouping **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1*	**Lesson 7:** Subtract Two Digit Numbers **Session 4 Refine:** Subtracting Two Digit Number **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1*	**Lesson 7:** Subtract Two Digit Numbers **Session 5 Refine:** Subtracting Two Digit Numbers **Materials:** ● *Student Worktext*

• *Teacher Guide Volume 1* • *Digital Math Tools* **Activities:** As outlined on pages 165-168 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It (*15 min)* 5) Close:Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 167-168	• *Digital Math Tools* **Activities:** As outlined on pages 169-174 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Model It *(5 min)* 5) Connect It (*10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 173-174 **Fluency:** Subtracting by Adding Up	• *Digital Math Tools* **Activities:** As outlined on pages 175-180 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Model It *(5 min)* 5) Connect It (*10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 179-180 **Fluency:** Subtracting by Regrouping	• *Digital Math Tools* **Activities:** As outlined on pages 181-184 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Example *(10 min)* 3) Apply It *(25 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 183-184	• *Teacher Guide Volume 1* • *LESSON QUIZ* **Activities:** As outlined on pages 185-186b in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Small Group Differentiation *(20 min)* 4) Close: Exit Ticket *(5 min)* **ASSESSMENT**: LESSON QUIZ
DAY 11 **Lesson 8:** Use Addition and Subtraction Strategies with Two Digit Numbers **Session 1 Explore:** Using Addition and Subtraction Strategies with Two Digit Numbers **Materials:** • *Student Worktext* • *Teacher Guide Volume 1* • *Digital Math Tools* **Activities:** As outlined on pages 189-192 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It (*15 min)* 5) Close:Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 191-192	**DAY 12** **Lesson 8:** Use Addition and Subtraction Strategies with Two Digit Numbers **Session 2 Develop:** Strategies to Find a Missing Addend **Materials:** • *Student Worktext* • *Teacher Guide Volume 1* • *Digital Math Tools* **Activities:** As outlined on pages 193-198 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Model It *(5 min)* 5) Connect It (*10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 197-198 **Fluency:** Strategies to Find a Missing Addend	**DAY 13** **Lesson 8:** Use Addition and Subtraction Strategies with Two Digit Numbers **Session 3 Develop:** Using Subtraction Strategies with Two Digit Numbers **Materials:** • *Student Worktext* • *Teacher Guide Volume 1* • *Digital Math Tools* **Activities:** As outlined on pages 199-204 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Model It *(5 min)* 5) Connect It (*10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 203-204 **Fluency:** Using Subtraction Strategies with Two Digit Numbers	**DAY 14** **Lesson 8:** Use Addition and Subtraction Strategies with Two Digit Numbers **Session 4 Refine:** Using Addition and Subtraction Strategies with Two Digit Numbers **Materials:** • *Student Worktext* • *Teacher Guide Volume 1* • *Digital Math Tools* **Activities:** As outlined on pages 205-208 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Example *(10 min)* 3) Apply It *(25 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 207-208	**DAY 15** **Lesson 8:** Use Addition and Subtraction Strategies with Two Digit Numbers **Session 5 Refine:** Using Addition and Subtraction Strategies with Two Digit Numbers **Materials:** • *Student Worktext* • *Teacher Guide Volume 1* • *LESSON QUIZ* **Activities:** As outlined on pages 209-210b in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Small Group Differentiation *(20 min)* 4) Close: Exit Ticket *(5 min)* **ASSESSMENT**: LESSON QUIZ
DAY 16 **Unit 2: Mid-Unit Assessment** **Materials:** • *Unit 2 Mid-Unit Assessment* • *Teacher Guide Volume 1* **Activities:** Students will take their Unit 2 Mid-Unit Assessment. ***See the Scoring Guide on page 210f in Teacher Guide Volume 1.***	**DAY 17** **Lesson 9:** Solve Word Problems with Two Digit Numbers **Session 1 Explore:** Solving Word Problems with Two Digit Numbers **Materials:** • *Student Worktext* • *Teacher Guide Volume 1* • *Digital Math Tools* **Activities:** As outlined on pages 213-216 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It & Discuss It *(20 min)* 3) Connect It (*15 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 215-216	**DAY 18** **Lesson 9:** Solve Word Problems with Two Digit Numbers **Session 2 Develop:** Ways to Model Word Problems **Materials:** • *Student Worktext* • *Teacher Guide Volume 1* • *Digital Math Tools* **Activities:** As outlined on pages 217-222 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It & Discuss It *(20 min)* 3) Picture It & Model It *(5 min)* 4) Connect It (*10 min)* 5) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 221-222 **Fluency:** Ways to Model Word Problems	**DAY 19** **Lesson 9:** Solve Word Problems with Two Digit Numbers **Session 3 Develop:** More Ways to Model Word Problems **Materials:** • *Student Worktext* • *Teacher Guide Volume 1* • *Digital Math Tools* **Activities:** As outlined on pages 223-228 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It & Discuss It *(20 min)* 3) Model It *(5 min)* 4) Connect It (*10 min)* 5) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 227-228 **Fluency:** More Ways to Model Word Problems	**DAY 20** **Lesson 9:** Solve Word Problems with Two Digit Numbers **Session 4 Develop:** Ways to Solve Two Step Word Problems **Materials:** • *Student Worktext* • *Teacher Guide Volume 1* • *Digital Math Tools* **Activities:** As outlined on pages 229-234 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It & Discuss It *(20 min)* 3) Picture It & Model It *(5 min)* 4) Connect It (*10 min)* 5) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 233-234 **Fluency:** Ways to Solving Two Step Word Problems
DAY 21 **Lesson 9:** Solve Word Problems with Two Digit Numbers	**DAY 22** **Lesson 9:** Solve Word Problems with Two Digit Numbers	**DAY 23** **Lesson 10:** Solve Word Problems Involving Money **Session 1 Explore:** Solving	**DAY 24** **Lesson 10:** Solve Word Problems Involving Money **Session 2 Develop:** Finding	**DAY 25** **Lesson 10:** Solve Word Problems Involving Money **Session 3 Develop:** Finding

Session 5 Refine: Solving Word Problems with Two Digit Numbers **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 235-238 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Example & Apply It *(35 min)* 3) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 237-238	**Session 6 Refine:** Solving Word Problems with Two Digit Numbers **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *LESSON QUIZ* **Activities:** As outlined on pages 239-240b in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Small Group Differentiation *(20 min)* 4) Close: Exit Ticket *(5 min)* **ASSESSMENT**: LESSON QUIZ	Word Problems Involving Money **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 243-246 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It & Discuss It *(20 min)* 3) Connect It (*15 min)* 4) Close:Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 245-246	the Value of Sets of Like Coins **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 247-252 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It & Discuss It *(20 min)* 3) Model It *(5 min)* 4) Connect It (*10 min)* 5) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 251-252 **Fluency:** Finding the Value of Sets of Like Coins	the Value of Mixed Coins **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 253-258 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It & Discuss It *(20 min)* 3) Picture It & Model It *(5 min)* 4) Connect It (*10 min)* 5) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 257-258 **Fluency:** Finding the Value of Sets of Mixed Coins
DAY 26 **Lesson 10:** Solve Word Problems Involving Money **Session 4 Develop:** Solving Word Problems About Money **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 259-264 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It & Discuss It *(20 min)* 3) Model It & Connect It *(15 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 263-264 **Fluency:** Solving Word Problems About Money	**DAY 27** **Lesson 10:** Solve Word Problems Involving Money **Session 5 Refine:** Solving Word Problems Involving Money **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 265-268in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Example & Apply It *(35 min)* 3) Check for Understanding (Close) *(5 min)* **Additional Practice:** *Student Worktext* pages 267-268	**DAY 28** **Lesson 10:** Solve Word Problems Involving Money **Session 6 Refine:** Solving Word Problems Involving Money **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *LESSON QUIZ* **Activities:** As outlined on pages 269-270b in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Apply It & Small Group Differentiation *(35 min)* 3) Close: Exit Ticket *(5 min)* **ASSESSMENT**: LESSON QUIZ	**DAY 29** **Lesson 11:** Tell and Write Time **Session 1 Explore:** Telling and Writing Time **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 273-276 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It (*15 min)* 5) Close:Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 275-276	**DAY 30** **Lesson 11:** Tell and Write Time **Session 2 Develop:** Telling and Writing Time **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 277-282 in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It *(5 min)* 5) Connect It (*10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 281-282 **Fluency:** Telling and Writing Time
DAY 31 **Lesson 11:** Tell and Write Time **Session 3 Refine:** Telling and Writing Time **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *Digital Math Tools* **Activities:** As outlined on pages 283-286in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Example & Apply It *(35 min)* 3) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 285-286	**DAY 32** **Lesson 11:** Tell and Write Time **Session 4 Refine:** Telling and Writing Time **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 1* ● *LESSON QUIZ* **Activities:** As outlined on pages 287-288b in *Teacher Guide Volume 1*: 1) Start *(5 min)* 2) Apply It & Small Group Differentiation *(35 min)* 3) Close: Exit Ticket *(5 min)* **ASSESSMENT**: LESSON QUIZ	**DAY 33** **Math in Action:** Work with Two Digit Numbers, Time, and Money **Session 1** **Materials (for each student):** ● Base Ten Blocks **Activities:** As outlined on page 290-295 in *Teacher Guide Volume 1*: 1) Example Problem and Solution *(15 min)* 2) Plan It *(5 min)* 3) Solve It *(10 min)* 4) Reflect *(5 min)* 5) Plan It & Solve It *(10 min)* 6) Reflect *(5 min)*	**DAY 34** **Math in Action:** Solve Addition and Subtraction Problems **Session 2** **Materials (for each student):** ● Base Ten Blocks **Activities:** As outlined on page 296-297 in *Teacher Guide Volume 1*: 1) Solve it *(20 min)* 2) Reflect *(5 min)* 3) Solve It *(20 min)* 4) Reflect *(5 min)*	**DAY 35** **Unit Game:** Subtraction Action **(OPTIONAL)** **Materials (for each pair):** ● *Recording Sheet* ● *2 sets of digit cards (0-9)* **Activities:** As outlined on page 298 in *Teacher Guide Volume 1*: Have students play *Subtraction Action!* In pairs to reinforce subtracting two digit numbers and comparing one or two digit numbers.

