

 Amplify Desmos Math **TEXAS**

Kindergarten

Volume 1: Units 1–4

 **Teacher Edition** 

About Amplify

Amplify is dedicated to collaborating with educators to create learning experiences that are rigorous and riveting for all students. Amplify creates K–12 core and supplemental curriculum, assessment, and intervention programs for today’s students.

A pioneer in K–12 education since 2000, Amplify is leading the way in next-generation curriculum and assessment. All of our programs provide teachers with powerful tools that help them understand and respond to the needs of every student.

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Amplify gratefully acknowledges the work of distinguished program advisors from English Learners Success Forum (ELSF), who have been integral in the development of Amplify Desmos Math. ELSF is a 501(c)(3) nonprofit organization whose mission is to expand educational equity for multilingual learners by increasing the supply of high-quality instructional materials that center their cultural and linguistic assets.

Amplify gratefully acknowledges the work of distinguished program advisors from Rice University School Mathematics Project (RUSMP), who have been integral in the development of Amplify Desmos Math Texas. RUSMP’s mission is to create a better understanding of the nature, beauty, and importance of mathematics by promoting effective teaching of mathematics and contributing significant research and evaluation on teaching and learning.

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Dear Teacher,

Welcome to Amplify Desmos Math Texas! We're so excited your school has chosen our program this year. Your hard work plays an essential role in your students' math experience, so we wanted to reach out to introduce ourselves.

We developed this program around the idea that a structured approach to problem-based instruction builds on students' curiosity to develop lasting grade-level understandings for every member of your classroom. Each lesson offers opportunities for you to build on students' understanding, connect their ideas, develop their skill fluency, and empower them to ask questions, explore, and make discoveries. This year, our mission is for your students to learn math — and to love learning math!

Here's what you can expect:

- A program **designed around the Texas Essential Knowledge and Skills** for Mathematics.
- **Deep and intentional alignment** to the English Language Proficiency Standards.
- **Interactive lessons** that blend paper-based and digital learning, including:
 - » Lessons that drive classroom discussions so students can work toward a shared understanding and sense of community.
 - » Responsive Feedback™ that interprets students' responses in context and encourages perseverance and revision.
 - » Easy-to-follow lesson plans tested in classrooms across the country, with clear teaching suggestions, strategies, and Math Language Routines.
- **Lesson practice** to support fluency and help students review previous topics.
- **Recommended differentiation moves** that meet the needs of diverse learners.
- **Diagnostic, formative, and summative assessments** along with lesson-level checks for understanding.
- **A caregiver resource** for each unit that includes explanations of key math concepts and problems to try.

We hope your students enjoy using technology to explore math, working with classmates to solve problems, and learning new and interesting concepts. We also hope you love experiencing it with them!

—The Amplify Desmos Math Texas team



Unit 1 Beginning Number Concepts

Students consider what it means to do math, explore and use math tools, and recognize quantities in their world.

Unit Story: The First Day of School In this story, students notice and wonder about mathematical situations and express how they feel about their first day of school.



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Sub-Unit 1 Exploring Math Tools 5

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	Sub-Unit Quiz 1	10N

K.1.E, Building Toward K.2.C, K.7.A, K.6.F, K.8.A
K.1.E, K.2.A
K.1.C, Building Toward K.6.B, K.6.E
K.1.E, K.2.A
K.1.C, Building Toward K.2.C, K.6.A

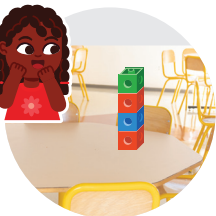


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1.07	Matching Groups Subitize to Identify Groups of Objects With the Same Quantity	13A
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1.11	Are There Enough? Using One-to-One Matching to Determine if Groups Have the Same Quantity	17A
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K.1.C, K.2.D
K.1.C, K.2.D
K.1.C, K.2.D
K.1.C, K.1.D, K.1.E, K.2.D, K.2.B
K.1.C, K.1.D, K.1.E, K.2.D, K.2.B
K.1.A, K.1.D, K.2.D, K.2.E
K.1.A, K.2.E



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K.1.A, K.2.A, K.2.C, K.2.E, K.2.B
K.1.C, K.1.F, K.2.A, K.2.C, K.2.E, K.2.B
K.1.C, K.2.A, K.2.C
K.1.C, K.2.C, K.2.A
K.1.D, K.1.E, K.2.D, K.2.A, K.2.C, K.2.B
K.1.C, K.2.C, K.2.A

Unit 2 Numbers 1–10

Students determine, represent, and compare quantities up to 10 and write numerals.

Unit Story: What's in a Restaurant? In this story, 5 kids and their families dine at different restaurants in their town where they see different groups and numbers.



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Sub-Unit 1 Counting and Comparing Objects 29

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K.1.E, K.2.A, K.2.B, K.2.C, K.2.D, K.2.E
K.1.F, K.1.G, K.2.C
K.1.D, K.1.G, K.2.C, K.2.D, K.2.G
K.1.D, K.1.G, K.2.C, K.2.D, K.2.E, K.2.G
K.1.D, K.1.G, K.2.C, K.2.D, K.2.G



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K.1.A, K.2.C, K.2.G
K.1.G, K.2.C, K.2.G
K.1.G, K.2.C, K.2.G
K.1.D, K.1.G, K.2.C, K.2.E, K.2.G



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Sub-Unit 3 Connecting Quantities and Numbers 87

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K.1.E, K.2.B, K.2.C
K.1.D, K.1.G, K.2.B, K.2.C, K.2.D
K.1.D, K.1.E, K.2.C, K.2.D, K.2.E
K.1.D, K.1.E, K.2.B, K.2.C, K.2.D, K.2.E
K.1.D, K.1.E, K.1.F, K.2.B, K.2.C, K.2.D



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2.18 What's Missing? Finding 1 More and 1 Less Than a Given Number	121A
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2.20 Two Ways to Compare Comparing Written Numerals and Groups of Images	131A
2.21 More or Less Comparing 2 Written Numerals	137A
2.22 Selling Smoothies Writing and Comparing Numerals	142A
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K.1.F, K.2.B, K.2.E
K.1.F, K.2.A, K.2.B, K.2.E, K.2.F
K.1.E, K.2.B, K.2.G
K.1.G, K.2.A, K.2.G
K.1.F, K.2.A, K.2.B, K.2.H
K.1.E, K.1.F, K.2.B, K.2.E, K.2.H

Unit 3 Shapes, Coins, and Financial Literacy

Students develop geometric concepts and language as they describe, sort, compare, and compose two-dimensional shapes. Students identify coins by name and consider how income can be earned and used as a source to meet one's wants and needs.

