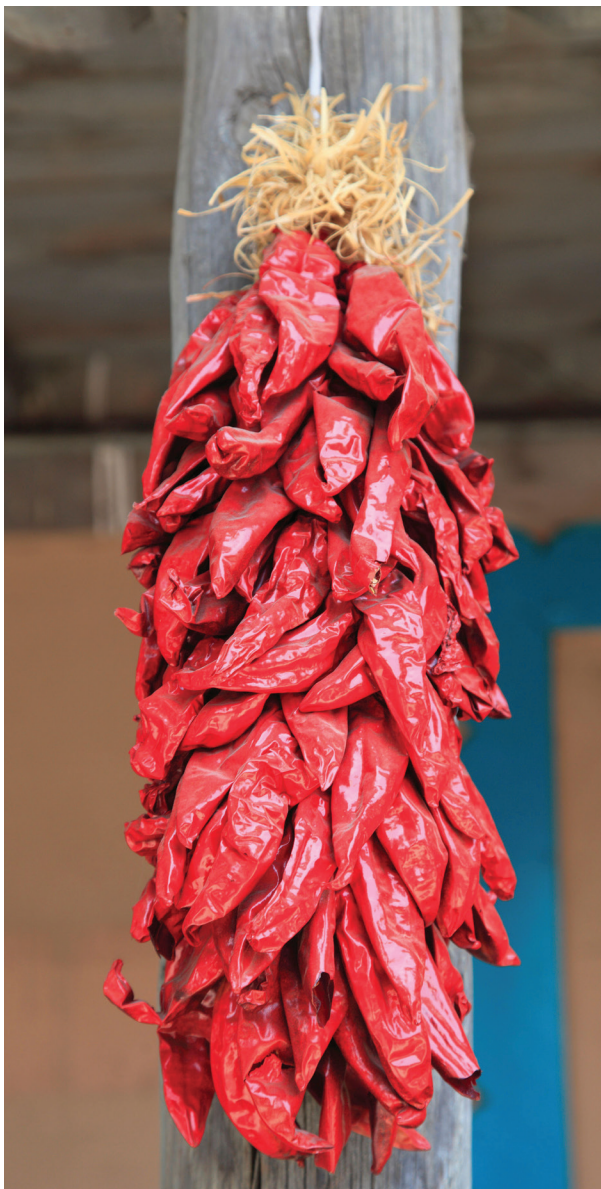
K–5
Sample

RevealMATH®

New Mexico Connections



Mc Graw Hill

EXPLORE **NEW MEXICO**

CONNECT TO NEW MEXICO

Reveal Math contains print and digital resources to support teachers and all learners in alignment with the CCSS, New Mexico Math Framework, and New Mexico Instructional Scope.

Alignment to Mathematical Content and Practice Standards

Reveal Math is 100% aligned to the Common Core State Standards for Mathematics. Learning is supported by formative and summative assessments at the course, unit, and lesson levels. The unit begins with a Readiness Diagnostic to assess students' knowledge of essential pre-requisite skills. End-of-Unit Assessments include two forms of the assessment and a Performance Task. A Math Probe is integrated throughout the unit to help identify and address common misconceptions associated with the unit content.

Multi-Layered Systems of Support

The Teacher Edition lesson opener pages map out learning targets, objectives, rigor, and coherence outlines to support vertical alignment and universal support frameworks. Every lesson provides two instructional strategies to tailor the lesson to the needs and structure of the classroom. Targeted intervention resources use indicators from the unit assessment items and lesson exit tickets to quickly correct misunderstanding and target gaps with small group lessons and practice sheets.

Culturally and Linguistically Responsive Instruction

Reveal Math supports all students with culturally and linguistically responsive instructional resources in both English and Spanish. Each unit includes a printable family letter in English and Spanish to present an overview of the math concepts and suggested home activities. Throughout the lessons, the Teacher Edition also includes integrated effective teaching practices and comprehensive supports for the language of math, including scaffolds for English learners. Every lesson keeps social and emotional learning at the top of students' minds with SEL objectives and Math is... Mindset prompts with teacher supports.

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WHAT IS **NEW MEXICO CONNECTIONS?**

Your New Mexico Connections booklet provides a unit-by-unit content map to highlight the alignment of *Reveal Math* to the New Mexico Instructional Scope and Math Framework. You will find a summary of the content and key features of each unit and lesson, along with references to additional resources to help teachers plan for multi-layered systems of support. Additional New Mexico-specific cross-curricular activities for each unit are provided to support culturally and linguistically responsive instruction for all students.

Unit Content Maps

The Unit Content Maps provide details about important features of each unit:

- **Focus Question**
- **Pacing Guide**
- **Unit Opener—Ignite Activity**
- **STEM in Action**
- **Lessons at a Glance**
- **Math Objectives**
- **Social and Emotional Learning Objectives**
- **CCSS Standards Coverage**

Planning for Multi-Layered Systems of Support

The Planning for Multi-Layered Systems of Support section calls out additional resources available in the Teacher Edition designed to help teachers support all learners. These features include additional student activities and worksheets as well as professional development opportunities for teachers to explore different instructional strategies.

- **Pre-Teach:** Prepare student understandings and promote productive struggle.
- **Re-Teach:** Identify and prepare content to revisit for targeted and intensive interventions.
- **Extension:** Challenge and broaden students' mathematical knowledge.

Culturally and Linguistically Responsive Instruction

Each unit includes new activities to support Culturally and Linguistically Responsive Instruction. These activities provide additional opportunities to spark students' curiosity and connection to mathematics with culturally and historically specific examples from New Mexico. Each activity aligns with the content in the corresponding unit. These are powerful tools to promote conversations that validate, affirm, build, and bridge connections between mathematical concepts and diverse cultural identities.

Grade K

Program Table of Contents

Unit 2 Numbers to 5

Unit Focus Question

How do I count, show, and compare numbers?