DAY 36 **Literacy Connection (Social Studies): "**An Amazing Rescue" **(OPTIONAL)** **Materials:** ● *"An Amazing Rescue"* from Ready Reading ● Literacy Connection Problems (from Teacher Toolbox) **Activities:** As outlined on page 299 in *Teacher Guide Volume 1*: Students read an informative text and employ problem solving skills and their understanding of solving addition and subtraction word problems with two digits.	**DAY 37** **Unit 2: Unit Review** **Materials:** ● *Teacher Guide Volume 1* ● *Student Worktext* **Activities:** 1) Have students complete the Unit 2 Self-Reflection on page 289. 2) Students will complete pages 298-300 in their *Student Worktext*. 3) As a class, review and discuss student answers and strategies. ***Use pages 298-300a in Teacher Guide Volume 1 to guide the discussion.***	**DAY 38** **Unit 2: Unit Assessment** **Materials:** ● *Unit 2 Assessment:* ● T*eacher Guide Volume 1* **ASSESSMENT:** Students will take their Unit 2 Assessment. ***See the Scoring Guide on page 300e in Teacher Guide Volume 1.***		

Differentiate Instruction, depending on individual student needs (students with an IEP, 504, or Intervention Plan; ELL Students; Students At Risk; Gifted Students) **by:**

Presentation Accommodations

- Use alternate texts at lower readability level
- Work with fewer items per page or line and/or materials in a larger print size
- Use magnification device, screen reader, or Braille / Nemeth Code
- Use audio amplification device (e.g., hearing aid(s), auditory trainer, sound-field system (which may require teacher use of microphone)
- Be given a written list of instructions
- Record a lesson, instead of taking notes
- Have another student share class notes with him
- Be given an outline of a lesson
- Be given a copy of teacher's lecture notes
- Be given a study guide to assist in preparing for assessments
- Use visual presentations of verbal material, such as word webs and visual organizers
- Use manipulatives to teach or demonstrate concepts

Response Accommodations

- Use sign language, a communication device, Braille, other technology, or native language other than English
- Dictate answers to a scribe
- Capture responses on an audio recorder
- Use a spelling dictionary or electronic spell-checker
- Use a word processor to type notes or give responses in class

Setting Accommodations

- Work or take a test in a different setting, such as a quiet room with few distractions
- Sit where he learns best (for example, near the teacher & away from distractions)
- Use special lighting or acoustics
- Take a test in small group setting
- Use sensory tools such as an exercise band that can be looped around a chair's legs (so fidgety kids can kick it and quietly get their energy out)
- Use noise buffers such as headphones, earphones, or earplugs

Timing Accommodations

- Take more time to complete a task or a test
- Have extra time to process oral information and directions
- Take frequent breaks, such as after completing a task

Scheduling Accommodations

- Take more time to complete a project
- Take a test in several timed sessions or over several days
- Take sections of a test in a different order
- Take a test at a specific time of day

Organization Skills Accommodations

- Use an alarm to help with time management

- Mark texts with a highlighter

Assignment Modifications

- Answer fewer or different test questions
- Create alternate projects or assignments

Curriculum Modifications

- Learn different material (such as continuing to work on multiplication while classmates move on to fractions, or moving ahead to an extension concept/skill while classmates continue to work on a core skill)
- Get graded or assessed using a different standard than the one for classmate

Subject Area: Mathematics **Grade Level:** 2	**Bedminster Township School**

Unit 3
Numbers Within 1,000
Place Value, Addition, and Subtraction

Dates: January-March	**Time Frame:** 44 days

Overview

This unit introduces students to place value and operations with numbers within 1,000. Students will use base ten blocks to understand place value in three digit numbers and make the connection that a digit's value is dependent upon its placement in a number. Students will compare three digit numbers through picture models, charts, and by using the terms *greater than* and *less than* and the symbols > and <.

Students will apply counting by fives and tens from 0 to 60 to skip counting by fives, tens and hundreds within 1,000. They will relate skip counting to addition and subtraction with two and three digit numbers. Students will add and subtract three digit numbers with and without regrouping a hundred or a ten. Students will use place value understanding to subtract from three digit numbers with and without zeros. They will work with different strategies and models and select the models they find most meaningful.

Enduring Understandings

- The value of a digit in a number depends on its place in the number. Knowing about place value will help you determine the total value of a number and will help you read, write, and compare numbers.
- You can use what you know about place value to mentally add 10 or 100 to numbers or subtract 10 or 100 from numbers.
- Knowing about place value will help you break apart numbers as a strategy for adding or subtracting.

SKILL AND KNOWLEDGE OBJECTIVES

Content Objectives:

- Identify ones, tens, and hundreds in a three digit number. *(Lesson 12)*
- Interpret models to determine the combinations of hundreds, tens, and ones in a number. *(Lesson 12)*
- Write a three digit number in terms of various combinations of hundreds, tens and ones. *(Lesson 12)*
- Identify the place value of each digit in a three digit number. *(Lesson 13)*
- Model three digit numbers. *(Lesson 13)*
- Interpret a model and write the number value. *(Lesson 13)*
- Evaluate models of three digit numbers to determine whether numbers are greater than, less than, or equal to each other. *(Lesson 14)*
- Express equalities and inequalities using proper notation. *(Lesson 14)*
- Solve problems involving inequalities and justify solutions. *(Lesson 14)*
- Skip count by hundreds within 1,000 to add and subtract. *(Lesson 15)*
- Skip count by fives and tens from two and three digit numbers. *(Lesson 15)*
- Mentally add 10 or 100 to a given number 100 - 900. *(Lesson 15)*
- Mentally subtract 10 or 100 from a given number 100 - 900. *(Lesson 15)*
- Break apart three digit numbers as a place value strategy for adding. *(Lesson 16)*
- Recognize that in addition, hundreds are added to hundreds, tens are added to tens, and ones are added to ones. *(Lesson 16)*
- Determine when regrouping a hundred or a ten is necessary and carry out the regrouping to find the sum. *(Lesson 16)*
- Determine when regrouping a ten or a hundred is necessary to subtract, and carry out the regrouping to dins the difference. *(Lesson 17)*
- Recognize that in subtraction, hundreds are subtracted from hundreds, tens are subtracted from tens, and ones are subtracted from ones. *(Lesson 17)*
- Explore subtraction as a process of taking away or adding up. *(Lesson 17)*
- Fluently break apart three digit numbers as a strategy for addition and subtraction. *(Lesson 18)*
- Fluently determine when regrouping ones or tens is necessary and carry out the regrouping to find a sum. *(Lesson 18)*
- Fluently determine when decomposing tens or hundreds is necessary and carry out the decomposition to find a difference. *(Lesson 18)*
- Subtract from three digit numbers with zeros in the ones and/or tens places. *(Lesson 18)*
- Use addition to check the solution to a subtraction problem. *(Lesson 18)*
- Break apart three or more numbers as a place value strategy for adding. *(Lesson 19)*
- Develop strategies for adding more than two numbers. *(Lesson 19)*
- Apply the commutative and associative properties of addition. *(Lesson 19)*

Language Objectives:

- Tell how many hundreds, tens, and ones are in a given three digit number. *(Lesson 12)*
- Tell how many tens are in 100 and in 200. *(Lesson 12)*
- Read three digit numbers aloud. *(Lesson 13)*
- Write three digit numbers in expanded form. *(Lesson 13)*
- Write a three digit number shown with base ten blocks. *(Lesson 13)*
- Tell which of 2 three digit numbers is greater and which is lesser. *(Lesson 14)*
- Write inequalities to compare three digit numbers using > and < symbols. *(Lesson 14)*
- Listen to the ideas of others and ask questions to clarify. *(Lesson 14)*
- Tell and write skip counted numbers in order. *(Lesson 15)*
- Explain patterns exhibited in the numerals of skip counted numbers. *(Lesson 15)*
- Describe situations where skip counting by fives, tens, and hundred is useful. *(Lesson 15)*
- Describe situations where mentally adding or subtracting 10 or 100 is useful. *(Lesson 15)*
- Write two numbers in a place-value chart to find their sum. *(Lesson 16)*
- Write two numbers in expanded form to find their sum. *(Lesson 16)*
- Record partial sums as a step toward finding the sum of two numbers. *(Lesson 16)*
- Write two numbers in a place value chart to find their difference. *(Lesson 17)*
- Write two numbers in expanded form to find their difference. *(Lesson 17)*
- Record the steps for adding up to subtract on an open number line. *(Lesson 17)*
- Compare two approaches to subtraction to describe how they are alike and different. *(Lesson 17)*
- Record sums and differences found by using models. *(Lesson 18)*
- Draw an open number line to model adding and subtracting three digit numbers. *(Lesson 18)*

- Write addition and subtraction equations to represent word problems. *(Lesson 18)*
- Explain how to solve addition and subtraction problems with three-digit numbers. *(Lesson 18)*
- Explain why and how addition and subtraction strategies work. *(Lesson 18)*
- Rewrite two digit numbers in expanded notation to add three or more numbers. *(Lesson 19)*
- Draw lines to group addends that are easy to add. *(Lesson 19)*
- Describe a mental math strategy used to add three or more numbers. *(Lesson 19)*
- Justify conclusions and communicate the conclusions to others. *(Lesson 19)*

ASSESSMENTS

Pre-Assessment:
- Diagnostic Assessment (*i-Ready Classroom Central*)
- Renaissance benchmark

Formative Assessment:
- Whole-class and partner discussion
- Whiteboard work
- Close: Exit Ticket
- Lesson Quizzes

Self-Reflection/Self-Assessment:
- Unit Skills Self-Check (in *Student Worktext*)
- Apply It (in *Student Worktext)*
- Reflect Questions (in *Student Worktext)*
- Self Reflection (in *Student Worktext)*
- Math Journal Questions (in *Student Worktext)*
- Unit Review (in *Student Worktext)*

Summative Assessment:
- Performance Assessment
- Mid-Unit Assessment
- Unit Assessment

RESOURCES

PRINT RESOURCES:

- **In-Class Instruction and Practice:**
  - *Teacher's Guide*
    - Lesson Progression
    - ELL Language Expectations
    - Connect to Culture
    - Discussion Prompts and Instructional Support
  - *Student Worktext* (Use the blue pages for in-class instruction and practice)
    - Instruction
- **Independent Practice for School or Home**
  - *Teacher's Guide*
    - Additional Practice
    - Cumulative Practice
  - *Student Worktext* (Use the green pages for independent practice)
    - Additional Practice
    - Cumulative Practice
  - *Teacher Toolbox*
    - Fluency and Skills Practice
    - Unit Game
    - Cumulative Practice
- **Assessments and Reports**
  - *Teacher's Guide*
    - Starts
    - Support Whole Group/Partner Discussion
    - Ask/Listen Fors
    - Common Misconceptions

        - Error Alerts
        - Close: Exit Ticket
    - *Student Worktext*
        - Self Checks
        - Apply It
        - Reflect Questions
        - Self Reflection
        - Math Journal Questions
        - Unit Review
    - *Teacher Toolbox*
        - Editable Lesson Quizzes
        - Editable Mid-Unit and Unit Assessments
- **Differentiation**
    - *Before the Unit/Lesson: Prerequisites Report*
        - Prerequisites Report: Resources
    - *During the Lesson: Teacher's Guide*
        - Hands-On Activities or Visual Models
        - Deepen Understanding
        - ELL Differentiated Instruction
        - Refine Sessions
    - *After the Lesson: Teacher Toolbox*
        - Reteach: Tools for Instruction
        - Reinforce: Math Center Activities
        - Extend: Enrichment Activities

DIGITAL RESOURCES

- **In-Class Instruction and Practice:**
    - Interactive Tutorials
    - Digital Math Tools
    - PowerPoint Slides
- **Independent Practice for School or Home**
    - Digital Math Tools
    - Learning Games
    - Interactive Practice
- **Assessments and Reports**
    - Diagnostic
    - Lesson, Mid-Unit, and Unit Comprehension Checks
    - Prerequisites Report
    - Comprehension Check Reports
- **Differentiation**
    - *Interactive Tutorials*
    - *Digital Math Tools*
    - *Learning Games*

STANDARDS

<u>2016 NJ Student Learning Standards (NJSLS) for Mathematics:</u>

- 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:

  a. 100 can be thought of as a bundle of ten tens — called a "hundred."