Unit Story: A Great Shape Adventure In this story, shapeless globs journey out to find the city of Polytopia. Along the way, they face different obstacles that challenge them to help each other and discover who they truly are.





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Sub-Unit 1 Identifying, Sorting, and Creating Shapes 151

 3.01 Explore: Shapes in Our Communities Which shape will you see the most in your partner's community?	152A	K.1.A, K.1.B, K.1.F, Building Toward K.6.A
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3.03 Which Shapes Match? Matching Shapes of Different Sizes and Orientations	159A	K.1.F, K.6.E
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3.05 So Much Sorting Sorting Images of Objects and Shapes	171A	K.1.F, K.1.G, K.2.A, K.2.B, K.2.C, K.5.A, K.6.D, K.6.E, K.8.A
3.06 What's That Shape Called? Identifying Circles and Triangles	176A	K.1.F, K.1.G, K.6.A, K.6.D, K.6.E
3.07 Another Shape Identifying Rectangles and Comparing Their Lengths	181A	K.1.F, K.1.G, K.6.A, K.6.D, K.6.E, K.7.B
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3.09 Polytopia's Annual Kite Festival Sorting Shapes Into Subcategories	191A	K.1.F, K.6.A, K.6.E, K.6.D
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Sub-Unit 2 Identifying and Sorting Coins 209

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Sub-Unit 3 Financial Literacy 225

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3.16 Where Does Money Come From? Differentiating Between Earning Income and Receiving Gifts	233A	K.1.F, K.1.G, K.9.A, K.9.B, K.9.D, K.2.D
3.17 Jobs in Our Community Skills Needed for Different Jobs	238A	K.1.A, K.1.D, K.9.C, K.2.D
 End-of-Unit Assessment	242G	

Unit 4 Understanding Addition and Subtraction

Students develop an understanding of addition and subtraction and represent and solve story problems.

Unit Story: Casey's Town In this story, Casey learns about the different people who work in her community, including the librarian, bus driver, mail carrier, grocer, waste collector, and park ranger.



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Sub-Unit 1 Counting to Add and Subtract 245

4.01	Explore: Casey's Town What math questions can we ask and answer about stories?	246A
4.02	How Many Objects? Joining 2 Groups to Determine the Total Amount of Objects	248A
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K.1.A, Building Toward K.3.B
K.1.F, K.1.G, K.2.C, K.2.I, K.3.A
K.1.F, K.2.A, K.2.B, K.2.C, K.2.I, K.3.A, K.5.A
K.1.F, K.2.A, K.2.C, K.2.I, K.3.A, K.5.A
K.1.F, K.1.G, K.2.B, K.3.A, K.5.A
K.1.D, K.1.F, K.1.G, K.2.B, K.2.D, K.3.A
K.1.A, K.1.D, K.2.B, K.2.D, K.3.A



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Sub-Unit 2 Representing and Solving Story Problems 287

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4.09	A Trip to the Grocery Store Using Objects to Represent Math Stories	293A
4.10	More Grocery Store Stories Solving Story Problems	298A
4.11	The Mail Carrier Making Predictions About the Unknown Quantity in a Story Problem	303A
4.12	One Story, Two Drawings Comparing the Organization of Story Problem Drawings	310A
4.13	Trash Day Drawing to Show Subtraction in Story Problems and the Concept of Zero	315A
4.14	Our Story Problems Creating and Solving Addition and Subtraction Story Problems	320A
	Sub-Unit Quiz 2	326A

K.1.E, K.3.A
K.1.E, K.1.F, K.1.G, K.3.A
K.1.F, K.1.G, K.3.A, K.3.B, K.3.C
K.1.C, K.1.B, K.1.F, K.3.A, K.3.B, K.3.C
K.1.C, K.1.D, K.1.E, K.1.F, K.1.G, K.3.A, K.3.B, K.3.C
K.1.E, K.1.F, K.1.G, K.2.A, K.3.B, K.3.C, K.5.A
K.1.E, K.1.F, K.2.A, K.3.B



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Sub-Unit 3 Addition and Subtraction Expressions 327

4.15	Exploring Expressions Introducing Expressions	328A
4.16	Expressions and Story Problems Using Expressions to Represent Story Problems	333A
4.17	Expressions and Drawings Connecting Expressions and Drawings	340A
4.18	What Is the Value? Finding the Values of Expressions	347A
4.19	Casey Cleans the Park Adding and Subtracting 0 and 1	354A
4.20	Show and Tell Telling Story Problems to Match Expressions	361A
	End-of-Unit Assessment	366C

K.1.E, K.1.F, K.3.B, K.3.C
K.1.D, K.1.F, Building Toward K.3.C
K.1.D, K.1.F, K.3.A
K.1.C, K.1.F, K.2.I, K.3.A, K.3.C
K.1.C, K.1.D, K.1.F, K.1.G, K.2.F, K.3.A, K.3.C
K.1.D, K.1.E, K.1.F, K.2.A, K.5.A, K.3.A, K.3.C

Unit 5 Make and Break Apart Numbers Within 10

Students compose and decompose numbers within 10 and represent and solve story problems.

Unit Story: Where Is Harry? In this story, a Kindergarten class discovers that their class pet, Harry the Hamster, has escaped. Together, they pursue Harry, looking for clues he left behind.



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Sub-Unit 1 Making and Breaking Apart Numbers Within 9 369

5.01	Explore: Mystery Number How can we use clues to figure out what the mystery object looks like?	370A
5.02	Making and Breaking Apart Numbers Composing and Decomposing Numbers	372A
5.03	Snapping Cubes Decomposing a Number	378A
5.04	Number Sentences and Drawings Connecting Number Sentences and Drawings	385A
5.05	Harry Explores the Ocean Looking for Patterns in Decompositions	390A
	Sub-Unit Quiz 1	396E

K.1.A, K.1.B, K.1.D, K.1.G,
Building Toward K.2.I

K.1.E, K.1.G, K.2.I

K.1.F, K.1.G, K.2.I, K.3.C

K.1.F, K.1.G, K.2.I

K.1.F, K.1.G, K.2.I



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Sub-Unit 2 More Types of Story Problems 397

5.06	At the Playground Making Sense of <i>Both Addends Unknown</i> Math Stories	398A
5.07	In the Cafeteria Solving <i>Both Addends Unknown</i> Story Problems	403A
5.08	In the Library Finding Multiple Solutions to <i>Both Addends Unknown</i> Story Problems	408A
5.09	In the School Office Solving <i>Put Together/Take Apart, Total Unknown</i> Story Problems	415A
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	Sub-Unit Quiz 2	428E