PACING: 15 days

LESSON		MATH OBJECTIVE	SOCIAL AND EMOTIONAL LEARNING OBJECTIVE	STANDARDS
Unit Opener	IGNITE! Tall Towers	Informally use the concepts of one-to-one correspondence, counting, and more/less.		
STEM in Action	STEM Career	Automotive engineer Riley counts the parts on a car.		
2-1	Count 1, 2, and 3	Students understand the relationship between numbers and quantities when using objects and illustrations to count 1, 2, and 3.	Students identify personal traits that make them good students, peers, and math learners.	**K.CC.B.4a**
2-2	Represent 1, 2, and 3	Students count groups of objects to 3, regardless of their arrangement, and recognize the numerals 1, 2, and 3.	Students actively listen without interruption as peers describe how they approached a task.	**K.CC.B.4b**
2-3	Count 4 and 5	Students understand the relationship between numbers and quantities when using objects and illustrations to count 4 and 5.	Students employ techniques that can be used to help maintain focus and manage reactions.	**K.CC.B.4a**
2-4	Represent 4 and 5	Students count groups of objects to 5, regardless of their arrangement, and recognize the numerals 4 and 5.	Students exchange ideas for mathematical problem-solving with a peer.	**K.CC.B.4b**
2-5	Represent 0	Students identify zero as a group with no objects and recognize the numeral 0.	Students set a focused mathematical goal and make a plan for achieving that goal.	**K.CC.A.3**
2-6	Numbers to 5	Students identify numbers from 1 to 5 in sequence understanding that each successive number name is referring to an amount that is one larger.	Students recognize and work to understand the emotions of others and practice empathetic responses.	**K.CC.B.4**
2-7	Equal Groups to 5	Students use one-to-one correspondence to determine whether groups are equal to each other.	Students use prior knowledge and new understanding to complete a task.	**K.CC.C.6**

LESSON		MATH OBJECTIVE	SOCIAL AND EMOTIONAL LEARNING OBJECTIVE	STANDARDS
2-8	Greater Than and Less Than	Students use one-to-one correspondence to determine whether one group is greater than or less than the other group.	Students identify a problem, use creativity to execute problem-solving steps.	**K.CC.C.6**
2-9	Lesson 9: Compare Numbers to 5	Students use counting to compare two groups.	Students reflect on and describe the logic and reasoning used to make a mathematical decision.	**K.CC.C.6**

Planning for Multi-Layered Systems of Support

The Teacher Edition provides additional unit and lesson resources and instructional strategies to support all learners.

Pre-Teach

These tools help teachers prepare student understandings and promote productive struggle.

- **Unit Readiness Diagnostic** p. 31G
- **Ignite! Activity** p. 32
- **Sense-Making Routines** pp. 33, 37, 41, 45, 49, 53, 57, 61, 65
- **Teaching Tip** pp. 33, 37, 41, 45, 49, 53, 57, 61, 65
- **Effective Teaching Practices** pp. 31D, 33, 37, 41, 45, 49, 53, 57, 61, 65
- **Math is... Mindset** pp. 33, 37, 41, 45, 49, 53, 57, 61, 65

Re-Teach

These tools help teachers identify and prepare content to revisit for targeted and intensive interventions.

- **Fluency Practice** pp. 75–76
- **Math Probe** pp. 69–70, 70A
- **Exit Ticket** pp. 36A, 40A, 44A, 48A, 52A, 56A, 60A, 64A, 68A
- **Reinforce Understanding** pp. 36B, 40B, 44B, 48B, 52B, 56B, 60B, 64B, 68B
- **Additional Practice** pp. 36B, 40B, 44B, 48B, 52B, 56B, 60B, 64B, 68B
- **Performance Tasks** pp. 73–74, 76A

Extension

These tools provide teachers with additional activities to challenge and broaden students' mathematical knowledge.

- **Extend Thinking** pp. 36C, 40C, 44C, 48C, 52C, 56C, 60C, 64C, 68C
- **Workstations** pp. 32A, 36B–36C, 40B–40C, 44B–44C, 48B–48C, 52B–52C, 56B–56C, 60B–60C, 64B–64C, 68B–68C

Culturally and Linguistically Responsive Instruction

Reveal Math provides flexibility in instructional and implementation options to meet the range of instructional settings and support the social, emotional, and academic needs of all learners. The following activities provide additional opportunities to spark students' curiosity and connection to mathematics with culturally and historically specific examples from New Mexico.

Language Arts Connection

The Very Hungry Caterpillar in New Mexico

Read *The Very Hungry Caterpillar* aloud. Then have students make their own booklets of what the caterpillar could eat in New Mexico from 1 to 5 items. Provide suggestions, such as chile peppers, corn, beans, squash, frybread, tacos, and enchiladas. Guide students to draw their food items, practice 1:1 counting to confirm, and write the count number under each item. Encourage students to use more than one language if they know it, or to have their families help them at home to add another language so they can read and practice counting in multiple languages.