  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).
- 2.NBT.A.3: Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.
- 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.
- 2.NBT.A.2: Count within 1000; skip-count by 5s, 10s, and 100s.

- 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.
- 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.
- 2.NBT.B.9: Explain why addition and subtraction strategies work, using place value and the properties of operations.
- 2.NBT.B.6: Add up to four two-digit numbers using strategies based on place value and properties of operations.
- 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.
- 2.NBT.B.5: Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

Standards for Mathematical Practice (SMP):

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

2016 NJ Student Learning Standards (NJSLS) for English Language Arts:

- RL.2.1. Ask and answer such questions as *who, what, where, when, why*, and *how* to demonstrate understanding of key details in a text.
- RL.2.2. Recount stories, including fables and folktales from diverse cultures, and determine their central message/theme, lesson, or moral.
- RI.2.1. Ask and answer such questions as *who, what, where, when, why*, and *how* to demonstrate understanding of key details in a text.
- RI.2.10. Read and comprehend informational texts, including history/social studies, science, and technical texts, at grade level text complexity proficiently with scaffolding as needed.
- SL.2.1. Participate in collaborative conversations with diverse partners about *grade 2 topics and texts* with peers and adults in small and larger groups.
- SL.2.2. Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.
- SL.2.6. Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.

2020 NJ Student Learning Standards (NJSLS) - Standard 9: 21st Century Life and Careers:

Career Ready Practices:

- **CRP2** Apply appropriate academic and technical skills
- **CRP4** Communicate clearly and effectively and with reason
- **CRP8** Utilize critical thinking to make sense of problems and persevere in solving them.
- **CRP11** Use technology to enhance productivity.

NJ Core Curriculum Content Standards - Technology

- **8.1.5.A.1** Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.
- **8.1.P.C.1** Collaborate with peers by participating in interactive digital games or activities.

SOCIAL AND EMOTIONAL COMPETENCIES - activities/topics [optional]

Self-Awareness and Self-Management:

- Lead discussions that encourage students to reflect on their understanding of the concepts covered in the unit, as well as any perceived strengths or weaknesses.
- Routinely give students the opportunity to share the strategies used to solve a problem as well as possible alternate solutions.
- Lead a class activity that asks students to identify feelings they might have in situations involving mathematics using vocabulary (e.g., lead discussions using questions such as, “How would you feel if you solved an easy problem?,” “Would you feel different or the same if you solved a harder problem?,” “How would you feel if a friend was having a hard time in class?”).
- Routinely provide authentic feedback and also ask dialoguing questions that help students reflect on their own strengths and interests. e.g., “I can tell you’re really enjoying this puzzle/problem. Can you tell me what about this puzzle/problem that makes you feel so excited/happy?,” “I can tell you’re really proud of how you did on this project. Can you tell me what about this you’re most proud of?”
- At the end of the unit, have students self-assess progress toward their learning goals and help support a Growth Mindset by reviewing the skills on the **Student Worktext Self Reflection** page. Encourage students to revisit the work they did in each lesson.

Social Awareness:

- When there is a difference of opinion among students (perhaps over solution strategies), allow them to reflect on how they are feeling and then share with a partner or in a small group—to be heard but also to listen to how others feel differently, and why, in the same situation.
- During the *DIscuss It* portion of the daily lessons, build respect for diversity in the classroom by having students share their different perspectives on situations or solution strategies for the same problem.
- Lead a discussion that encourages students to reflect on barriers they may encounter when completing an assignment (e.g., finding a computer) and that also help them think about ways they can overcome them, including how to approach others for help (e.g., how to politely ask the teacher for help).

Relationship Skills:

- Teach lessons to develop communication skills (e.g., how to speak loudly and clearly so that others can hear) as they present solutions.
- Teach lessons on effective listening (e.g., how can we show that we are listening?) and give students a chance to practice listening, taking turns in pair shares. Have students follow each other with responses to what the last student said, e.g. “I heard you say, ‘The next number in the sequence is….’”
- Have students work in pairs during daily lessons. For example, students can play partner games during the Fluency Practice portion of daily lessons to build fluency.

Responsible Decision-Making:

- Encourage students to reflect on how they approached mathematics “today,” including in journals or pair shares. Ask them to include how their choices could be repeated if successful or improved in order to be more successful.

End of Unit: To support Growth Mindset, have students review the skills on the **Student Worktext Self Reflection** page and work in pairs to respond to the prompts. Encourage students to revisit the work they did in each lesson.

Interdisciplinary Connections

- Read just right books in the content areas
- Use mentor texts to deliver Social Studies content
- Compare content area ideas and issues to what our characters deal with in out read alouds and mentor texts
- Apply reading skills and strategies to the reading we do in the content areas
- Apply spelling strategies
- Apply grammar skills
- Analyze illustrations in books for details
- Illustrate a passage that was just read to show detail ideas and lessons

21st Century Skills Intergration

- Use venn diagrams and T chart to compare and contrast events
- Use highlighters, notecards, post-its and other tools to keep track of sory events details and ideas.

Unit 3: Numbers Within 1,000

DAY 1 **Lesson 12:** Understand Three Digit Numbers **Session 1 Explore:** Three Digit Numbers **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 307-310 in *Teacher's Guide Volume 2*: 1) Start *(5 min)* 2) Model It *(10 min)* 3) Discuss It *(5 min)* 4) Model It *(10 min)* 5) Discuss it *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 309-310	**DAY 2** **Lesson 12:** Understand Three Digit Numbers **Session 2 Develop:** Understanding of Three Digit Numbers **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 311-314 in *Teacher's Guide Volume 2*: 1) Start *(5 min)* 2) Model It: Base Ten Blocks *(5 min)* 3) Discuss it *(5 min)* 4) Model It: Place Value Chart *(5 min)* 5) Discuss It *(5 min)* 6) Connect It *(15 min)* 7) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 313-314 **Fluency:** Understanding of Three Digit Numbers	**DAY 3** **Lesson 12:** Understand Three Digit Numbers **Session 3 Refine:** Ideas About Three Digit Numbers **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 315-316b in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Apply It *(35 min)* 3) Close: Exit Ticket *(5 min)* **ASSESSMENT:** LESSON QUIZ	**DAY 4** **Lesson 13:** Read and Write Three Digit Numbers **Session 1 Explore:** Reading and Writing Three Digit Numbers **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 319-322 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It *(15 min)* 5) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 321-322	**DAY 5** **Lesson 13:** Read and Write Three Digit Numbers **Session 2 Develop:** Finding the Value of Three Digit Numbers **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 323-328 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture Its and Model It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 327-328 **Fluency:** Finding the Value of Three-Digit Numbers
DAY 6 **Lesson 13:** Read and Write Three Digit Numbers **Session 3 Develop:** Writing Three Digit Numbers **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 329-334 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It and Model It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 333-334 **Fluency:** Writing Three Digit Numbers	**DAY 7** **Lesson 13:** Read and Write Three Digit Numbers **Session 4 Refine:** Reading and Writing Three Digit Numbers **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 335-338 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Example *(10 min)* 3) Apply It *(25 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 337-338	**DAY 8** **Lesson 13:** Read and Write Three Digit Numbers **Session 5 Refine:** Reading and Writing Three Digit Numbers **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 339-340b in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Small Group Differentiation *(20 min)* 4) Close: Exit Ticket *(5 min)* **ASSESSMENT:** LESSON QUIZ	**DAY 9** **Lesson 14:** Compare Three Digit Numbers **Session 1 Explore:** Comparing Three Digit Numbers **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 343-346 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It *(15 min)* 5) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 345-346	**DAY 10** **Lesson 14:** Compare Three Digit Numbers **Session 2 Develop:** Ways to Compare Three Digit Numbers **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 347-352 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It and Model It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 351-352 **Fluency:** Ways to Compare Three Digit Numbers
DAY 11 **Lesson 14:** Compare Three Digit Numbers **Session 3 Develop:** More Ways to Compare Three Digit Numbers **Materials:**	**DAY 12** **Lesson 14:** Compare Three Digit Numbers **Session 4 Refine:** Comparing Three Digit Numbers **Materials:** • *Student Worktext*	**DAY 13** **Lesson 14:** Compare Three Digit Numbers **Session 5 Refine:** Comparing Three Digit Numbers **Materials:** • *Student Worktext*	**DAY 14** **Lesson 15:** Mental Addition and Subtraction **Session 1 Explore:** Mental Addition and Subtraction **Materials:** • *Student Worktext*	**DAY 15** **Lesson 15:** Mental Addition and Subtraction **Session 2 Develop:** Skip Counting by Fives, Tens, and Hundreds **Materials:**

• *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 353-358 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It and Model It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 357-358 **Fluency:** More Ways to Compare Three Digit Numbers	• *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 359-362 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Example *(10 min)* 3) Apply It *(25 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 361-362	• *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 363-364b in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Small Group Differentiation *(20 min)* 4) Close: Exit Ticket *(5 min)* **ASSESSMENT:** LESSON QUIZ	• *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 367-370 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It *(15 min)* 5) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 369-370	• *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 371-376 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Model It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 375-376 **Fluency:** Skip Counting by Fives, Tens, and Hundreds
DAY 16 **Lesson 15:** Mental Addition and Subtraction **Session 3 Develop:** Adding and Subtracting 10 and 100 **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 377-382 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It and Model It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 381-382 **Fluency:** Adding and Subtracting 10 and 100	**DAY 17** **Lesson 15:** Mental Addition and Subtraction **Session 4 Refine:** Using Mental Addition and Subtraction **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 383-386 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Example *(10 min)* 3) Apply It *(25 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 385-386	**DAY 18** **Lesson 15:** Mental Addition and Subtraction **Session 5 Refine:** Using Mental Addition and Subtraction **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 387-388b in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Small Group Differentiation *(20 min)* 4) Close: Exit Ticket *(5 min)* **ASSESSMENT:** LESSON QUIZ	**DAY 19** **Unit 3: Mid-Unit Assessment** **Materials:** • *Unit 3 Mid-Unit Assessment* • *Teacher Guide Volume 2* **Activities:** Students will take their Unit 3 Mid-Unit Assessment. ***See the Scoring Guide on page 388f in Teacher Guide Volume 2.***	**DAY 20** **Lesson 16:** Add Three Digit Numbers **Session 1 Explore:** Adding Hundreds, Tens, and Ones **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 391-394 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It *(15 min)* 5) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 393-394
DAY 21 **Lesson 16:** Add Three Digit Numbers **Session 2 Develop:** Adding and Regrouping Ones **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 395-400 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It & Model It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 399-400 **Fluency:** Adding and Regrouping Ones	**DAY 22** **Lesson 16:** Add Three Digit Numbers **Session 3 Develop:** Adding and Regrouping Tens **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 401-406 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Model It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 405-406 **Fluency:** Adding and Regrouping Tens	**DAY 23** **Lesson 16:** Add Three Digit Numbers **Session 4 Refine:** Adding Three Digit Numbers **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 407-410 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Example *(10 min)* 3) Apply It *(25 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 409-410	**DAY 24** **Lesson 16:** Add Three Digit Numbers **Session 5 Refine:** Adding Three Digit Numbers **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 411-412b in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Small Group Differentiation *(20 min)* 4) Close: Exit Ticket *(5 min)* **ASSESSMENT:** LESSON QUIZ	**DAY 25** **Lesson 17: Subtract Three Digit Numbers** **Session 1 Explore:** Subtracting Hundreds, Tens and Ones **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 415-418 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It *(15 min)* 5) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 417-418
DAY 26 **Lesson 17: Subtract Three Digit Numbers**	**DAY 27** **Lesson 17: Subtract Three Digit Numbers**	**DAY 28** **Lesson 17: Subtract Three Digit Numbers**	**DAY 29** **Lesson 17: Subtract Three Digit Numbers**	**DAY 30** **Lesson 18:** Use Addition and Subtraction Strategies with