K.1.B, K.1.D, K.1.G, K.2.I,
K.3.A

K.1.B, K.1.C, K.1.F, K.1.G,
K.2.I, K.3.A, K.3.B, K.3.C

K.1.D, K.1.E, K.1.F, K.2.I,
K.3.A, K.3.B, K.3.C, K.5.A

K.1.E, K.1.G, K.2.I, K.3.A,
K.3.B

K.1.D, K.1.E, K.1.G, K.2.A,
K.2.I, K.3.A, K.3.B, K.5.A



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Sub-Unit 3 Making and Breaking Apart 10 429

5.11	Harry Is Home Representing Numbers on a 10-Frame	430A
5.12	Number Sentences That Show 10 Matching Number Sentences With Different Representations of 10	437A
5.13	Harry's Hamster Wheel Finding Pairs That Make 10	444A
5.14	Harry Explores Space Relating Compositions and Decompositions of 10 to Expressions	450A
5.15	Showing What We Know About 10 Decomposing 10 in More Than 1 Way	457A
	End-of-Unit Assessment	462C

K.1.D, K.1.F, K.2.B, K.2.C,
K.2.D, K.2.E, K.2.I

K.1.D, K.1.F, K.1.G, K.2.I,
K.3.C

K.1.C, K.1.D, K.1.E, K.1.F,
K.1.G, K.2.B, K.2.D, K.2.I,
K.3.A, K.3.C

K.1.F, K.1.G, K.2.B, K.2.I,
K.3.C

K.1.C, K.1.D, K.1.E, K.1.G,
K.2.I, K.5.A

Unit 6 Numbers 0–20

Students count and represent numbers up to 20 with or without objects or images and recognize the $10 + n$ structure of teen numbers. Students compare and order numbers up to 20 using objects and generate a set of objects that represents a number that is *more than*, *less than*, or the *same as* a given number.

Unit Story: Winners In this story, Sara cheers on her sister, Elise, and her soccer team. In practice and in the game, there are groups of teen numbers all around.




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Sub-Unit 1 Counting Groups of 11–20 Objects 465


6.01	Explore: Packing Snacks How can we put together numbers to make 10 in multiple ways?	466A
6.02	Getting Ready for the Game Counting Larger Groups of Objects	468A
6.03	How Many Stars? Keeping Track of Rearranged Objects	473A
6.04	How Many Water Bottles? Counting Forward and Backward With Objects Up to 20	478A
	Sub-Unit Quiz 1	482E

K.1.A, K.1.B, K.1.E, K.1.F, Building Toward K.2.B
K.1.B, K.1.C, K.1.D, K.2.A, K.2.C, K.5.A
K.1.B, K.1.C, K.1.G, K.2.A, K.2.B, K.2.C
K.1.D, K.1.F, K.1.G, K.2.A, K.2.D, K.5.A



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Sub-Unit 2 10 Ones and Some More 483


6.05	Pass, Shoot, Score Representing Teen Numbers on Fingers and 10-Frames	484A
6.06	Jersey Jam! Matching 10-Frames With Written Numerals	489A
6.07	People at the Park Counting Larger Groups of Images	496A
	Sub-Unit Quiz 2	502E

K.1.D, K.1.E, K.2.A, K.2.B, K.2.C, K.2.D
K.1.F, K.1.G, K.2.B, K.2.C, K.2.E
K.1.F, K.2.A, K.2.B, K.2.C



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Sub-Unit 3 Comparing Groups of Numbers 11–20 503

6.08	One More, One Less Generating a Number that is One More or One Less	504A
6.09	Comparing Groups of 11-20 Using Objects to Compare Groups	511A
6.10	More, Less, and the Same Generating a Set That Represents a Number That is More, Less, or the Same as a Given Number	516A
6.11	How Many Kicks? Comparing Numbers 11-20	523A
6.12	Organizing Jerseys Ordering, Writing, and Matching Representations of Numbers 0-20	528A
	End-of-Unit Assessment	532G

K.1.F, K.1.G, K.2.A, K.2.B, K.2.F
K.1.D, K.1.G, K.2.B, K.2.G
K.1.D, K.1.F, K.2.B, K.2.E
K.1.F, K.1.G, K.2.F, K.2.H, K.5.A
K.1.D, K.1.E, K.1.F, K.1.G, K.2.A, K.2.B, K.2.C, K.2.H, K.3.A, K.5.A

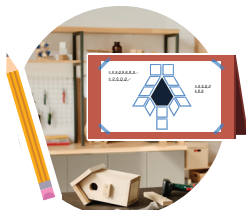
Unit 7 Solid Shapes All Around Us

Students describe, sort, and compare three-dimensional shapes and revisit counting, addition, and subtraction. Students identify and compare measurable attributes of objects and collect data to organize in real-object graphs and picture graphs.

Unit Story: Everyone Needs Help Sometimes In this story, River makes and repairs things made of solid shapes to help community members solve problems.



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Sub-Unit 1 Exploring, Adding, and Subtracting with Shapes 535

7.01	Explore: River's Projects What kinds of shapes can we use to make one of River's projects?	536A
7.02	Solid Shapes Around Us Recognizing and Building Solid Shapes	538A
7.03	Sorting Solid Shapes Comparing and Sorting Solid Shapes	543A
7.04	What's That Shape? Identifying Solid Shapes	548A
7.05	Shapes and Number Sentences Matching Number Sentences with Composite Shapes	554A
7.06	Subtracting Shapes Telling and Solving Subtraction Problems	561A
	Sub-Unit Quiz 1	566E

K.1.A, K.1.B, K.1.F, Building Toward K.6.C
K.1.A, K.1.F, K.6.B
K.1.C, K.1.D, K.1.F, K.1.G, K.6.C, K.6.E
K.1.G, K.6.B, K.6.E
K.1.F, K.1.G, K.2.B, K.2.C, K.2.E, K.3.A, K.3.C, K.6.F
K.1.C, K.3.A, K.3.B, K.3.C



Jason Finn/Shutterstock.com

Sub-Unit 2 Measurable Attributes 567

7.07	Heavier or Lighter? Comparing the Weights of Two Objects	568A
7.08	Which Can Hold More? Comparing the Capacities of Two Objects	573A
7.09	So Many Ways to Compare Objects Identifying Measurable Attributes of Objects	578A
	Sub-Unit Quiz 2	584E

K.1.A, K.1.G, K.7.B
K.1.A, K.1.B, K.5.A, K.7.B
K.1.A, K.1.G, K.7.A, K.7.B



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Sub-Unit 3 Exploring Data 585

7.10	Let's Face It! Introducing Real-Object Graphs	586A
7.11	Thinking About Math Tools Collecting Data to Create Real-Object Graphs	591A
7.12	Picture the Data Creating Picture Graphs	596A
7.13	What Is True About the Data? Counting to Draw Conclusions About Picture Graphs	601A
7.14	Add It Up Adding to Draw Conclusions About Picture Graphs	606A
	End-of-Unit Assessment	613C