Science Connection

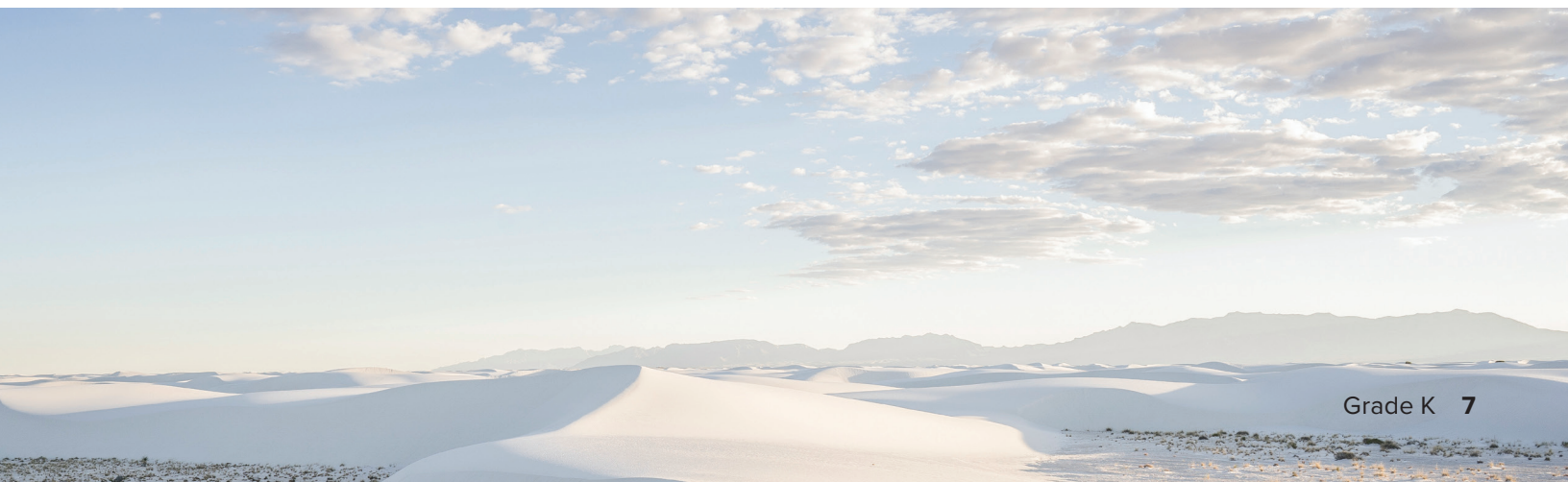
Local Weather

Record the weather for one week or several weeks on a class calendar or chart. For each week, count how many days of each type of weather there was (you can have more than one type each day, for example rainy and windy). Guide students to use linking cubes to make towers representing the weather tallies. Use the towers to practice comparing, ordering, counting using 1:1 correspondence, and concepts such as greater then, less than, or equal to. You can represent the concept of zero with a number card at the base of each tower.

Social Studies Connection

Fill the Building

Have students discuss the different housing styles they live in (adobe, pueblo, modern, mobile). Count the number of students that live in each style house. Distribute outlines of various buildings filled with small circles or squares to each student. Have students roll a number cube, count the dots, and put counters in the corresponding spaces. Direct them to continue until the spaces are filled. Another option is to have two students play together (if using images with the same number of boxes), taking turns to see who fills their building first. Number cubes for differentiation include 0–5, 1–3, 0–2, etc. and can be modified with stickers, or small pieces of paper, markers, and tape.



The Open Road Images/Aurora Open

Grade 1

Program Table of Contents

Unit 3 Place Value

Unit Focus Question

How can I use place value to represent and compare numbers?

PACING: 14 days

LESSON		MATH OBJECTIVE	SOCIAL AND EMOTIONAL LEARNING OBJECTIVE	STANDARDS
Unit Opener IGNITE!	Seeing Dots	Determine, by sight, the number of dots when presented with unstructured and structured patterns.		
STEM in Action	STEM Career	Paleontologist Jin uses place value to determine the total number of dinosaur teeth.		
3-1	Numbers 11 to 19	Students understand that teen numbers are composed of a ten and some ones.	Students identify and discuss the emotions experienced during math learning.	1.NBT.B.2 1.NBT.B.2.a 1.NBT.B.2.b
3-2	Understand Tens	Students understand that ten ones can be grouped as one ten.	Students recognize personal strengths through thoughtful self-reflection.	1.NBT.B.2 1.NBT.B.2.a 1.NBT.B.2.c
3-3	Represent Tens and Ones	Students represent 2-digit numbers with some tens and some ones.	Students set a focused mathematical goal and make a plan for achieving that goal.	1.NBT.B.2
3-4	Represent 2-Digit Numbers	Students use place value to show 2-digit numbers.	Students collaborate with peers to complete a mathematical task and offer constructive feedback to the mathematical ideas posed by others.	1.NBT.B.2
3-5	Represent 2-Digit Numbers in Different Ways	Students can represent 2-digit numbers in different ways.	Students engage in respectful discourse with peers about various perspectives for approaching a mathematical challenge.	1.NBT.B.2

LESSON		MATH OBJECTIVE	SOCIAL AND EMOTIONAL LEARNING OBJECTIVE	STANDARDS
1-6	Compare Numbers	Students can compare 2-digit numbers.	Students collaborate with peers and contribute to group effort to achieve a collective mathematical goal.	1.NBT.B.3
1-7	Compare Numbers on a Number Line	Students can use number lines to compare 2-digit numbers.	Students discuss and practice strategies for managing stressful situations.	1.NBT.B.3
1-8	Use Symbols to Compare Numbers	Students compare numbers using the >, <, and = symbols.	Students demonstrate thoughtful reflection through identifying the causes of challenges and successes while completing a mathematical task.	1.NBT.B.3

Planning for Multi-Layered Systems of Support

The Teacher Edition provides additional unit and lesson resources and instructional strategies to support all learners.

Pre-Teach

These tools help teachers prepare student understandings and promote productive struggle.

- **Unit Readiness Diagnostic** p. 61G
- **Ignite! Activity** p. 62.
- **Sense-Making Routines** pp. 63, 69, 73, 77, 81, 85, 89, 93
- **Teaching Tip** pp. 63, 69, 73, 77, 81, 85, 89, 93
- **Effective Teaching Practices** pp. 61D, 63, 69, 73, 77, 81, 85, 89, 93
- **Math is...Mindset** pp. 64A, 70A, 74A, 78A, 82A, 86A, 90A, 94A

Re-Teach

These tools help teachers identify and prepare content to revisit for targeted and intensive interventions.

- **Fluency Practice** pp. 101–102
- **Math Probe** pp. 67–68, 68A
- **Exit Ticket** pp. 66A, 72A, 76A, 80A, 84A, 88A, 92A, 96A
- **Reinforce Understanding** pp. 66B, 72B, 76B, 80B, 84B, 88B, 92B, 96B
- **Additional Practice** pp. 66B, 72B, 76B, 80B, 84B, 88B, 92B, 96B
- **Performance Tasks** pp. 99–100, 102A

Extension

These tools provide teachers with additional activities to challenge and broaden students' mathematical knowledge.

- **Extend Thinking** pp. 66C, 72C, 76C, 80C, 84C, 88C, 92C, 96C
- **Workstations** pp. 62A, 66B–66C, 72B–72C, 76B–76C, 80B–80C, 84B–84C, 88B–88C, 92B–92C, 96B–96C

Culturally and Linguistically Responsive Instruction

Reveal Math provides flexibility in instructional and implementation options to meet the range of instructional settings and support the social, emotional, and academic needs of all learners. The following activities provide additional opportunities to spark students' curiosity and connection to mathematics with culturally and historically specific examples from New Mexico.