Session 2 Develop: Regrouping Tens to Ones **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 419-424 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It & Model It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 423-424 **Fluency:** Regrouping Tens to Ones	**Session 3 Develop:** Regrouping Hundred to Tens **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 425-430 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It & Model It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 429-430 **Fluency:** Regrouping Hundreds to Tens	**Session 4 Refine:** Subtracting Three Digit Numbers **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 431-434 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Example *(10 min)* 3) Apply It *(25 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 433-434	**Session 5 Refine:** Subtracting Three Digit Numbers **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 435-436b in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Small Group Differentiation *(20 min)* 4) Close: Exit Ticket *(5 min)* **ASSESSMENT:** LESSON QUIZ	Three Digit Numbers **Session 1 Explore:** Using Addition and Subtraction Strategies with Three Digit Numbers **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 439-442 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It *(15 min)* 5) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 441-442
DAY 31 **Lesson 18:** Use Addition and Subtraction Strategies with Three Digit Numbers **Session 2 Develop:** Using Addition Strategies with Three Digit Numbers **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 443-448 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Model It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 447-448 **Fluency:** Using Addition Strategies with Three Digit Numbers	**DAY 32** **Lesson 18:** Use Addition and Subtraction Strategies with Three Digit Numbers **Session 3 Develop:** Using Subtraction Strategies with Three Digit Numbers **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 449-454 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Model It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 453-454 **Fluency:** Using Subtraction Strategies with Three Digit Numbers	**DAY 33** **Lesson 18:** Use Addition and Subtraction Strategies with Three Digit Numbers **Session 4 Refine:** Using Addition and Subtraction Strategies with Three Digit Numbers **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 455-458 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Example *(10 min)* 3) Apply It *(25 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 457-458	**DAY 34** **Lesson 18:** Use Addition and Subtraction Strategies with Three Digit Numbers **Session 5 Refine:** Using Addition and Subtraction Strategies with Three Digit Numbers **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 459-460b in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Small Group Differentiation *(20 min)* 4) Close: Exit Ticket *(5 min)* **ASSESSMENT:** LESSON QUIZ	**DAY 35** **Lesson 19:** Add Several Two Digit Numbers **Session 1 Explore:** Adding Several Two Digit Numbers **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 463-466 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It *(15 min)* 5) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 441-465-466
DAY 36 **Lesson 19:** Add Several Two Digit Numbers **Session 2 Develop:** Adding Four Two Digit Numbers **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 467-472 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Model It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 471-472 **Fluency:** Adding Four Two Digit Numbers	**DAY 37** **Lesson 19:** Add Several Two Digit Numbers **Session 3 Refine:** Adding Several Two Digit Numbers **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 473-476 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Example *(10 min)* 3) Apply It *(25 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 475-476	**DAY 38** **Lesson 19:** Add Several Two Digit Numbers **Session 4 Refine:** Adding Several Two Digit Numbers **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 477-478b in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Small Group Differentiation *(20 min)* 4) Close: Exit Ticket *(5 min)* **ASSESSMENT:** LESSON QUIZ	**DAY 39** **Math in Action:** Add, Subtract, and Compare Numbers **Session 1** **Materials (for each student):** ● 3 hundreds blocks, 15 tens blocks, Activity Sheet **Activities:** As outlined on page 480-485 in *Teacher Guide Volume 2*: 1) Example Problem and Solution *(15 min)* 2) Plan It *(5 min)* 3) Solve It *(10 min)* 4) Reflect *(5 min)* 5) Plan It & Solve It *(10 min)* 6) Reflect *(5 min)*	**DAY 40** **Math in Action:** Solve Addition and Subtraction Problems **Session 2** **Materials (for each student):** ● Base Ten Blocks **Activities:** As outlined on page 486-487 in *Teacher Guide Volume 2*: 1) Solve it *(20 min)* 2) Reflect *(5 min)* 3) Solve It *(20 min)* 4) Reflect *(5 min)*

DAY 41	DAY 42	DAY 43	DAY 44	
Unit Game: Comparing Three-Digit Numbers **(OPTIONAL)** **Materials (for each pair):** ● *2 copies of the Recording Sheet, 6 sets of Digit Cards (0-9)* **Activities:** As outlined on page 488 in *Teacher Guide Volume 2*: Have students play *Comparing Three Digit Numbers* In pairs to reinforce reading, writing and comparing three digit numbers. Extend the game to practice subtracting three digit numbers.	**Literacy Connection (Social Studies): "**Homes Around the World" **(OPTIONAL)** **Materials:** ● *"Homes Around the World"* from Ready Reading ● Literacy Connection Problems (from Teacher Toolbox) **Activities:** As outlined on page 489 in *Teacher Guide Volume 2*: Students read an informative text and employ problem solving skills. Students will use their understanding of solving addition and subtraction word problems with three digit numbers using multiple representations.	**Unit 3: Unit Review** **Materials:** ● *Teacher Guide Volume 2* ● *Student Worktext* **Activities:** 1) Have students complete the Unit 3 Self-Reflection on page 479. 2) Students will complete pages 488-490 in their *Student Worktext*. 3) As a class, review and discuss student answers and strategies. ***Use pages 488-490a in Teacher Guide Volume 2 to guide the discussion.***	**Unit 3: Unit Assessment** **Materials:** ● *Unit 3 Assessment:* ● T*eacher Guide Volume 2* **ASSESSMENT:** Students will take their Unit 3 Assessment. ***See the Scoring Guide on page 490e in Teacher Guide Volume 2.***	

Differentiate Instruction, depending on individual student needs (students with an IEP, 504, or Intervention Plan; ELL Students; Students At Risk; Gifted Students) **by:**

Presentation Accommodations

- Use alternate texts at lower readability level
- Work with fewer items per page or line and/or materials in a larger print size
- Use magnification device, screen reader, or Braille / Nemeth Code
- Use audio amplification device (e.g., hearing aid(s), auditory trainer, sound-field system (which may require teacher use of microphone)
- Be given a written list of instructions
- Record a lesson, instead of taking notes
- Have another student share class notes with him
- Be given an outline of a lesson
- Be given a copy of teacher's lecture notes
- Be given a study guide to assist in preparing for assessments
- Use visual presentations of verbal material, such as word webs and visual organizers
- Use manipulatives to teach or demonstrate concepts

Response Accommodations

- Use sign language, a communication device, Braille, other technology, or native language other than English
- Dictate answers to a scribe
- Capture responses on an audio recorder
- Use a spelling dictionary or electronic spell-checker
- Use a word processor to type notes or give responses in class

Setting Accommodations

- Work or take a test in a different setting, such as a quiet room with few distractions
- Sit where he learns best (for example, near the teacher & away from distractions)
- Use special lighting or acoustics
- Take a test in small group setting
- Use sensory tools such as an exercise band that can be looped around a chair's legs (so fidgety kids can kick it and quietly get their energy out)
- Use noise buffers such as headphones, earphones, or earplugs

Timing Accommodations

- Take more time to complete a task or a test
- Have extra time to process oral information and directions
- Take frequent breaks, such as after completing a task

Scheduling Accommodations

- Take more time to complete a project
- Take a test in several timed sessions or over several days
- Take sections of a test in a different order
- Take a test at a specific time of day

Organization Skills Accommodations

- Use an alarm to help with time management
- Mark texts with a highlighter

Assignment Modifications

- Answer fewer or different test questions
- Create alternate projects or assignments

Curriculum Modifications

- Learn different material (such as continuing to work on multiplication while classmates move on to fractions, or moving ahead to an extension concept/skill while classmates continue to work on a core skill)
- Get graded or assessed using a different standard than the one for classmate

Subject Area: Mathematics **Grade Level:** 2	**Bedminster Township School**

Unit 4
Length
Measurement, Addition and Subtraction, and Line Plots

Dates: March-May	**Time Frame:** 43 days

Overview

This unit extends students' understanding of measuring length. Students will use different measurement tools to measure and compare the lengths of objects in inches, centimeters, yards and meters. Students will estimate the lengths of objects using standard units and compare their estimates to actual measurement to determine if they were reasonable. Students will apply their understanding of addition and subtraction to find differences in length and solve word problems involving length. At the end of the unit, students will read charts, interpret and represent data, and organize lengths on a line plot.

Enduring Understandings

- There are different tools and different units that can be used to measure length. Knowing about measurement will help you estimate and compare lengths.
- You can use addition or subtraction to find the difference between the lengths of objects.

SKILL AND KNOWLEDGE OBJECTIVES

Content Objectives:

- Understand that the lengths of objects can be measured by using different standard units. *(Lesson 20)*
- Represent and measure the lengths of objects using different tools, such as inch and centimeter rulers. *(Lesson 20)*
- Compare measuring the length of an object in inches with measuring the length of an object in centimeters. *(Lesson 20)*
- Choose a tool for measuring the length of a given object. *(Lesson 21)*

- Measure lengths by using rulers, yardsticks, meter sticks, and measuring tapes. *(Lesson 21)*
- Use a ruler repeatedly to measure a length. *(Lesson 21)*
- Compare lengths measured in different units. *(Lesson 22)*
- Understand the relationship between feet and inches and between feet and yards. *(Lesson 22)*
- Understand the relationship between centimeters and inches and between centimeters and meters. *(Lesson 22)*
- Explore how the number of units in a measurement is related to the size of the units used. *(Lesson 22)*
- Estimate length in inches, centimeters, feet, and meters. *(Lesson 23)*
- Use benchmark objects when estimating. *(Lesson 23)*
- Compare the length of objects by determining which measure is greater than or less than the other. *(Lesson 24)*
- Use addition and subtraction to compare lengths, finding how much greater or less the measure of one object is than the other. *(Lesson 24)*
- Use addition and subtraction to solve problems involving lengths. *(Lesson 25)*
- Recognize the importance of working within a single unit when adding or subtracting lengths. *(Lesson 25)*
- Interpret and apply models that represent measurement problems involving addition and subtraction. *(Lesson 25)*
- Represent a whole number as a length from 0 on a number line. *(Lesson 26)*
- Use a number line to represent and solve addition problems. *(Lesson 26)*
- Use a number line to represent and solve subtraction problems. *(Lesson 26)*
- Use a number line to solve addition and subtraction word problems. *(Lesson 26)*
- Interpret marks on a line plot as data. *(Lesson 27)*
- Understand that the numbers on a ruler or number line can be used to represent a given length. *(Lesson 27)*
- Represent data on a line plot. *(Lesson 27)*