K.1.D, K.1.E, K.1.G, K.6.C, K.6.E, K.8.A, K.8.B, K.8.C
K.1.D, K.1.E, K.8.A, K.8.B, K.8.C
K.1.D, K.1.E, K.8.A, K.8.B
K.1.D, K.1.E, K.1.F, K.5.A, K.8.B, K.8.C
K.1.D, K.1.E, K.1.F, K.3.C, K.5.A, K.8.C

Designed Around the TEKS

Amplify Desmos Math Texas, Kindergarten is built from the Texas Essential Knowledge and Skills for Kindergarten. The primary focal areas in Kindergarten consist of (1) understanding counting and cardinality, (2) understanding addition as joining and subtraction as separating, and (3) comparing objects by measurable attributes. Five out of seven units in Amplify Desmos Math Texas address counting, cardinality, addition, and subtraction. As a result, the units addressing geometry, data analysis, and financial literacy concepts are strategically placed within the sequence of counting, cardinality, addition, and subtraction to allow students to pause their work with these topics and explore something new.

Rationale of Unit Order in Amplify Desmos Math Texas, Grade K

Unit 1 Beginning Number Concepts

Kindergarten begins with engagement as students explore different types of tools they will use in math class and motivating contexts as they begin to explore the concept of number. This unit is placed at the beginning of the year as the majority of the rest of Kindergarten builds from these counting and number concepts.

- **The work students embark on in Unit 1 builds upon their natural curiosity** of what it means to have “enough” of something or what it means to find “how many” of something one has.
- **Unit 1 work is necessary to prepare students for further work with** counting, cardinality, addition, and subtraction.

Unit 2 Numbers 1-10

Students extend their understanding of numbers to count and compare objects and images up to 10. They connect quantities with numeral symbols and compare numbers to find which shows more and which shows less. This unit is placed in the beginning of Kindergarten, immediately after Unit 1, as students apply their understanding of “enough” and “how many” to the numbers 1-10.

- **The work students embark on in Unit 2 builds upon their understanding of** beginning number concepts from Unit 1.
- **Unit 2 work is necessary to prepare students for further work with** the numbers 1-10 in Units 4 and 5.

Unit 3 Shapes, Coins, and Financial Literacy

Students identify, sort, compare, and create flat (two-dimensional) and solid (three-dimensional) shapes. They identify U.S. coins by name and their work with financial literacy in Sub-Unit 3, such as distinguishing between wants and needs and identifying income as a way to meet both, allows them to explore beginning concepts of the free enterprise economic system.

- **The work students embark on in Unit 3 builds upon their natural curiosity and understanding of** shape, money, and wants and needs from their everyday lives.
- **Unit 3 work is necessary to prepare students for further work with** flat and solid shapes in Unit 7.

Unit 4 Understanding Addition and Subtraction

Students develop an understanding of addition and subtraction situations involving sums and differences within 10. This unit is placed near the middle of Kindergarten as understanding and representing the numbers 1-10 are prerequisites.

- **The work students embark on in Unit 4 builds upon their understanding of** the numbers 1-10 from Units 1 and 2.
- **Unit 4 work is necessary to prepare students for further work with** number concepts as their proficiency with adding and subtracting within 10 helps prepare them to make and break apart numbers within 10 in Unit 5.

Unit 5 Make and Break Apart Numbers Within 10

Students further their work with the numbers 1-10 to compose (make) and decompose (break apart) numbers within 10 to solve story problems.

- **The work students embark on in Unit 5 builds upon their understanding of** the numbers 1-10 from Units 1, 2, and 4.
- **Unit 5 work is necessary to prepare students for further work with** number concepts as they extend the concept of decomposition to understand the numbers 11-20 as a ten and some ones.

Unit 6 Numbers 0-20

Students extend their concept of number and counting to now include the numbers 0-20. This unit is placed strategically near the end of Kindergarten as student proficiency with the numbers 1-10 is a prerequisite to exploring the numbers 0-20.

- **The work students embark on in Unit 6 builds upon their understanding of** the numbers 1-10 from Units 1, 2, 4, and 5.
- **Unit 6 work is necessary to prepare students for further work with** the numbers 0-20 as they add and subtract within 20 in Grade 1.

Unit 7 Solid Shapes All Around Us

Kindergarten ends with students exploring attributes of flat (two-dimensional) and solid (three-dimensional) shapes and data analysis.

- **The work students embark on in Unit 7 builds upon their understanding of** flat and solid shapes from Unit 3.
- **Unit 7 work is necessary to prepare students for further work with** the attributes of two- and three-dimensional shapes in Grade 1 and beyond.

A curiosity-driven program that builds students' lifelong math proficiency

As we developed Amplify Desmos Math Texas, we asked ourselves: how can we support teachers in creating a collaborative classroom of learners excited about math?

With that question in mind, we built the program around four core tenets:

A structured approach to problem-based learning

The program thoughtfully combines conceptual understanding, procedural fluency, and application. Each lesson is designed to tell a story by posing problems that invite a variety of approaches before guiding students to synthesize their understanding of the learning goals.

The Teacher Edition provides guidance for teachers to anticipate and monitor strategies students may use, select and sequence students' ideas, and orchestrate productive discussions to help students make connections between their own ideas and those of their classmates.¹

Proficiency Progression

Lessons are designed around what we call the Proficiency Progression, a model that systematically builds on students' curiosity to develop lasting grade-level understanding.

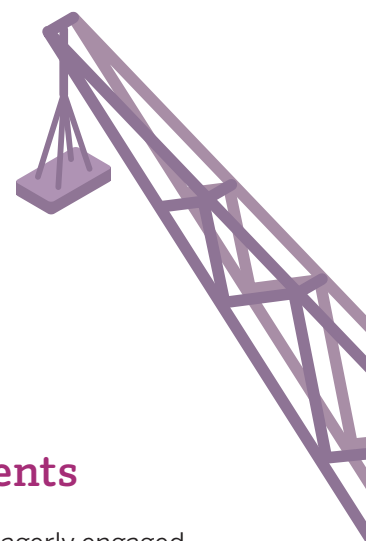
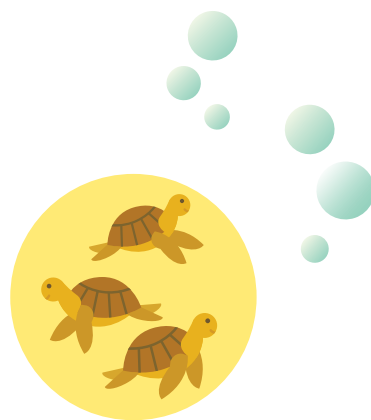
- 1 Activate students' prior knowledge and curiosity
- 2 Generate new ideas through collaboration
- 3 Refine ideas using facilitation tools
- 4 Guide to grade-level understanding
- 5 Practice, reinforce, remediate, and extend for lasting understanding

Access to grade-level math for every student, every day

Tasks in each lesson are thoughtfully sequenced so that all students can engage with the math each day without any roadblocks. Every lesson includes suggestions for accessibility and differentiation to support, strengthen, and stretch students' understanding.