Arts Connection

Albuquerque Balloon Fiesta

Display images from the Albuquerque Balloon Fiesta and invite students to share anything they know about it. Then ask them to draw a picture of 10 hot air balloons. Have the class call off the numbers 1 to 9 and have them draw that many more balloons.

Science Connection

Sunlight in New Mexico

Discuss with students that the number of hours of sunlight changes throughout the year. Gather data to find the average number of hours of sunlight in summer (about 14 hours) and in winter (about 10 hours) where they live in New Mexico. Have students compare the numbers using cubes or a number line. Then ask them to write a statement comparing using symbols.

Social Studies Connection

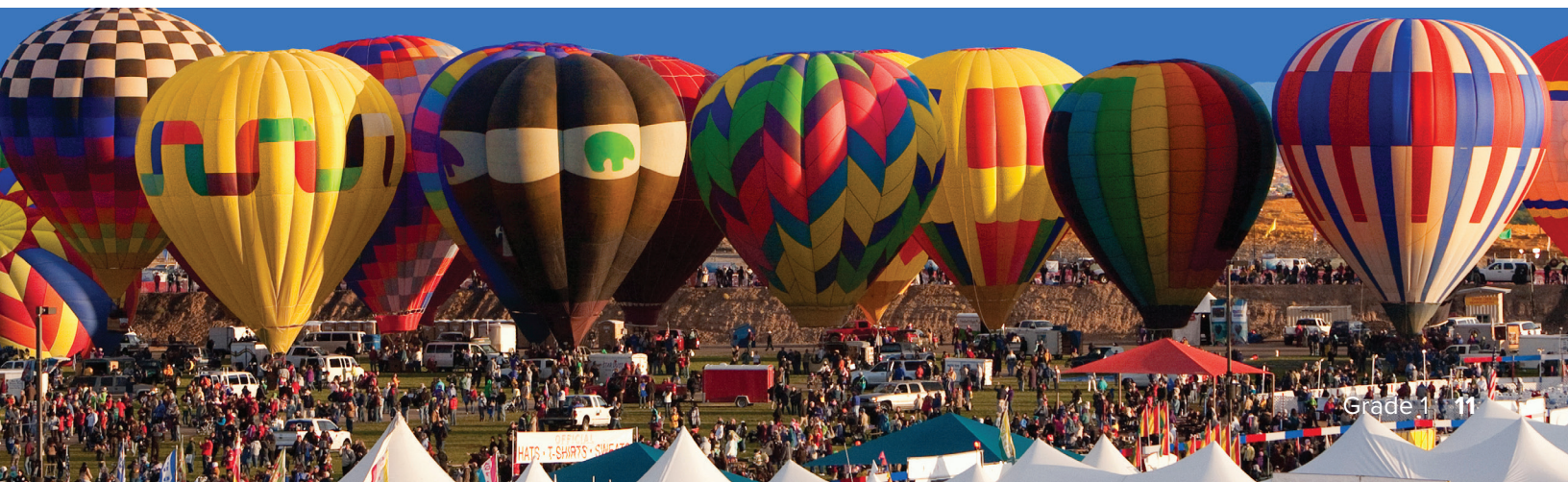
New Mexico's Pueblos

Display a map of New Mexico's 19 pueblos and discuss what they are. Have pairs of students work together to represent the number 19 with connecting cubes, a place-value chart, and a drawing. Discuss how each way shows the same number but looks different. Repeat with other real or fictitious numbers related to pueblos.

Agricultural Connection

Chile Harvest

Form two piles of single-digit number cards. Have students choose one card from each pile to form a two-digit number. Tell them to role-play as chile farmers reporting the number of chile they harvested in a basket. Ask them to use connecting cubes to show the number as tens and ones. Then extend the activity to have pairs of students compare their numbers and explain their reasoning.



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Grade 2

Program Table of Contents

Unit 5 Strategies to Fluently Add within 100

Unit Focus Question

What strategies can I use to add 2-digit numbers?

PACING: 16 days

LESSON		MATH OBJECTIVE	SOCIAL AND EMOTIONAL LEARNING OBJECTIVE	STANDARDS
Unit Opener IGNITE! Corner Sums in Squares Explore addition patterns on a number chart to promote thinking about ways to add 2-digit numbers.				
STEM in Action STEM Career Video Game Designer Learn about Erik and video game designers.				
5-1	Strategies to Add Fluently within 20	Students add fluently within 20.	Students engage in active listening and work collaboratively with a partner to complete mathematical tasks.	**2.OA.B.2**
5-2	More Strategies to Add Fluently within 20	Students add fluently within 20.	Students demonstrate self-awareness of personal strengths and areas of challenge in mathematics.	**2.OA.B.2**
5-3	Represent Addition with 2-Digit Numbers	Students represent addition of 2-digit numbers to find the sum.	Students recognize and work to understand the emotions of others and practice empathetic responses.	**2.NBT.B.5**
5-4	Use Properties to Add	Students understand that addends added in any order have the same sum.	Students practice strategies for persisting at a mathematical task, such as setting a small goal or setting timers for remaining focused.	**2.NBT.B.5**
5-5	Decompose Two Addends to Add	Students decompose two addends to add.	Students demonstrate thoughtful reflection through identifying the causes of challenges and successes while completing a mathematical task.	**2.NBT.B.5**
5-6	Use a Number Line to Add	Students use a number line to add.	Students develop and execute a plan, including selecting tools for mathematical problem solving.	**2.NBT.B.5**
5-7	Decompose One Addend to Add	Students decompose one addend to add.	Students use prior knowledge and new understanding of mathematical concepts to complete a task, building stronger self-efficacy.	**2.NBT.B.5**

LESSON		MATH OBJECTIVE	SOCIAL AND EMOTIONAL LEARNING OBJECTIVE	STANDARDS
5-8	Adjust Addends to Add	Students adjust addends to add.	Students discuss the value of hearing different viewpoints and approaches to problem solving.	**2.NBT.B.5**
5-9	Add More Than Two Numbers	Students add up to four 2-digit numbers.	Students collaborate with peers and contribute to group effort to achieve a collective mathematical goal.	**2.NBT.B.6**
5-10	Solve One-and Two-Step Problems Using Addition	Students solve one- and two-step addition word problems.	Students determine the strategies and analyses necessary to make informed decisions when engaging in mathematical practices.	**2.OA.A.1**

Planning for Multi-Layered Systems of Support

The Teacher Edition provides additional unit and lesson resources and instructional strategies to support all learners.