Language Objectives:

- Describe how to use a ruler to measure the length of an object by lining up one end of the object with the zero mark and then determining the length by identifying the number with which the other end of the object lines up. *(Lesson 20)*
- Explain the difference between inches and centimeters as standard units of measure. *(Lesson 20)*
- Record the lengths of objects measured with a ruler, measuring tape, yardstick, or meter stick. *(Lesson 21)*
- Tell which measuring tool would be best for measuring a particular object. *(Lesson 21)*
- Justify answers and communicate the results to others. *(Lesson 21)*
- Compare given lengths measured in different units. *(Lesson 22)*
- Predict whether a given object would be more inches in length or more feet in length. *(Lesson 22)*
- Describe the relationship between centimeters and meters. *(Lesson 22)*
- Definite the key vocabulary term *estimate* when discussing measurement with a partner. *(Lesson 23)*
- Justify conclusions and communicate conclusions to others. *(Lesson 23)*
- Tell how to compare the lengths of two objects that are not lined up next to each other. *(Lesson 24)*
- Record the lengths of two objects and subtract to tell how much longer or shorter one is than the other. *(Lesson 24)*
- Restate the essential information in a measurement word problem. *(Lesson 25)*
- Draw a bar model to represent a measurement word problem. *(Lesson 25)*
- Discuss with a partner strategies used to solve a problem. *(Lesson 25)*
- Draw a line or jump on a number line to represent a whole number. *(Lesson 26)*
- Draw lines or jumps on a number line to represent addition or subtraction. *(Lesson 26)*
- Discuss with a partner strategies used to solve an addition or subtraction problem on a number line. *(Lesson 26)*
- Describe how the number line on a line plot is like a ruler. *(Lesson 27)*
- Label the number line on a line plot with numbers to represent given data. *(Lesson 27)*
- Tell what each X on a line plot represents. *(Lesson 27)*

ASSESSMENTS

Pre-Assessment:

- Diagnostic Assessment (*i-Ready Classroom Central*)
- Renaissance benchmark

Formative Assessment:

- Whole-class and partner discussion
- Whiteboard work
- Close: Exit Ticket
- Lesson Quizzes

Self-Reflection/Self-Assessment:

- Unit Skills Self-Check (in *Student Worktext*)
- Apply It (in *Student Worktext)*
- Reflect Questions (in *Student Worktext)*
- Self Reflection (in *Student Worktext)*
- Math Journal Questions (in *Student Worktext)*
- Unit Review (in *Student Worktext)*

Summative Assessment:

- Performance Assessment
- Mid-Unit Assessment
- Unit Assessment

RESOURCES

PRINT RESOURCES:

- **In-Class Instruction and Practice:**
  - *Teacher's Guide*
    - Lesson Progression
    - ELL Language Expectations
    - Connect to Culture
    - Discussion Prompts and Instructional Support
  - *Student Worktext* (Use the blue pages for in-class instruction and practice)
    - Instruction
- **Independent Practice for School or Home**
  - *Teacher's Guide*
    - Additional Practice
    - Cumulative Practice
  - *Student Worktext* (Use the green pages for independent practice)
    - Additional Practice
    - Cumulative Practice
  - *Teacher Toolbox*
    - Fluency and Skills Practice
    - Unit Game
    - Cumulative Practice
- **Assessments and Reports**
  - *Teacher's Guide*
    - Starts
    - Support Whole Group/Partner Discussion
    - Ask/Listen Fors
    - Common Misconceptions
    - Error Alerts
    - Close: Exit Ticket
  - *Student Worktext*
    - Self Checks
    - Apply It
    - Reflect Questions
    - Self Reflection
    - Math Journal Questions
    - Unit Review
  - *Teacher Toolbox*
    - Editable Lesson Quizzes
    - Editable Mid-Unit and Unit Assessments
- **Differentiation**
  - *Before the Unit/Lesson: Prerequisites Report*
    - Prerequisites Report: Resources

- *During the Lesson: Teacher's Guide*
  - Hands-On Activities or Visual Models
  - Deepen Understanding
  - ELL Differentiated Instruction
  - Refine Sessions
- *After the Lesson: Teacher Toolbox*
  - Reteach: Tools for Instruction
  - Reinforce: Math Center Activities
  - Extend: Enrichment Activities

DIGITAL RESOURCES

- **In-Class Instruction and Practice:**
  - Interactive Tutorials
  - Digital Math Tools
  - PowerPoint Slides
- **Independent Practice for School or Home**
  - Digital Math Tools
  - Learning Games
  - Interactive Practice
- **Assessments and Reports**
  - Diagnostic
  - Lesson, Mid-Unit, and Unit Comprehension Checks
  - Prerequisites Report
  - Comprehension Check Reports
- **Differentiation**
  - *Interactive Tutorials*
  - *Digital Math Tools*
  - *Learning Games*

STANDARDS

2016 NJ Student Learning Standards (NJSLS) for Mathematics:

- 2.MD.A.1: Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
- 2.MD.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.
- 2.MD.A.3: Estimate lengths using units of inches, feet, centimeters, and meters.
- 2.MD.A.4: Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.
- 2.MD.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.
- 2.MD.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.
- 2.MD.D.9: 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.
- 2.MD.C.8: Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. *Example: If you have 2 dimes and 3 pennies, how many cents do you have?*

Standards for Mathematical Practice (SMP):

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.

5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

2016 NJ Student Learning Standards (NJSLS) for English Language Arts:

- RL.2.1. Ask and answer such questions as *who, what, where, when, why*, and *how* to demonstrate understanding of key details in a text.
- RL.2.2. Recount stories, including fables and folktales from diverse cultures, and determine their central message/theme, lesson, or moral.
- RI.2.1. Ask and answer such questions as *who, what, where, when, why*, and *how* to demonstrate understanding of key details in a text.
- RI.2.10. Read and comprehend informational texts, including history/social studies, science, and technical texts, at grade level text complexity proficiently with scaffolding as needed.
- SL.2.1. Participate in collaborative conversations with diverse partners about *grade 2 topics and texts* with peers and adults in small and larger groups.
- SL.2.2. Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.
- SL.2.6. Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.

2020 NJ Student Learning Standards (NJSLS) - Standard 9: 21st Century Life and Careers:

Career Ready Practices:

- **CRP2** Apply appropriate academic and technical skills
- **CRP4** Communicate clearly and effectively and with reason
- **CRP8** Utilize critical thinking to make sense of problems and persevere in solving them.
- **CRP11** Use technology to enhance productivity.

NJ Core Curriculum Content Standards - Technology

- **8.1.5.A.1** Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.
- **8.1.P.C.1** Collaborate with peers by participating in interactive digital games or activities.

SOCIAL AND EMOTIONAL COMPETENCIES - activities/topics [optional]

Self-Awareness and Self-Management:

- Lead discussions that encourage students to reflect on their understanding of the concepts covered in the unit, as well as any perceived strengths or weaknesses.
- Routinely give students the opportunity to share the strategies used to solve a problem as well as possible alternate solutions.
- Lead a class activity that asks students to identify feelings they might have in situations involving mathematics using vocabulary (e.g., lead discussions using questions such as, “How would you feel if you solved an easy problem?,” “Would you feel different or the same if you solved a harder problem?,” “How would you feel if a friend was having a hard time in class?”).
- Routinely provide authentic feedback and also ask dialoguing questions that help students reflect on their own strengths and interests. e.g., “I can tell you’re really enjoying this puzzle/problem. Can you tell me what about this puzzle/problem that makes you feel so excited/happy?,” “I can tell you’re really proud of how you did on this project. Can you tell me what about this you’re most proud of?”
- At the end of the unit, have students self-assess progress toward their learning goals and help support a Growth Mindset by reviewing the skills on the **Student Worktext Self Reflection** page. Encourage students to revisit the work they did in each lesson.

Social Awareness:

- When there is a difference of opinion among students (perhaps over solution strategies), allow them to reflect on how they are feeling and then share with a partner or in a small group—to be heard but also to listen to how

others feel differently, and why, in the same situation.
- During the *DIscuss It* portion of the daily lessons, build respect for diversity in the classroom by having students share their different perspectives on situations or solution strategies for the same problem.
- Lead a discussion that encourages students to reflect on barriers they may encounter when completing an assignment (e.g., finding a computer) and that also help them think about ways they can overcome them, including how to approach others for help (e.g., how to politely ask the teacher for help).

Relationship Skills:
- Teach lessons to develop communication skills (e.g., how to speak loudly and clearly so that others can hear) as they present solutions.
- Teach lessons on effective listening (e.g., how can we show that we are listening?) and give students a chance to practice listening, taking turns in pair shares. Have students follow each other with responses to what the last student said, e.g. "I heard you say, 'The next number in the sequence is….'"
- Have students work in pairs during daily lessons. For example, students can play partner games during the Fluency Practice portion of daily lessons to build fluency.

Responsible Decision-Making:
- Encourage students to reflect on how they approached mathematics "today," including in journals or pair shares. Ask them to include how their choices could be repeated if successful or improved in order to be more successful.

End of Unit: To support Growth Mindset, have students review the skills on the **Student Worktext Self Reflection** page and work in pairs to respond to the prompts. Encourage students to revisit the work they did in each lesson.

Interdisciplinary Connections
- Read just right books in the content areas
- Use mentor texts to deliver Social Studies content
- Compare content area ideas and issues to what our characters deal with in out read alouds and mentor texts
- Apply reading skills and strategies to the reading we do in the content areas
- Apply spelling strategies
- Apply grammar skills
- Analyze illustrations in books for details
- Illustrate a passage that was just read to show detail ideas and lessons

21st Century Skills Intergration
- Use venn diagrams and T chart to compare and contrast events
- Use highlighters, notecards, post-its and other tools to keep track of sory events details and ideas.