We also provide additional resources that integrate seamlessly with core instruction, including a suite of assessments, tailored practice resources that adjust to students' learning, and other intervention solutions. Cohesive differentiation and intervention resources support and challenge students on their path toward deeper understanding of the learning goals, ensuring all students can keep up with or stretch beyond grade-level math.





Students' thinking is valuable and can be made evident

Students take an active role in developing their own ideas first and then synthesize them as a class. To guide the learning process, students see each other's thinking, engage in conversations, and connect to each other through the understanding that they can use math to make sense of the world. This fuels classroom conversations and a shared understanding of math.

Rather than evaluating ideas as simply right or wrong, Responsive Feedback™ shows students what their ideas mean in context and offers opportunities for students to learn from each other's responses.² This feedback encourages students to explore different strategies and make sense of a variety of responses, so that students' ideas drive the learning process.

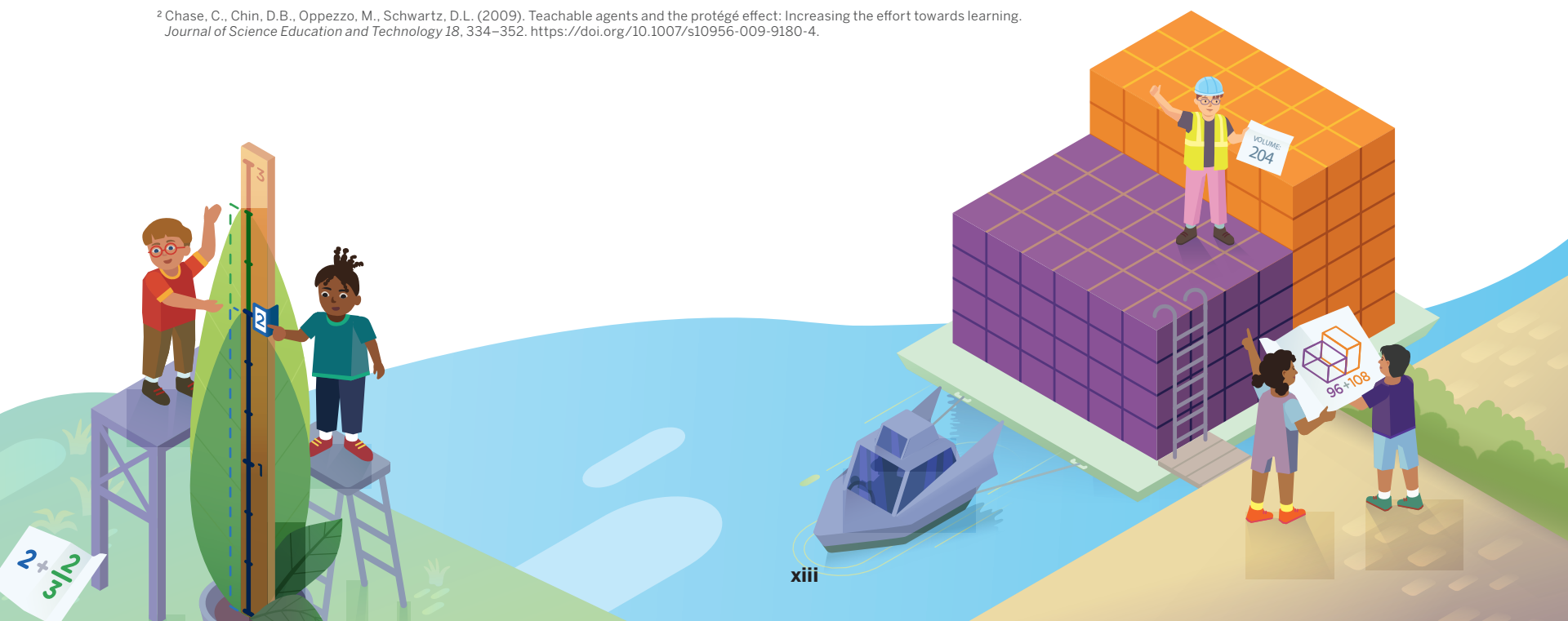
Math that motivates students

Picture a classroom where students are so eagerly engaged in a lesson, they wish it would not end. It is buzzing with the sounds of natural curiosity. There is an audible groan from students when their screens are paused. This is what an Amplify Desmos Math Texas classroom looks like and sounds like. This is math that motivates.

Our curriculum supports social classrooms, invites mathematical creativity, and evokes wonder, empowering students to see themselves and their classmates as having brilliant mathematical ideas.

¹ Smith, M.S., & Stein, M.K. (2018). *5 practices for orchestrating productive mathematics discussions* (2nd ed.). SAGE Publications.

² Chase, C., Chin, D.B., Oppezzo, M., Schwartz, D.L. (2009). Teachable agents and the protégé effect: Increasing the effort towards learning. *Journal of Science Education and Technology* 18, 334–352. <https://doi.org/10.1007/s10956-009-9180-4>.



Scope and Sequence | Grades K–5

Volume 1				
	Unit 1	Unit 2	Unit 3	Unit 4
Kindergarten 140 days total	Beginning Number Concepts 18 instructional days 3 assessment days 21 days total	Numbers 1–10 22 instructional days 4 assessment days 26 days total	Shapes, Coins, and Financial Literacy 17 instructional days 3 assessment days 20 days total	Understanding Addition and Subtraction 20 instructional days 3 assessment days 23 days total
Grade 1 146 days total	Adding, Subtracting, and Working With Data 16 instructional days 4 assessment days 20 days total	Story Problems Within 10 20 instructional days 5 assessment days 25 days total	Adding and Subtracting Within 20 20 instructional days 5 assessment days 25 days total	Numbers to 99 and Financial Literacy 19 instructional days 5 assessment days 24 days total
Grade 2 148 days total	Working With Data and Developing Financial Literacy 18 instructional days 5 assessment days 23 days total	Adding and Subtracting Within 100 25 instructional days 5 assessment days 30 days total	Measuring and Solving Problems Using Length 12 instructional days 4 assessment days 16 days total	Numbers to 1,200 15 instructional days 4 assessment days 19 days total
Grade 3 127 days total (+1 optional day)	Introducing Multiplication 24 instructional days 5 assessment days 29 days total	Adding, Subtracting, and Rounding Larger Numbers 22 instructional days 5 assessment days 27 days total	Relating Multiplication to Division 17 instructional days 4 assessment days 21 days total	
Grade 4 127 days total	Fraction Equivalence and Comparison 15 instructional days 4 assessment days 19 days total	Extending Operations to Fractions 9 instructional days 2 assessment days 11 days total	From Hundredths to One Billion 23 instructional days 5 assessment days 28 days total	
Grade 5 111 days total (+3 optional days)	Volume, Factors, and Expressions 14 instructional days 4 assessment days (+3 optional days) 21 days total	Multiplying and Dividing Fractions 10 instructional days 3 assessment days 13 days total	Multi-digit Multiplication and Division and Financial Literacy 17 instructional days 5 assessment days 22 days total	