Pre-Teach

These tools help teachers prepare student understandings and promote productive struggle.

- **Unit Readiness Diagnostic** p. 149G
- **Ignite! Activity** p. 150
- **Sense-Making Routines** pp. 151, 155, 159, 163, 167, 171, 175, 179, 185, 189
- **Teaching Tip** pp. 151, 155, 159, 163, 167, 171, 175, 179, 185, 189
- **Effective Teaching Practices** pp. 149D, 151, 155, 159, 163, 167, 171, 175, 179, 185, 189
- **Math is... Mindset** pp. 151, 155, 159, 163, 167, 171, 175, 179, 185, 189

Re-Teach

These tools help teachers identify and prepare content to revisit for targeted and intensive interventions.

- **Fluency Practice** p. 197–198
- **Math Probe** p. 183–184
- **Exit Ticket** pp. 154A, 158A, 162A, 166A, 170A, 174A, 178A, 182A, 188A, 192A
- **Reinforce Understanding** pp. 154B, 158B, 162B, 166B, 170B, 174B, 178B, 182B, 188B, 192B
- **Additional Practice** pp. 154B, 158B, 162B, 166B, 170B, 174B, 178B, 182B, 188B, 192B
- **Performance Tasks** pp. 195–196, 198A

Extension

These tools provide teachers with additional activities to challenge and broaden students' mathematical knowledge.

- **Extend Thinking** pp. 154C, 158C, 162C, 166C, 170C, 174C, 178C, 182C, 188C, 192C
- **Workstations** pp. 150A, 154B–C, 158B–C, 162B–C, 166B–C, 170B–C, 174B–C, 178B–C, 182B–C, 188B–C, 192B–C

Culturally and Linguistically Responsive Instruction

Reveal Math provides flexibility in instructional and implementation options to meet the range of instructional settings and support the social, emotional, and academic needs of all learners. The following activities provide additional opportunities to spark students' curiosity and connection to mathematics with culturally and historically specific examples from New Mexico.

Career and Skills Connection

Favorite Foods

Invite students to describe their favorite family or traditional foods that come in individual units, such as cookies or churros. Then describe a food common in New Mexico, such as empanadas. Draw a model on the board using circles to represent the food. Show a group of 10 food items, such as on an oven tray, and then several individual items that are less than 10 in number, such as on a plate or on a counter. Ask students to use a number line, decomposition, or another strategy to add to find the total number of items. Repeat with different numbers.

Business Connection

Turquoise in New Mexico

Display an image of turquoise and allow students to describe it. Explain that turquoise is found in New Mexico and is considered to be the state gem. Describe scenarios in which a silversmith is making jewelry items with turquoise. Present 2-digit numbers of turquoise beads and 2-digit numbers of other beads. Have students model adding to find the total number of beads and explain their strategies.

Language Arts Connection

Children's Literature in New Mexico

Show students examples of grade appropriate books recommended for New Mexico students, such as *Anansi Does the Impossible* or *Bringing the Rain to Kapiti Plain* by Verna Aardema. List the numbers of pages in each book. Ask students to find the total number of pages. Invite volunteers to share their strategies. Encourage them to use related vocabulary, such as *number line, decompose,* and *adjust addends*. Finish by reading the books aloud or having students take turns reading aloud.

Ed Scott/AGE Fotostock

Grade 3

Program Table of Contents

Unit 3 Multiplication and Division

Unit Focus Question

What does it mean to multiply and divide?

PACING: 12 days

LESSON		MATH OBJECTIVE	SOCIAL AND EMOTIONAL LEARNING OBJECTIVE	STANDARDS
Unit Opener IGNITE! Broken Calculators		Explore adding combinations of 2s and 5s to obtain a particular number.		
STEM in Action STEM Career		Construction Manager Finn talks about the work of construction managers.		
3-1	Understand Equal Groups	Students explain one meaning of multiplication: equal groups.	Students actively listen without interruption as peers describe how they approached a complex mathematical task.	**3.OA.A.1**
3-2	Use Arrays to Multiply	Students use arrays to represent multiplication.	Students set learning goals and initiate work on tasks to accomplish their goals.	**3.OA.A.1**
3-3	Understand the Commutative Property	Students demonstrate understanding of the Commutative Property of Multiplication.	Students exchange ideas for completing a mathematical task with a peer and reflect on the value of their similarities and differences.	**3.OA.B.5**
3-4	Understand Equal Sharing	Students represent division with equal sharing.	Students discuss how a rule or routine can help develop mathematical skills and knowledge and be responsible contributors.	**3.OA.A.2**
3-5	Understand Equal Grouping	Students represent division with equal grouping.	Students use prior knowledge and new understanding of mathematical concepts to complete a task, building stronger self-efficacy.	**3.OA.A.2**
3-6	Relate Multiplication and Division	Students use equal groups and arrays to represent the relationship between multiplication and division.	Students develop and execute a plan for mathematical problem solving.	**3.OA.A.1** **3.OA.A.2**
3-7	Find the Unknown	Students use representations to determine the unknown in a multiplication or division equation.	Students determine the strategies and analyses necessary to make informed decisions when engaging in mathematical practices.	**3.OA.A.4**

Planning for Multi-Layered Systems of Support

The Teacher Edition provides additional unit and lesson resources and instructional strategies to support all learners.

Pre-Teach

These tools help teachers prepare student understandings and promote productive struggle.

- **Unit Readiness Diagnostic** p. 89G
- **Ignite! Activity** p. 90
- **Sense-Making Routines** pp. 91, 95, 101, 105, 109, 113, 117
- **Teaching Tip** pp. 91, 95, 101, 105, 109, 113, 117
- **Effective Teaching Practices** pp. 89D, 91, 95, 101, 105, 109, 113, 117
- **Math is... Mindset** pp. 91, 95, 101, 105, 109, 113, 117

Re-Teach

These tools help teachers identify and prepare content to revisit for targeted and intensive interventions.