Unit 4: Length

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
Lesson 20: Measure in Inches and Centimeters **Session 1 Explore:** Measuring in Inches and Centimeters **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 497-500 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It *(15 min)* 5) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 499-500	**Lesson 20:** Measure in Inches and Centimeters **Session 2 Develop:** Measuring in Inches and Centimeters **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 501-506 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Model It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 505-506 **Fluency:** Measuring in Inches and	**Lesson 20:** Measure in Inches and Centimeters **Session 3 Refine:** Measuring in Inches and Centimeters **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 507-510 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Example *(10 min)* 3) Apply It *(25 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 509-510	**Lesson 20:** Measure in Inches and Centimeters **Session 4 Refine:** Measuring in Inches and Centimeters **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 511-512b in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Small Group Differentiation *(20 min)* 4) Close: Exit Ticket *(5 min)* **ASSESSMENT:** LESSON QUIZ	**Lesson 21:** Measure in Feet and Meters **Session 1 Explore:** Measuring in Feet and Meters **Materials:** • *Student Worktext* • *Teacher Guide Volume 2* • *Digital Math Tools* **Activities:** As outlined on pages 515-518 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It *(15 min)* 5) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 517-518

	Centimeters			
DAY 6 **Lesson 21:** Measure in Feet and Meters **Session 2 Develop:** Measuring in Inches and Feet **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 519-524 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Measure It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 523-524 **Fluency:** Measuring in Inches and Feet	**DAY 7** **Lesson 21:** Measure in Feet and Meters **Session 3 Develop:** Measuring in Centimeters and Meters **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 525-530 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Measure It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 529-530 **Fluency:** Measuring in Centimeters and Meters	**DAY 8** **Lesson 21:** Measure in Feet and Meters **Session 4 Refine:** Measuring in Feet and Meters **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 531-534 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Example *(10 min)* 3) Apply It *(25 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 533-534	**DAY 9** **Lesson 21:** Measure in Feet and Meters **Session 5 Refine:** Measuring in Feet and Meters **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 535-536b in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Small Group Differentiation *(20 min)* 4) Close: Exit Ticket *(5 min)* **ASSESSMENT:** LESSON QUIZ	**DAY 10** **Lesson 22:** Understand Measurement with Different Units **Session 1 Explore:** Measurement with Different Units **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 539-542 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Model It *(10 min)* 3) Discuss It *(5 min)* 4) Model It *(10 min)* 5) Discuss It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 541-542
DAY 11 **Lesson 22:** Understand Measurement with Different Units **Session 2 Develop:** Understanding of Different Units of Length **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 543-546 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Model It: Measure in Inches and Centimeters *(5 min)* 3) Discuss It *(5 min)* 4) Model It: Compare Other Units *(5 min)* 5) Discuss It *(5 min)* 6) Connect It *(15 min)* 7) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 545-546 **Fluency:** Comparing Units of Length	**DAY 12** **Lesson 22:** Understand Measurement with Different Units **Session 3 Refine:** Ideas About Measurement with Different Units **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 547-548b in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Close: Exit Ticket *(5 min)* **ASSESSMENT:** LESSON QUIZ	**DAY 13** **Lesson 23:** Estimate and Measure Length **Session 1 Explore:** Estimating and Measuring Length **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 551-554 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It *(15 min)* 5) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 553-554	**DAY 14** **Lesson 23:** Estimate and Measure Length **Session 2 Develop:** Using Different Units to Estimate Length **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 555-560 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 559-560 **Fluency:** Using Different Units to Estimate Length	**DAY 15** **Lesson 23:** Estimate and Measure Length **Session 3 Refine:** Estimating and Measuring Length **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 561-564 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Example *(10 min)* 3) Apply It *(25 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 563-564
DAY 16 **Lesson 23:** Estimate and Measure Length **Session 4 Refine:** Estimating and Measuring Length **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 565-566b in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Small Group Differentiation *(20 min)*	**DAY 17** **Lesson 24:** Compare Lengths **Session 1 Explore:** Comparing Lengths **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 569-572 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It *(15 min)* 5) Close: Exit Ticket *(5 min)*	**DAY 18** **Lesson 24:** Compare Lengths **Session 2 Develop:** Finding the Differences Between Length **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 573-578 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Measure It & Model It *(5 min)*	**DAY 19** **Lesson 24:** Compare Lengths **Session 3 Develop:** Ways to Compare Length **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 579-584 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Measure It & Model It *(5 min)* 5) Connect It *(10 min)*	**DAY 20** **Lesson 24:** Compare Lengths **Session 4 Refine:** Comparing Lengths **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 585-588 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Example *(10 min)* 3) Apply It *(25 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:**

4) Close: Exit Ticket *(5 min)* **ASSESSMENT:** LESSON QUIZ	**Additional Practice:** *Student Worktext* pages 571-572	5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 577-578 **Fluency:** Finding Differences Between Lengths	6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 583-584 **Fluency:** Ways to Compare Lengths	*Student Worktext* pages 587-588
DAY 21 **Lesson 24:** Compare Lengths **Session 5 Refine:** Comparing Lengths **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 589-590b in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Small Group Differentiation *(20 min)* 4) Close: Exit Ticket *(5 min)* **ASSESSMENT:** LESSON QUIZ	**DAY 22** **Unit 4: Mid-Unit Assessment** **Materials:** ● *Unit 4 Mid-Unit Assessment* ● *Teacher Guide Volume 2* **Activities:** Students will take their Unit 4 Mid-Unit Assessment. ***See the Scoring Guide on page 590f in Teacher Guide Volume 2.***	**DAY 23** **Lesson 25:** Add and Subtract Lengths **Session 1 Explore:** Adding and Subtracting Lengths **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 593-596 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It *(15 min)* 5) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 595-596	**DAY 24** **Lesson 25:** Add and Subtract Lengths **Session 2 Develop:** Problem Solving About Length **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 597-602 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It & Model It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 601-602 **Fluency:** Solving Problems About Length	**DAY 25** **Lesson 25:** Add and Subtract Lengths **Session 3 Develop:** Solving Two Step Problems About Length **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 603-608 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It & Model It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 607-608 **Fluency:** Solving Two Step Problems About Length
DAY 26 **Lesson 25:** Add and Subtract Lengths **Session 4 Refine:** Adding and Subtracting Lengths **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 609-612 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Example *(10 min)* 3) Apply It *(25 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 611-612	**DAY 27** **Lesson 25:** Add and Subtract Lengths **Session 5 Refine:** Adding and Subtracting Lengths **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 613-614b in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Small Group Differentiation *(20 min)* 4) Close: Exit Ticket *(5 min)* **ASSESSMENT:** LESSON QUIZ	**DAY 28** **Lesson 26:** Add and Subtract on the Number Line **Session 1 Explore:** Adding and Subtracting on the Number Line **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 617-620 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It *(15 min)* 5) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 619-620	**DAY 29** **Lesson 26:** Add and Subtract on the Number Line **Session 2 Develop:** Adding on the Number Line **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 621-626 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Model It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 601-602 **Fluency:** Adding on the Number Line	**DAY 30** **Lesson 26:** Add and Subtract on the Number Line **Session 3 Develop:** Subtracting on the Number Line **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 627-632 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Model It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 631-632 **Fluency:** Subtracting on the Number Line
DAY 31 **Lesson 26:** Add and Subtract on the Number Line **Session 4 Refine:** Adding and Subtracting on the Number Line **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:**	**DAY 32** **Lesson 26:** Add and Subtract on the Number Line **Session 5 Refine:** Adding and Subtracting on the Number Line **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:**	**DAY 33** **Lesson 27:** Read and Make Line Plots **Session 1 Explore:** Sorting and Organizing Data **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 641-644	**DAY 34** **Lesson 27:** Read and Make Line Plots **Session 2 Develop:** Reading and Making Line Plots **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 645-650	**DAY 35** **Lesson 27:** Read and Make Line Plots **Session 3 Develop:** Reading and Making Line Plots **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 651-656

As outlined on pages 633-636 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Example *(10 min)* 3) Apply It *(25 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 635-636	As outlined on pages 637-638b in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Small Group Differentiation *(20 min)* 4) Close: Exit Ticket *(5 min)* **ASSESSMENT:** LESSON QUIZ	in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It *(15 min)* 5) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 643-644	in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It & Model It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 649-650 **Fluency:** Reading and Making Line Plots	in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It & Model It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 655-656 **Fluency:** Organize Data in Line Plots
DAY 36 **Lesson 27:** Read and Make Line Plots **Session 4 Refine:** Reading and Making Line Plots **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 657-660 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Example *(10 min)* 3) Apply It *(25 min)* 4) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 659-660	**DAY 37** **Lesson 27:** Read and Make Line Plots **Session 45Refine:** Reading and Making Line Plots **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 661-662b in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Apply It *(15 min)* 3) Small Group Differentiation *(20 min)* 4) Close: Exit Ticket *(5 min)* **ASSESSMENT:** LESSON QUIZ	**DAY 38** **Math in Action:** Use Measurement **Session 1** **Materials (for each student):** ● Centimeter ruler, Activity Sheets, inch ruler **Activities:** As outlined on page 664-669 in *Teacher Guide Volume 2*: 1) Example Problem and Solution *(15 min)* 2) Plan It *(5 min)* 3) Solve It *(10 min)* 4) Reflect *(5 min)* 5) Plan It & Solve It *(10 min)* 6) Reflect *(5 min)*	**DAY 39** **Math in Action:** Use Measurement **Session 2** **Materials (for each student):** ● None **Activities:** As outlined on page 670-671 in *Teacher Guide Volume 2*: 1) Solve it *(20 min)* 2) Reflect *(5 min)* 3) Solve It *(20 min)* 4) Reflect *(5 min)*	**DAY 40** **Unit Game:** Measure It **(OPTIONAL)** **Materials (for each pair):** ● *Game Cards, 6 straws (optional), 1 paper bag (optional)* ● *For each student: Recording Sheet* **Activities:** As outlined on page 672 in *Teacher Guide Volume 2*: Have students play *Measure It* In pairs to reinforce measuring lengths using centimeters and adding measurements.
DAY 41 **Literacy Connection (Realistic Fiction): "**A Puppy For Oscar" **(OPTIONAL)** **Materials:** ● *"A Puppy for Oscar"* from Ready Reading ● Literacy Connection Problems (from Teacher Toolbox) **Activities:** As outlined on page 673 in *Teacher Guide Volume 2*: Students read a fiction text and employ problem solving skills. Students will use their understanding of representing and interpreting data using line plots to complete the problems.	**DAY 42** **Unit 4: Unit Review** **Materials:** ● *Teacher Guide Volume 2* ● *Student Worktext* **Activities:** 1) Have students complete the Unit 4 Self-Reflection on page 663. 2) Students will complete pages 672-674 in their *Student Worktext*. 3) As a class, review and discuss student answers and strategies. ***Use pages 673-674a in Teacher Guide Volume 2 to guide the discussion.***	**DAY 43** **Unit 4: Unit Assessment** **Materials:** ● *Unit 4 Assessment:* ● T*eacher Guide Volume 2* **ASSESSMENT:** Students will take their Unit 4 Assessment. ***See the Scoring Guide on page 674e in Teacher Guide Volume 2.***		

Differentiate Instruction, depending on individual student needs (students with an IEP, 504, or Intervention Plan; ELL Students; Students At Risk; Gifted Students) **by:**

Presentation Accommodations

- Use alternate texts at lower readability level
- Work with fewer items per page or line and/or materials in a larger print size
- Use magnification device, screen reader, or Braille / Nemeth Code
- Use audio amplification device (e.g., hearing aid(s), auditory trainer, sound-field system (which may require teacher use of microphone)
- Be given a written list of instructions
- Record a lesson, instead of taking notes
- Have another student share class notes with him
- Be given an outline of a lesson
- Be given a copy of teacher's lecture notes
- Be given a study guide to assist in preparing for assessments

- Use visual presentations of verbal material, such as word webs and visual organizers
- Use manipulatives to teach or demonstrate concepts

Response Accommodations

- Use sign language, a communication device, Braille, other technology, or native language other than English
- Dictate answers to a scribe
- Capture responses on an audio recorder
- Use a spelling dictionary or electronic spell-checker
- Use a word processor to type notes or give responses in class

Setting Accommodations

- Work or take a test in a different setting, such as a quiet room with few distractions
- Sit where he learns best (for example, near the teacher & away from distractions)
- Use special lighting or acoustics
- Take a test in small group setting
- Use sensory tools such as an exercise band that can be looped around a chair's legs (so fidgety kids can kick it and quietly get their energy out)
- Use noise buffers such as headphones, earphones, or earplugs

Timing Accommodations

- Take more time to complete a task or a test
- Have extra time to process oral information and directions
- Take frequent breaks, such as after completing a task

Scheduling Accommodations

- Take more time to complete a project
- Take a test in several timed sessions or over several days
- Take sections of a test in a different order
- Take a test at a specific time of day

Organization Skills Accommodations

- Use an alarm to help with time management
- Mark texts with a highlighter

Assignment Modifications

- Answer fewer or different test questions
- Create alternate projects or assignments

Curriculum Modifications

- Learn different material (such as continuing to work on multiplication while classmates move on to fractions, or moving ahead to an extension concept/skill while classmates continue to work on a core skill)
- Get graded or assessed using a different standard than the one for classmate

Subject Area: Mathematics **Grade Level:** 2	**Bedminster Township School**

Unit 5

Shapes and Skip Counting
Partitioning and Tiling Shapes, Arrays, Evens and Odds

Dates: May-June	**Time Frame:** 26 days

Overview

This unit extends students' understanding of shapes and arrays. Students will use the number of sides and angles to identify, name, and classify polygons. Students reason logically when they generalize attributes to sets of shapes and in determining when an attribute can be applied to all of one kind of polygon, some of them, or none of them. They will partition squares, circles, and rectangles into halves, thirds, and fourths, recognizing that equal parts of congruent shapes need not look identical. They name and compare fractional parts based on their shape and the amount of the whole they consume.