Volume 2

Unit 4

Unit 5

Unit 6

Unit 7

Make and Break
Apart Numbers
Within 10

15 instructional days

3 assessment days

18 days total

Numbers 0–20

12 instructional days

3 assessment days

15 days total

Solid Shapes All
Around Us

14 instructional days

3 assessment days

17 days total

Numbers to 120

13 instructional days

4 assessment days

17 days total

Length Measurement
Within 120 Units

12 instructional days

3 assessment days

15 days total

Geometry and Time

16 instructional days

4 assessment days

20 days total

Geometry and Time

18 instructional days

4 assessment days

22 days total

Adding and
Subtracting
Within 1,000

21 instructional days

3 assessment days

24 days total

Equal Groups and Area

11 instructional days

3 assessment days

14 days total

Fractions as Numbers

15 instructional days

5 assessment days

(+ 1 optional day)

21 days total

Measurement and
Financial Literacy

13 instructional days

4 assessment days

17 days total

Sorting and
Classifying Shapes

9 instructional days

3 assessment days

12 days total

Mathematical
Relationships and
Financial Literacy

19 instructional days

4 assessment days

23 days total

Multiplying and
Dividing Multi-Digit
Numbers

22 instructional days

4 assessment days

26 days total

Angles and Properties
of Shapes

16 instructional days

4 assessment days

20 days total

Place Value Patterns
and Decimal
Operations

17 instructional days

4 assessment days

21 days total

Measurement, Fraction
Operations, and Data

17 instructional days

4 assessment days

21 days total

Geometry and
Algebraic Reasoning

12 instructional days

4 assessment days

16 days total

Alternate Calendar Suggestions

165 Instructional Days

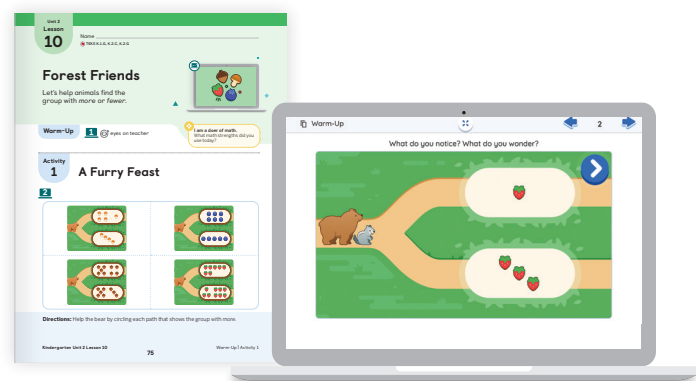
- Refer to the Pacing Considerations on the Unit Overview pages, where you can find unit-specific guidance to which lessons and activities can be skipped or combined.

210 Instructional Days

- Consider supporting students before or after quizzes and assessments with Centers and other resources noted in the Assess & Respond pages.
- Consider adding a day of practice focus per week, utilizing the lesson practice, spiral practice, Fluency, and/or Additional Practice.

Program Resources

For Students



- Student Edition (two-volume)
- Interactive digital student screens
- Responsive Feedback™
- Collaboration tools like Challenge Creators and Polygraphs
- Boost Personalized Learning

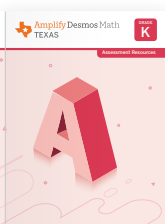
Student materials available in Spanish

For Teachers



- Teacher Edition (two-volume)
- Digital access to planning and instruction resources including teacher moves in Spanish
- Teacher Presentation Screens
- Facilitation and progress-monitoring tools
- Assessment and reporting suite, including Benchmarks and Progress Monitoring

Additional Resources



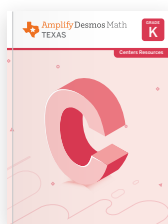
Assessment Resources

- Unit Assessments
- Show What You Know Lesson Assessments
- Rubrics and Teacher Answer Keys
- Activity PDFs



Intervention and Extension Resources

- Mini-Lessons
- Extensions



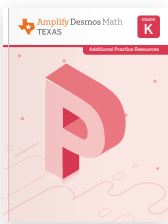
Centers Resources

- Centers PDFs
- Work Mats, Cards, and Grids



Math Language Development Resources

- Graphic Organizers, Frayer models, Sentence Frames
- English/Spanish Cognates, Word Banks, and Glossary
- Proficiency-levelled Supports



Additional Practice

- Two pages of student practice per lesson
- Teacher Answer Keys
- Optional student workbook available

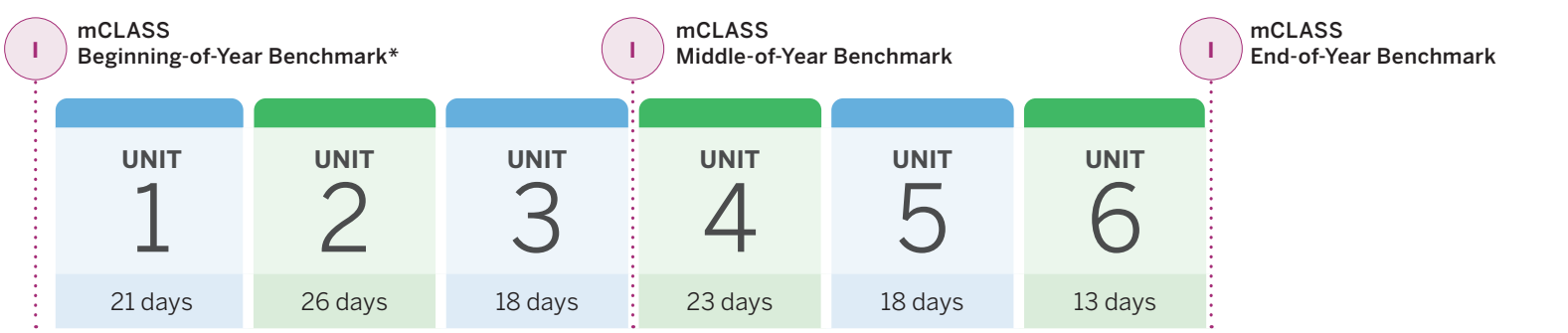
Optional: Manipulative Kits and Centers Kits