- **Fluency Practice** pp. 125–126
- **Math Probe** pp. 99–100, 100A
- **Exit Ticket** pp. 94A, 98A, 104A, 108A, 112A, 116A, 120A
- **Reinforce Understanding** pp. 94B, 104B, 108B, 112B, 116B, 120B
- **Additional Practice** pp. 94B, 104B, 108B, 112B, 116B, 120B
- **Performance Tasks** pp. 123–124, 126A

Extension

These tools provide teachers with additional activities to challenge and broaden students' mathematical knowledge.

- **Extend Thinking** pp. 94C, 98C, 104C, 108C, 112C, 116C, 120C
- **Workstations** pp. 90A, 94B–94C, 98B–98C, 104B–104C, 108B–108C, 112B–112C, 116B–116C, 120B–120C

Teacher Notes

Culturally and Linguistically Responsive Instruction

Reveal Math provides flexibility in instructional and implementation options to meet the range of instructional settings and support the social, emotional, and academic needs of all learners. The following activities provide additional opportunities to spark students' curiosity and connection to mathematics with culturally and historically specific examples from New Mexico.

Social Studies Connection

Petroglyph National Monument

Share images of petroglyphs from Petroglyph National Monument. Explain that these petroglyphs are powerful cultural and religious symbols. Have students study the images and work with students to practice multiplication with shapes in petroglyph art by grouping repeated images (e.g., 5 groups of 7 spirals).

Arts Connection

Native American Blanket Patterns

Display Native American blankets. Point out repeated geometric patterns and discuss some of their meanings. Have students create their own blanket designs by coloring and cutting out shapes. Challenge them to use the shapes to show the Commutative Property. Have them label their patterns to show the two multiplication expressions.

Career and Skills Connection

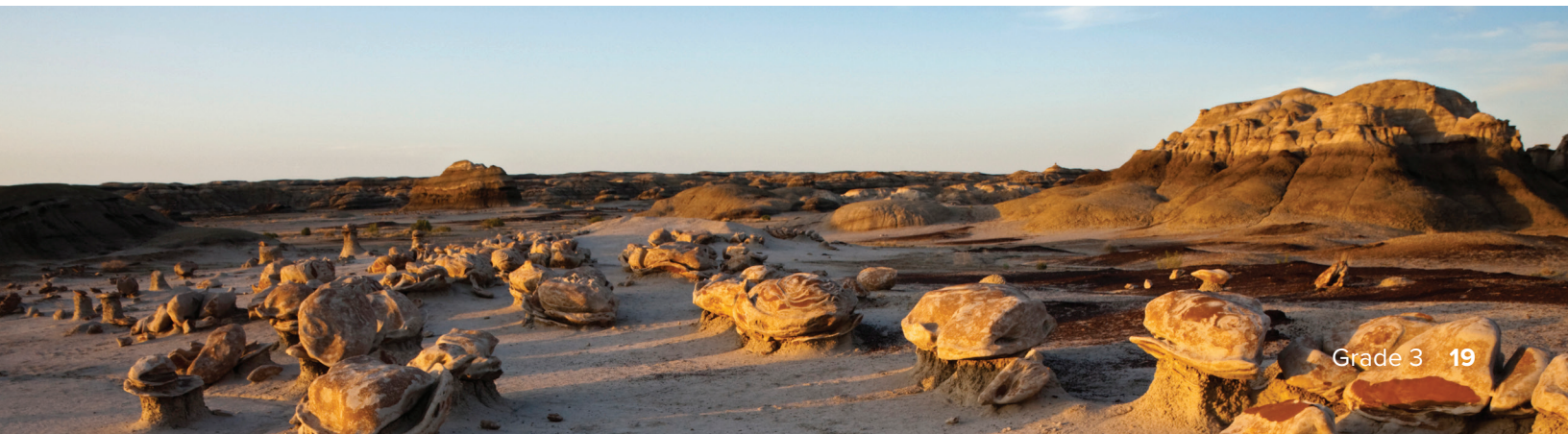
Tamale Dough Ingredients

Provide students with ingredients that might be in a tamale dough recipe. For example, write on the board that each tamale requires 2 ounces of masa dough. Have students determine the number of tamales they can make with different amounts of dough. Present the problem so that students solve for an unknown using multiplication. Repeat with different amounts of dough or assign different amounts to different groups and then compare as a whole class.

Language Arts Connection

Writing Word Problems

Discuss how students can use what they learn about math in the classroom in their everyday lives. Challenge students to think of an example that involves multiplication or division. Have students write a word problem for their example. Tell them to include the solution and describe what the unknown in their problem means. Allow students to present their word problems, clarifying the names of any objects that may relate to their families, culture, or native languages.



Christian Heinrich/Getty Images

Grade 4

Program Table of Contents

Unit 3 Addition and Subtraction Strategies and Algorithms

Unit Focus Question

How can I add and subtract with strategies and algorithms?

PACING: 15 days

LESSON		MATH OBJECTIVE	SOCIAL AND EMOTIONAL LEARNING OBJECTIVE	STANDARDS
Unit Opener	IGNITE! The Greatest Sum or Difference:	Create the greatest possible sum or difference given a series of digits.		
STEM in Action	STEM Career	Ocean Engineer Hiro uses multi-digit addition and subtraction to weigh animals.		
3-1	Estimate Sums or Differences	Students estimate sums and differences involving multi-digit numbers, and use their estimate to determine if their answer is reasonable.	Students exchange ideas for complete a mathematical task with a peer and reflect on the value of their similarities and differences.	**4.OA.A.3**
3-2	Strategies to Add Multi-Digit Numbers	Students add multi-digit numbers by adjusting numbers or decomposing numbers based on place value.	Students engage in active listening and work collaboratively with a partner to complete mathematical tasks.	4.NBT.B.4
3-3	Understand an Addition Algorithm	Students use an explain a standard addition algorithm without regrouping.	Students demonstrate self awareness of personal strengths and areas of challenge in mathematics.	4.NBT.B.4
3-4	Understand an Addition Algorithm Involving Regrouping	Students use and explain a standard addition algorithm with regrouping.	Students identify personal traits that make them good students, peers, and math learners.	4.NBT.B.4
3-5	Strategies to Subtract Multi-Digit Numbers	Students subtract multi-digit numbers by adjusting or decomposing numbers based on place value.	Students collaborate with peers to complete a mathematical task and offer constructive feedback to the mathematical ideas posed by others.	4.NBT.B.4
3-6	Understand a Subtraction Algorithm	Students use and explain a standard subtraction algorithm with regrouping.	Students set a focused mathematical goal and make a plan for achieving that goal.	4.NBT.B.4