Students will apply their knowledge of addition, skip counting, and partitioning rectangles to arrays. They analyze arrays, recognizing them as sets of objects organized in equal rows and columns. They recognize that adding 3 groups of 4 or adding 4 groups of 3 results in the same sum. This structure lays the foundation for the extension of the commutative property for multiplication.

Finally, students will learn to differentiate between even and odd numbers. They learn that even numbers can be seen as groups of 2 with no leftovers or as 2 equal groups of any number. They connect skip counting by twos to the concept of even numbers. Students relate the concept of 2 equal groups to doubles fact, examine doubles +1 facts, and relate both to the structure of even and odd numbers.

Enduring Understandings

- Knowing the number of sides and angles a shape has can help you identify the shape.
- You can use what you know about diving a shape into equal parts to show halves, thirds, and fourths.
- An array is an arrangement of objects in equal rows and columns. You can use what you know about addition and skip counting to find the number of objects in an array.

SKILL AND KNOWLEDGE OBJECTIVES

Content Objectives:

- Identify triangles, quadrilaterals, pentagons, and hexagons based on the number of sides and angles they have. *(Lesson 28)*
- Identify cubes based on the number and shape of faces that are the same. *(Lesson 28)*
- Distinguish between triangles, quadrilaterals, pentagons and hexagons based on their attributes. *(Lesson 28)*
- Draw a shape based on specific attributes. *(Lesson 28)*
- Identify and name halves, thirds, and fourths as parts into which a shape is divided. *(Lesson 29)*
- Recognize that fractional parts are equal in size. *(Lesson 29)*
- Understand that the more parts a whole is divided into, the smaller the size of each part. *(Lesson 29)*
- Analyze an array of squares with no gaps or overlaps. *(Lesson 30)*
- Determine the number of squares used to partition a rectangle. *(Lesson 30)*
- Create an array of squares to fit a rectangular shape. *(Lesson 30)*
- Describe an array of up to 5 rows and 5 columns. *(Lesson 31)*
- Calculate the number of items in an array using repeated addition and skip counting. *(Lesson 31)*
- Write an equation to express the sum of items in an array. *(Lesson 31)*
- Identify odd and even numbers. *(Lesson 32)*
- Relate doubles and doubles +1 facts to odd and even numbers. *(Lesson 32)*
- Use counting on by twos to identify even numbers. *(Lesson 32)*

Language Objectives:

- Write the names of shapes based on the number of sides and angles. *(Lesson 28)*
- Draw shapes that have a given number of sides or angles. *(Lesson 28)*
- Draw cubes. *(Lesson 28)*
- Divide a shape into halves, thirds, and fourths. *(Lesson 29)*
- Draw lines in a shape to show 4 equal parts in different ways. *(Lesson 29)*
- Label parts of shapes that are cut into same-sized piece with the words *half, third*, or *fourth. (Lesson 29)*
- Draw lines in a rectangle to make rows of same-sized squares. *(Lesson 30)*
- Tell how many same-sized squares of a certain size will fill a rectangle. *(Lesson 30)*
- Tell the number of rows and columns in an array. *(Lesson 31)*
- Tell the number of objects in each row or column of an array. *(Lesson 31)*
- Tell whether a number is odd or even. *(Lesson 32)*
- Draw a picture to show whether a number is odd or even. *(Lesson 32)*
- Count on by twos to name even numbers. *(Lesson 32)*

ASSESSMENTS

Pre-Assessment:

- Diagnostic Assessment (*i-Ready Classroom Central*)

Formative Assessment:

- Whole-class and partner discussion
- Whiteboard work
- Close: Exit Ticket
- Lesson Quizzes

Self-Reflection/Self-Assessment:

- Unit Skills Self-Check (in *Student Worktext*)
- Apply It (in *Student Worktext)*
- Reflect Questions (in *Student Worktext)*
- Self Reflection (in *Student Worktext)*
- Math Journal Questions (in *Student Worktext)*
- Unit Review (in *Student Worktext)*

Summative Assessment:

- Performance Assessment
- Mid-Unit Assessment
- Unit Assessment

RESOURCES

PRINT RESOURCES:

- **In-Class Instruction and Practice:**
  - *Teacher's Guide*
    - Lesson Progression
    - ELL Language Expectations
    - Connect to Culture
    - Discussion Prompts and Instructional Support
  - *Student Worktext* (Use the blue pages for in-class instruction and practice)
    - Instruction
- **Independent Practice for School or Home**
  - *Teacher's Guide*
    - Additional Practice
    - Cumulative Practice
  - *Student Worktext* (Use the green pages for independent practice)
    - Additional Practice
    - Cumulative Practice
  - *Teacher Toolbox*
    - Fluency and Skills Practice
    - Unit Game
    - Cumulative Practice

- **Assessments and Reports**
  - *Teacher's Guide*
    - Starts
    - Support Whole Group/Partner Discussion
    - Ask/Listen Fors
    - Common Misconceptions
    - Error Alerts
    - Close: Exit Ticket
  - *Student Worktext*
    - Self Checks
    - Apply It
    - Reflect Questions
    - Self Reflection
    - Math Journal Questions
    - Unit Review
  - *Teacher Toolbox*
    - Editable Lesson Quizzes
    - Editable Mid-Unit and Unit Assessments
- **Differentiation**
  - *Before the Unit/Lesson: Prerequisites Report*
    - Prerequisites Report: Resources
  - *During the Lesson: Teacher's Guide*
    - Hands-On Activities or Visual Models
    - Deepen Understanding
    - ELL Differentiated Instruction
    - Refine Sessions
  - *After the Lesson: Teacher Toolbox*
    - Reteach: Tools for Instruction
    - Reinforce: Math Center Activities
    - Extend: Enrichment Activities

DIGITAL RESOURCES

- **In-Class Instruction and Practice:**
  - Interactive Tutorials
  - Digital Math Tools
  - PowerPoint Slides
- **Independent Practice for School or Home**
  - Digital Math Tools
  - Learning Games
  - Interactive Practice
- **Assessments and Reports**
  - Diagnostic
  - Lesson, Mid-Unit, and Unit Comprehension Checks
  - Prerequisites Report
  - Comprehension Check Reports
- **Differentiation**
  - *Interactive Tutorials*
  - *Digital Math Tools*
  - *Learning Games*

STANDARDS

<u>2016 NJ Student Learning Standards (NJSLS) for Mathematics:</u>

- 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.[5] Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.
- 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.
- 2.G.A.2: Partition a rectangle into rows and columns of same-size squares and count to find the total

number of them.
- 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.
- 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.

Standards for Mathematical Practice (SMP):

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

2016 NJ Student Learning Standards (NJSLS) for English Language Arts:

- RL.2.1. Ask and answer such questions as *who, what, where, when, why*, and *how* to demonstrate understanding of key details in a text.
- RL.2.2. Recount stories, including fables and folktales from diverse cultures, and determine their central message/theme, lesson, or moral.
- RI.2.1. Ask and answer such questions as *who, what, where, when, why*, and *how* to demonstrate understanding of key details in a text.
- RI.2.10. Read and comprehend informational texts, including history/social studies, science, and technical texts, at grade level text complexity proficiently with scaffolding as needed.
- SL.2.1. Participate in collaborative conversations with diverse partners about *grade 2 topics and texts* with peers and adults in small and larger groups.
- SL.2.2. Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.
- SL.2.6. Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.

2020 NJ Student Learning Standards (NJSLS) - Standard 9: 21st Century Life and Careers:

Career Ready Practices:

- **CRP2** Apply appropriate academic and technical skills
- **CRP4** Communicate clearly and effectively and with reason
- **CRP8** Utilize critical thinking to make sense of problems and persevere in solving them.
- **CRP11** Use technology to enhance productivity.

NJ Core Curriculum Content Standards - Technology

- **8.1.5.A.1** Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.
- **8.1.P.C.1** Collaborate with peers by participating in interactive digital games or activities.

SOCIAL AND EMOTIONAL COMPETENCIES - activities/topics [optional]

Self-Awareness and Self-Management:

- Lead discussions that encourage students to reflect on their understanding of the concepts covered in the unit, as well as any perceived strengths or weaknesses.
- Routinely give students the opportunity to share the strategies used to solve a problem as well as possible alternate solutions.
- Lead a class activity that asks students to identify feelings they might have in situations involving mathematics using vocabulary (e.g., lead discussions using questions such as, “How would you feel if you solved an easy

problem?," "Would you feel different or the same if you solved a harder problem?," "How would you feel if a friend was having a hard time in class?").
- Routinely provide authentic feedback and also ask dialoguing questions that help students reflect on their own strengths and interests. e.g., "I can tell you're really enjoying this puzzle/problem. Can you tell me what about this puzzle/problem that makes you feel so excited/happy?," "I can tell you're really proud of how you did on this project. Can you tell me what about this you're most proud of?"
- At the end of the unit, have students self-assess progress toward their learning goals and help support a Growth Mindset by reviewing the skills on the **Student Worktext Self Reflection** page. Encourage students to revisit the work they did in each lesson.

Social Awareness:
- When there is a difference of opinion among students (perhaps over solution strategies), allow them to reflect on how they are feeling and then share with a partner or in a small group—to be heard but also to listen to how others feel differently, and why, in the same situation.
- During the *DIscuss It* portion of the daily lessons, build respect for diversity in the classroom by having students share their different perspectives on situations or solution strategies for the same problem.
- Lead a discussion that encourages students to reflect on barriers they may encounter when completing an assignment (e.g., finding a computer) and that also help them think about ways they can overcome them, including how to approach others for help (e.g., how to politely ask the teacher for help).