hand2mind

Program Architecture

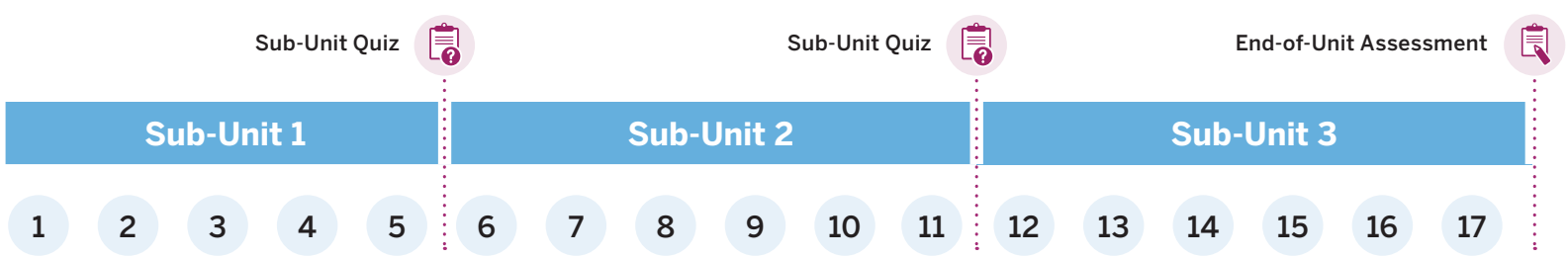
Course



Note: This depiction shows the general structure of a course. The number of lessons varies from unit to unit. See Scope and Sequence pages for the full program scope.

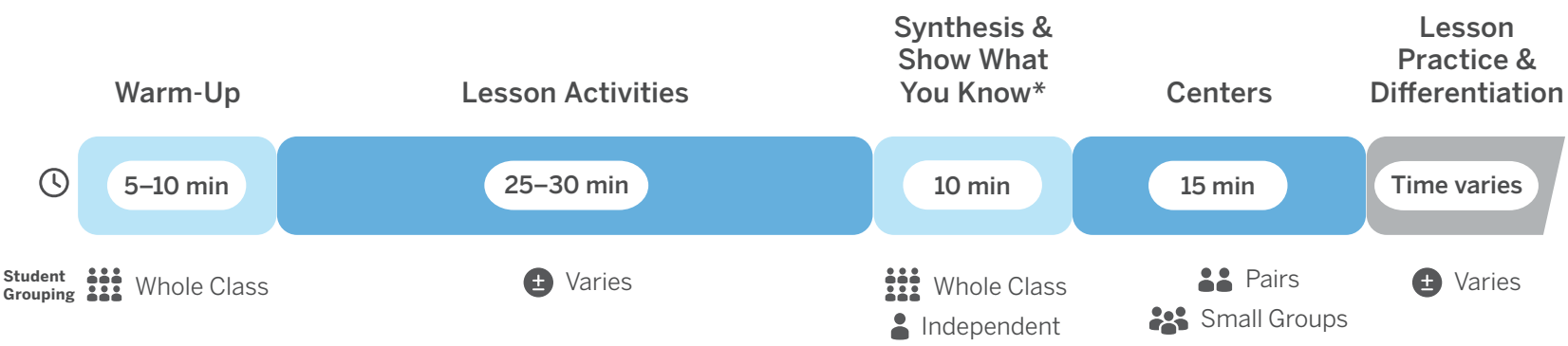
*A brief but powerful mCLASS Beginning-of-Year Screener is provided when mCLASS Benchmark is not included.

Unit



Note: The number of sub-units, lessons, and quizzes within each unit varies. This depiction shows the general structure of a unit. See the course Table of Contents for more details.

Lesson



Note: *Show What You Know is optional in Kindergarten.

Once you have logged into the digital program, you can launch a guided tour with helpful navigation tips.

Unit at a Glance

Teachers are provided with thoughtful **pacing considerations** for how they can adjust the pacing of the unit as needed without compromising unit learning goals.

Navigating This Program

The **Sub-Unit Overview** lists the content and language goals for the unit. This page also provides a visual to show the progression of TEKS coverage in the Sub-Unit.

The mathematical concepts of the unit are presented in student-friendly language on the **Watch Your Knowledge Grow** page, allowing students to monitor their own progress.

Sub-Unit 1

Showing Your Data

Sub-Unit 1 Goal:

Organize and represent data

Progression of TEKS in Sub-Unit 1

Lessons 1-6: Students sort, collect, organize, and represent data. They take surveys to collect data and organize data using tally marks and tally charts, and represent the data in picture graphs and **bar-type graphs**. They consider ways to create data representations that will be clear to others and explain how the various features are helpful for understanding the data.

Sub-Unit 1 Progression	Lesson 1*	Lesson 2	Lesson 3	Lesson 4	Lesson 5
Algebraic Reasoning					
TEKS 1.5.A					
Geometry and Measurement					
TEKS 1.6.A					
Data Analysis					
TEKS 1.8.A					
TEKS 1.8.B					
TEKS 1.8.C					

Coming Up Next

Sub-Unit 2, Lessons 6-13:

Number and Operations: TEKS 1.2.A, 1.2.B, 1.2.B.1, 1.3.C, 1.3.D, 1.3.E, 1.3.F

Algebraic Reasoning: TEKS 1.5.A, 1.5.D, 1.5.E, 1.5.F

Sub-Unit 3, Lessons 14-16:

Number and Operations: TEKS 1.3.D

Algebraic Reasoning: TEKS 1.5.E

Data Analysis: TEKS 1.8.C

Math That Matters Most

Sub-Unit 1: As students progress through Sub-Unit 1, look for these skills as they work to organize, order, and represent data with 3 categories.

Progression of Strategies, Skills, or Language

Progression	For example...																																	
Representing data concretely and sorting it into categories.																																		
Representing and sorting data into categories, and organizing the data in a way that makes it easy to count how many.																																		
Creating a data representation using symbols to represent the data points in each category.																																		
Creating a data representation that includes category labels and a title.	<div>Favorite Sea Animals</div> <table><tbody><tr><td>Walrus</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Dolphin</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Octopus</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></tbody></table>	Walrus											Dolphin											Octopus										
Walrus																																		
Dolphin																																		
Octopus																																		

Unit 1 | Adding, Subtracting, and Working With Data

Watch Your Knowledge Grow (Optional)

Purpose: Students rate their understanding of the concepts that they will explore in this unit, prior to beginning the unit. Return to this page at the end of the unit and invite them to rate their understanding again to see how their knowledge has grown.