LESSON		MATH OBJECTIVE	SOCIAL AND EMOTIONAL LEARNING OBJECTIVE	STANDARDS
3-7	Understand a Subtraction Algorithm Involving Regrouping	Students use and explain a standard subtraction algorithm with regrouping.	Students recognize and work to understand the emotions of others and practice empathetic responses.	4.NBT.B.4
3-8	Represent and Solve Multi-Step Problems	Students solve multi step problems with whole numbers by using representations such as, bar diagrams and equations.	Students break down a situation to identify the problem at hand.	**4.OA.A.3**
3-9	Solve Multi-Step Problems Involving Addition and Subtraction	Students solve multi step problems involving addition and subtraction.	Students discuss and practice strategies for managing stressful situations.	**4.OA.A.3**

Planning for Multi-Layered Systems of Support

The Teacher Edition provides additional unit and lesson resources and instructional strategies to support all learners.

Pre-Teach

These tools help teachers prepare student understandings and promote productive struggle.

- **Unit Readiness Diagnostic** p. 57G
- **Ignite! Activity** p. 58
- **Sense-Making Routines** pp. 59, 65, 69, 73, 77, 81, 85, 89, 93
- **Teaching Tip** pp. 59, 65, 69, 73, 77, 81, 85, 89, 93
- **Effective Teaching Practices** pp. 57D, 59, 65, 69, 73, 77, 81, 85, 89, 93
- **Math is... Mindset** pp. 59, 65, 69, 73, 77, 81, 85, 89, 93

Re-Teach

These tools help teachers identify and prepare content to revisit for targeted and intensive interventions.

- **Fluency Practice** pp. 101–102
- **Math Probe** pp. 63–64, 64A
- **Exit Ticket** pp. 62A, 68A, 72A, 76A, 80A, 84A, 88A, 92A, 96A
- **Reinforce Understanding** pp. 62B, 68B, 72B, 76B, 80B, 84B, 88B, 92B, 96B
- **Additional Practice** pp. 62B, 68B, 72B, 76B, 80B, 84B, 88B, 92B, 96B
- **Performance Tasks** pp. 99–100, 102A

Extension

These tools provide teachers with additional activities to challenge and broaden students' mathematical knowledge.

- **Extend Thinking** pp. 62C, 68C, 72C, 76C, 80C, 84C, 88C, 92C, 96C
- **Workstations** pp. 58A, 62B–62C, 68B–68C, 72B–72C, 76B–76C, 80B–80C, 84B–84C, 88B–88C, 92B–92C, 96B–96C

Culturally and Linguistically Responsive Instruction

Reveal Math provides flexibility in instructional and implementation options to meet the range of instructional settings and support the social, emotional, and academic needs of all learners. The following activities provide additional opportunities to spark students' curiosity and connection to mathematics with culturally and historically specific examples from New Mexico.

Career and Skills Connection

Family and Community Math Stories

Have students interview family members about how they use addition and subtraction in their daily lives (e.g., budgeting, shopping). Ask them to create a written or visual presentation to share with the class that includes a few examples.

Social Studies Connection

Population Comparison of New Mexico Towns

Provide students with census data for the populations of local towns or the student populations of nearby schools. Have students compare the populations and solve real-world problems by adding or subtracting. You may wish to extend the activity to having students use algorithms to determine how a specific population has changed over time.

Economics Connection

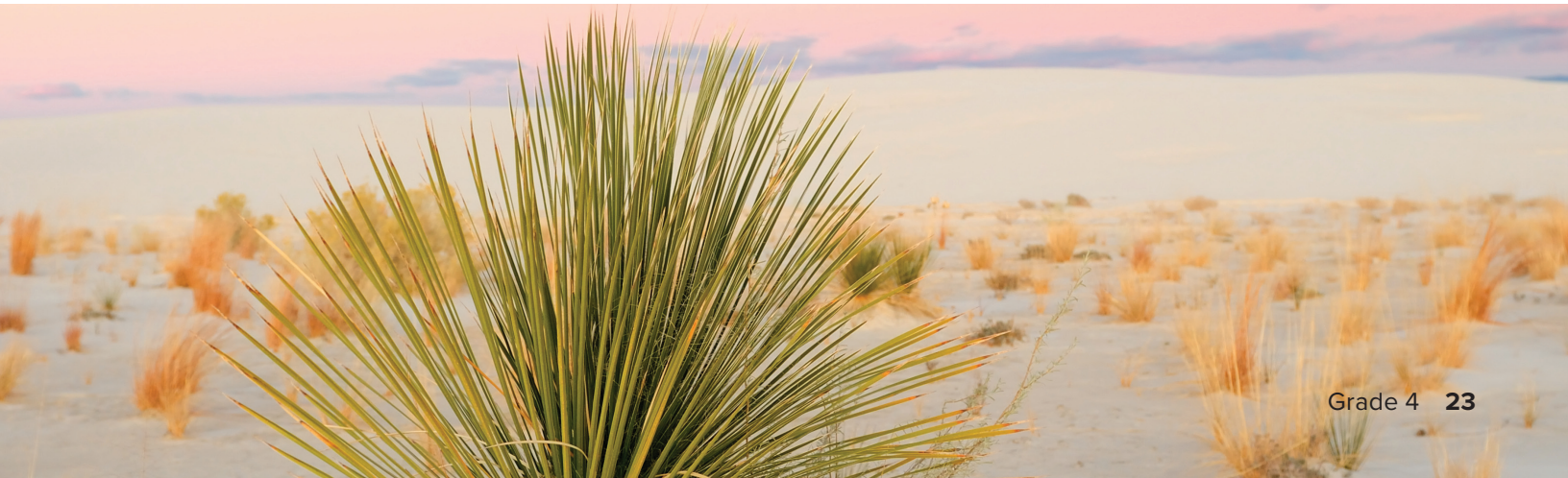
Trading at New Mexican Farmers' Markets

Provide students with a hypothetical budget and a list of items with prices. Have students practice adding and subtracting to make purchases within their budget, discussing the cultural significance of the markets.