Relationship Skills:
- Teach lessons to develop communication skills (e.g., how to speak loudly and clearly so that others can hear) as they present solutions.
- Teach lessons on effective listening (e.g., how can we show that we are listening?) and give students a chance to practice listening, taking turns in pair shares. Have students follow each other with responses to what the last student said, e.g. "I heard you say, 'The next number in the sequence is….'"
- Have students work in pairs during daily lessons. For example, students can play partner games during the Fluency Practice portion of daily lessons to build fluency.

Responsible Decision-Making:
- Encourage students to reflect on how they approached mathematics "today," including in journals or pair shares. Ask them to include how their choices could be repeated if successful or improved in order to be more successful.

End of Unit: To support Growth Mindset, have students review the skills on the **Student Worktext Self Reflection** page and work in pairs to respond to the prompts. Encourage students to revisit the work they did in each lesson.

Interdisciplinary Connections
- Read just right books in the content areas
- Use mentor texts to deliver Social Studies content
- Compare content area ideas and issues to what our characters deal with in out read alouds and mentor texts
- Apply reading skills and strategies to the reading we do in the content areas
- Apply spelling strategies
- Apply grammar skills
- Analyze illustrations in books for details
- Illustrate a passage that was just read to show detail ideas and lessons

21st Century Skills Intergration
- Use venn diagrams and T chart to compare and contrast events
- Use highlighters, notecards, post-its and other tools to keep track of sory events details and ideas.

Unit 5: Shapes and Skip Counting

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
Lesson 28: Recognize and Draw Shapes **Session 1 Explore:** Recognizing and Drawing Shapes	**Lesson 28:** Recognize and Draw Shapes **Session 2 Develop:** Recognizing and Drawing Shapes	**Lesson 28:** Recognize and Draw Shapes **Session 3 Develop:** Recognizing and Describing Cubes	**Lesson 28:** Recognize and Draw Shapes **Session 4 Refine:** Recognizing and Drawing Shapes	**Lesson 28:** Recognize and Draw Shapes **Session 5 Refine:** Recognizing and Drawing Shapes

Materials: ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 683-686 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It *(15 min)* 5) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 685-686	**Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 687-692 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It & Draw It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 691-692 **Fluency:** Recognizing and Drawing Shapes	**Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 693-698 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 697-698 **Fluency:** Recognizing and Describing Cubes	**Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 699-702 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Example & Apply It *(35 min)* 3) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 701-702	**Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 703-704b in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Apply It & Small Group Differentiation *(35 min)* 3) Close: Exit Ticket *(5 min)* **ASSESSMENT:** LESSON QUIZ
DAY 6 **Lesson 29:** Understand Partitioning Shapes into Halves, Thirds, and Fourths **Session 1 Explore:** Partitioning Shapes into Halves, Thirds, and Fourths **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 707-710 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Model It *(10 min)* 3) Discuss It *(5 min)* 4) Discuss It *(10 min)* 5) Close: Exit Ticket **Additional Practice:** *Student Worktext* pages 709-710	**DAY 7** **Lesson 29:** Understand Partitioning Shapes into Halves, Thirds, and Fourths **Session 2 Develop:** Understanding of Partitioning Shapes into Halves, Thirds, and Fourths **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 711-714 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Model It: Rectangle Area Models *(5 min)* 3) Discuss It *(5 min)* 4) Model It: Circle Area Models *(5 min)* 5) Connect It *(15 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 713-714 **Fluency:** Partitioning Shapes into Equal Parts	**DAY 8** **Lesson 29:** Understand Partitioning Shapes into Halves, Thirds, and Fourths **Session 3 Refine:** Ideas About Partitioning Shapes into Halves, Thirds, and Fourths **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 715-716b in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Apply It *(35 min)* 3) Close: Exit Ticket *(5 min)* **ASSESSMENT:** LESSON QUIZ	**DAY 9** **Lesson 30:** Partition Rectangles **Session 1 Explore:** Partitioning Rectangles **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 719-722 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It *(15 min)* 5) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 721-722	**DAY 10** **Lesson 30:** Partition Rectangles **Session 2 Develop:** Partitioning a Rectangle Into Squares **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 723-728 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Model It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 727-728 **Fluency:** Partitioning a Rectangle Into Squares
DAY 11 **Lesson 30:** Partition Rectangles **Session 3 Refine:** Partitioning Rectangles **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 729-732 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Example & Apply It *(35 min)* 3) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 731-732	**DAY 12** **Lesson 30:** Partition Rectangles **Session 4 Refine:** Partitioning Rectangles **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 733-734b in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Apply It & Small Group Differentiation *(35 min)* 3) Close: Exit Ticket *(5 min)* **ASSESSMENT:** LESSON QUIZ	**DAY 13** **Lesson 31:** Add Using Arrays **Session 1 Explore:** Adding Using Arrays **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 737-740 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It *(15 min)* 5) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 739-740	**DAY 14** **Lesson 31:** Add Using Arrays **Session 2 Develop:** Adding Using Arrays **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 741-746 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Picture It & Model It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 745-746 **Fluency:** Adding Using Arrays	**DAY 15** **Lesson 31:** Add Using Arrays **Session 3 Refine:** Adding Using Arrays **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 747-750 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Example & Apply It *(35 min)* 3) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 749-750

DAY 16 **Lesson 31:** Add Using Arrays **Session 4 Refine:** Adding Using Arrays **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 751-752b in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Apply It & Small Group Differentiation *(35 min)* 3) Close: Exit Ticket *(5 min)* **ASSESSMENT:** LESSON QUIZ	**DAY 17** **Lesson 32:** Even and Odd Numbers **Session 1 Explore:** Even and Odd Numbers **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 755-758 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Connect It *(15 min)* 5) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 757-758	**DAY 18** **Lesson 32:** Even and Odd Numbers **Session 2 Develop:** Modeling Even and Odd Numbers **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 759-764 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Try It *(10 min)* 3) Discuss It *(10 min)* 4) Model It *(5 min)* 5) Connect It *(10 min)* 6) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 763-764 **Fluency:** Modeling Even and Odd Numbers	**DAY 19** **Lesson 32:** Even and Odd Numbers **Session 3 Refine:** Identifying Even and Odd Numbers **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 765-768 in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Example & Apply It *(35 min)* 3) Close: Exit Ticket *(5 min)* **Additional Practice:** *Student Worktext* pages 767-768	**DAY 20** **Lesson 32:** Even and Odd Numbers **Session 4 Refine:** Even and Odd Numbers **Materials:** ● *Student Worktext* ● *Teacher Guide Volume 2* ● *Digital Math Tools* **Activities:** As outlined on pages 769-770b in *Teacher's Guide Volume 2:* 1) Start *(5 min)* 2) Apply It & Small Group Differentiation *(35 min)* 3) Close: Exit Ticket *(5 min)* **ASSESSMENT:** LESSON QUIZ
DAY 21 **Math in Action:** Use Shapes and Even and Odd Numbers **Session 1** **Materials (for each student):** ● Toothpicks, tape, paper, Activity Sheet, inch ruler **Activities:** As outlined on page 772-777 in *Teacher Guide Volume 2*: 1) Example Problem and Solution *(15 min)* 2) Plan It *(5 min)* 3) Solve It *(10 min)* 4) Reflect *(5 min)* 5) Plan It & Solve It *(10 min)* 6) Reflect *(5 min)*	**DAY 22** **Math in Action:** Use Shapes and Even and Odd Numbers **Session 2** **Materials (for each student):** ● Pattern blocks or activity sheet **Activities:** As outlined on page 778-779 in *Teacher Guide Volume 2*: 1) Solve it *(20 min)* 2) Reflect *(5 min)* 3) Solve It *(20 min)* 4) Reflect *(5 min)*	**DAY 23** **Unit Game:** Shape Match **(OPTIONAL)** **Materials (for each pair):** ● *2 copies each of Word Cards, Shapes Cards, and Recording sheet* **Activities:** As outlined on page 780 in *Teacher Guide Volume 2*: Have students play *Shape Match* in pairs to reinforce shape names and attributes.	**DAY 24** **Literacy Connection (Folktale): "**The Red and Yellow Coat" **(OPTIONAL)** **Materials:** ● *"The Red and Yellow Coat"* from Ready Reading ● Literacy Connection Problems (from Teacher Toolbox) **Activities:** As outlined on page 781 in *Teacher Guide Volume 2*: Students read a folktale and employ problem solving skills. Students will use their understanding of equal parts to divide items from the story.	**DAY 25** **Unit 5: Unit Review** **Materials:** ● *Teacher Guide Volume 2* ● *Student Worktext* **Activities:** 1) Have students complete the Unit 5 Self-Reflection on page 771. 2) Students will complete pages 780-782 in their *Student Worktext*. 3) As a class, review and discuss student answers and strategies. ***Use pages 780-782a in Teacher Guide Volume 2 to guide the discussion.***
DAY 26 **Unit 5: Unit Assessment** **Materials:** ● *Unit 5 Assessment:* ● T*eacher Guide Volume 2* **ASSESSMENT:** Students will take their Unit 5 Assessment. ***See the Scoring Guide on page 782e in Teacher Guide Volume 2.***				

Differentiate Instruction, depending on individual student needs (students with an IEP, 504, or Intervention Plan; ELL Students; Students At Risk; Gifted Students) **by:**

Presentation Accommodations

- Use alternate texts at lower readability level
- Work with fewer items per page or line and/or materials in a larger print size
- Use magnification device, screen reader, or Braille / Nemeth Code
- Use audio amplification device (e.g., hearing aid(s), auditory trainer, sound-field system (which may require teacher use of microphone)
- Be given a written list of instructions
- Record a lesson, instead of taking notes
- Have another student share class notes with him
- Be given an outline of a lesson
- Be given a copy of teacher's lecture notes

- Be given a study guide to assist in preparing for assessments
- Use visual presentations of verbal material, such as word webs and visual organizers
- Use manipulatives to teach or demonstrate concepts

Response Accommodations

- Use sign language, a communication device, Braille, other technology, or native language other than English
- Dictate answers to a scribe
- Capture responses on an audio recorder
- Use a spelling dictionary or electronic spell-checker
- Use a word processor to type notes or give responses in class

Setting Accommodations

- Work or take a test in a different setting, such as a quiet room with few distractions
- Sit where he learns best (for example, near the teacher & away from distractions)
- Use special lighting or acoustics
- Take a test in small group setting
- Use sensory tools such as an exercise band that can be looped around a chair's legs (so fidgety kids can kick it and quietly get their energy out)
- Use noise buffers such as headphones, earphones, or earplugs

Timing Accommodations

- Take more time to complete a task or a test
- Have extra time to process oral information and directions
- Take frequent breaks, such as after completing a task

Scheduling Accommodations

- Take more time to complete a project
- Take a test in several timed sessions or over several days
- Take sections of a test in a different order
- Take a test at a specific time of day

Organization Skills Accommodations

- Use an alarm to help with time management
- Mark texts with a highlighter

Assignment Modifications

- Answer fewer or different test questions
- Create alternate projects or assignments

Curriculum Modifications

- Learn different material (such as continuing to work on multiplication while classmates move on to fractions, or moving ahead to an extension concept/skill while classmates continue to work on a core skill)
- Get graded or assessed using a different standard than the one for classmate