Historical Connection

The International Balloon Fiesta

Ask students to explore the number of balloons in the fiesta International Balloon Fiesta each year. Then explain that the fiesta started with just 13 balloons in 1972 and it had a peak of 1,019 balloons in 2000. The Balloon Fiesta Board limited the number of balloons to 750 in 2001, and then to 600 in 2009. Use the numbers of balloons to have students solve multi-step problems involving addition and subtraction, such as finding the difference between two different pairs of years.



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Grade 5

Program Table of Contents

Unit 7 Divide Whole Numbers

Unit Focus Question

How can I divide multi-digit numbers?

PACING: 12 days

LESSON		MATH OBJECTIVE	SOCIAL AND EMOTIONAL LEARNING OBJECTIVE	STANDARDS
Unit Opener	IGNITE! Division Puzzles	Solve 3 by 3 number puzzles using division facts.		
STEM in Action	STEM Career	Computer Programmer Grace talks about how she divides whole numbers to do her job.		
7-1	Division Patterns with Multi-Digit Numbers	Students use place-value patterns and basic facts to divide a whole number by a multiple of 10.	Students recognize personal strengths through thoughtful self-reflection.	**5.NBT.B.6**
7-2	Estimate Quotients	Students estimate quotients of multi-digit numbers using the same strategies used to estimate quotients of lesser numbers. Students use estimated quotients to make predictions about a calculated solution. Students use estimated quotients to assess the reasonableness of a calculated solution.	Students set learning goals and initiate work on tasks to accomplish their goals.	**5.NBT.B.6**
7-3	Relate Multiplication and Division of Multi-Digit Numbers	Students use the relationship between multiplication and division to determine the quotient of multi-digit numbers.	Students collaborate with peers and contribute to group effort to achieve a collective mathematical goal.	**5.NBT.B.6**
7-4	Represent Division of 2-Digit Divisors	Students use an area model to determine partial quotients and add partial quotients to calculate the quotient.	Students discuss how a rule or routine can help develop mathematical skills and knowledge and be responsible contributors.	**5.NBT.B.6**
7-5	Use Partial Quotients to Divide	Students record partial quotients using an algorithm.	Students exchange ideas for mathematical problem-solving with a peer, listening attentively and providing thoughtful and constructive feedback.	**5.NBT.B.6**
7-6	Divide Multi-Digit Whole Numbers	Students solve division problems using partial quotients, which sometimes include remainders.	Students set a focused mathematical goal and make a plan for achieving that goal.	**5.NBT.B.6**

LESSON		MATH OBJECTIVE	SOCIAL AND EMOTIONAL LEARNING OBJECTIVE	STANDARDS
7-7	Solve Problems Involving Division	Students solve word problems involving division. Students interpret the remainder, when necessary, to solve problems.	Students break down a situation to identify the problem at hand.	**5.NBT.B.6**

Planning for Multi-Layered Systems of Support

The Teacher Edition provides additional unit and lesson resources and instructional strategies to support all learners.

Pre-Teach

These tools help teachers prepare student understandings and promote productive struggle.

- **Unit Readiness Diagnostic** p. 205G
- **Ignite! Activity** p. 206
- **Sense-Making Routines** pp. 207, 211, 215, 219, 223, 227, 231
- **Teaching Tip** pp. 207, 211, 215, 219, 223, 227, 231
- **Effective Teaching Practices** pp. 205D, 207, 211, 215, 219, 223, 227, 231
- **Math is... Mindset** pp. 207, 211, 215, 219, 223, 227, 231

Re-Teach

These tools help teachers identify and prepare content to revisit for targeted and intensive interventions.

- **Fluency Practice** pp. 241–242
- **Math Probe** pp. 235–236, 236A
- **Exit Ticket** pp. 210A, 214A, 218A, 222A, 226A, 230A, 234A
- **Reinforce Understanding** pp. 210B, 214B, 218B, 222B, 226B, 230B, 234B
- **Additional Practice** pp. 210B, 214B, 218B, 222B, 226B, 230B, 234B
- **Performance Tasks** pp. 239–240, 242A

Extension

These tools provide teachers with additional activities to challenge and broaden students' mathematical knowledge.

- **Extend Thinking** pp. 210C, 214C, 218C, 222C, 226C, 230C, 234C
- **Workstations** pp. 206A, 210B–210C, 214B–214C, 218B–218C, 222B–222C, 226B–226C, 230B–230C, 234B–234C

Teacher Notes

Culturally and Linguistically Responsive Instruction

Reveal Math provides flexibility in instructional and implementation options to meet the range of instructional settings and support the social, emotional, and academic needs of all learners. The following activities provide additional opportunities to spark students' curiosity and connection to mathematics with culturally and historically specific examples from New Mexico.

Social Studies Connection

The International UFO Museum in Roswell

Explain to students that the International UFO (Unidentified Flying Objects) Museum and Research Center in Roswell houses materials related to the 1947 "Roswell Incident." Provide students with information about museum, such as total annual visitors and total. Have them use division to calculate the daily attendance rates and revenue per visitor at the museum.

Economics Connection

Route 66 Road Trip

Have students estimate quotients and divide multi-digit numbers while planning a road trip on Route 66. For example, ask students to plan a road trip from Albuquerque to Gallup. Tell them to calculate the number of fuel stops by dividing the distance by the miles per gallon. They can also incorporate decimal multiplication by estimating fuel costs.

Architecture Connection

Adobe Brick Construction Project

Have students explore traditional New Mexican adobe architecture by dividing the total number of bricks required for a house by the number of bricks a company can produce daily. Ask them to estimate the time needed to complete construction and use partial quotients to check their results. For example, if 9,600 bricks are needed and a company can make 160 bricks a day, how many days will the project take?

STEM Connection

Sandia Peak Tram Tickets

Have students explore and discuss Sandia Peak and the Tramway. Ask students to calculate various quotients related to the tram. For example, students might calculate the total revenue using the price per ticket to determine the number of people who visited Sandia Peak.

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