Read aloud the instructions. Let students know they are about to explore these math concepts in the upcoming unit. Invite students to rate their understanding of each concept prior to beginning the unit. Let them know that they will return to this page at the end of the unit to rate their understanding again. They will be able to see how their knowledge has grown! Consider asking:

“Where have you seen the term data before? What does this term mean?”

“How might addition and subtraction be connected to data?”

Emergent Bilinguals Consider pairing students with partners who speak the same primary language and inviting them to respond to your questions first in their primary language and using a mixture of their primary language and English. **ELF 2.6**

Math Identity and Community Let students know that it is a normal part of learning to not understand or be familiar with a topic prior to learning about it. Celebrate the number of “Not yet” and “Almost” bubbles that were selected. Remind students that this means their knowledge can increase greatly after this unit!

Watch Your Knowledge Grow

This is the math you'll explore in this unit. Rate your understanding to see how your knowledge grows!

Not yet Almost I got it!

Topic	Before	After
Collect and show data using tally charts		
Create picture graphs		
Create bar-type graphs		
Ask and answer questions about data using picture graphs and bar-type graphs		
Find the sum when adding 1 and 2 to a number		
Find the difference when subtracting 1 and 2 from a number		
Use 2 numbers to make 10 in different ways		
Find and represent 10 in different ways		

Depending on the goals of the Sub-Unit, the **Math that Matters Most** page illustrates for teachers the most important progressions of strategies, skills, and language that happen during the Sub-Unit.

Sub-Unit Overview pages

The lessons within each unit are grouped into sub-units that address a related group of concepts. Each sub-unit starts and ends with pages that focus on the key ideas of the sub-unit.

Kindergarten

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Navigating This Program

Navigating This Program


Lesson Supports

Throughout this Teacher Edition, lesson guidance for teachers is organized clearly and consistently so that they have all of the information they need at their fingertips.

In the **Key Concepts** and **Connections and Coherence** sections, teachers will find the goals and language goals for the lesson. There is also information on prior learning that has built to the math in this lesson, as well as future learning that this lesson is helping build to.

Lesson modality shows teachers how they should plan to have students engage in the lesson.

Unit 1
Lesson
2



Student Edition pages and Presentation Screens support learning in this lesson.

Shapes Ying Saw

Sorting and Representing Shapes

Let's sort picture cards and show how many.

Key Concepts

- Today's Goals**
 - Goal:** Sort images into 3 categories.
 - Goal:** Represent the amount in each category.
 - Language Goal:** Describe what is included in a data representation that shows how images were sorted. **(Listening and Speaking)** **ELPS 1.E.2.B**

Connections and Coherence

Students sort shapes into 3 categories. They share and compare ways of organizing and keeping track of categories. Then students create representations of their sorts and discuss features of other pairs' representations to consider ways to share information clearly. **(TEKS 1.1.E)**

Prior Learning

In Kindergarten, students sorted objects into categories and counted to find the total number in each category. In the Exploration, students sorted objects into at least 2 categories and described the categories they used to sort and how many in each category.

Future Learning

In Lesson 3, students will collect, organize, and represent categorical data about the class.

Integrating Rigor in Student Thinking

- Students develop their **conceptual understanding** of sorting, organizing, and representing data.

Vocabulary

Review Vocabulary

category
sort

TEKS


Addressing

1.8.A
Collect, sort, and organize data in up to three categories using models/representations such as tally marks or T-charts.
Also Addressing: 1.6.A
Math Process Standards: 1.1.E
ELPS: 1.B.1.C.1.E.1.F.2.B.2.C.2.E.2.F

Building On

K.2.C
K.2.G
K.6.E

Building Math Identity

 **I can be all of me in math class.**
In the story, Ying realized that she likes her town. What is the best thing about where you live?
Invite students to reflect on this question as they complete this lesson.

Grade 1 Unit 1 Lesson 26AShapes Ying Saw

The **Integrating Rigor in Student Thinking** section explains how students develop conceptual understanding, procedural fluency, and application in this lesson.

The **Standards** section lists all of the applicable standards for the lesson. Both Content and Process TEKS are listed, as well as the relevant ELPS.

Lesson Overview

This introductory page orients teachers to the topic, standards, and key learning goals of the lesson, including any new vocabulary terms that will be introduced.

Kindergarten

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Navigating This Program

The **time frame** and suggested **student grouping** is listed for each part of the lesson.

Lesson at a Glance

60 min

TEKS: 1.1.E.1.6.A, 1.8.A

Warm-Up

Whole Class | 10 min

Activity 1

Pairs | 15 min

Activity 2

Pairs | 15 min

Synthesis

Whole Class | 5 min

Show What You Know (optional)

Independent | 5 min

Center

Pairs | 15 min

Math Language Development

Emergent Bilinguals

Pre-Production

Beginning

Intermediate

High Intermediate

Advanced

Quickly preview the **Emergent Bilingual proficiency-levelled supports** for this lesson. Refer to the *Math Language Development Resources* book for more information.

The daily **Center Time** or **Center Choice Time** is summarized for ease of preparation.

The screen icon is used to show which **Presentation Screens** or **Digital Student Screens** align to each instructional moment.

Whole Class | 10 min

Lesson 2 Warm-Up

Warm-Up Notice and Wonder

Purpose: Students examine an image of Ying at the lake to activate their prior knowledge about the shapes in the image.

What do you notice? What do you wonder?

1 Launch

Display the image.

Use the Notice and Wonder routine.

Say, "You will use a routine called Think-Pair-Share. First, I will ask you a question and you will have time to think about your response independently. Next, you will pair up to share your thinking. Then some students will share their thinking with the whole class."

Use the Think-Pair-Share routine. Ask:

- "What do you notice? What do you wonder?"
- "What shapes do you see in the picture of Ying at the lake?"

2 Connect

Record students' responses as they share.

Students might say . . .

ELPS 2.B

I notice there are lots of boats.

I notice there are some trees.

I notice that Ying and her family are having a picnic.

I wonder what food they have.

I wonder why they aren't wearing swimsuits.

I wonder how many boats there are.

Lesson at a Glance

The Lesson at a Glance page describes the purpose of the Warm-Up, Activities, Synthesis, and Show What You Know. Teachers will find suggested timing for each part of the lesson, as well as guidance on whether students should work individually, in pairs, in small groups, or with the whole class.

The page also lists which Student Edition pages, Presentation Screens, or Digital Student Screens can be used with each part of the lesson, as well as any hands-on materials that may be needed.

Warm-Up

Every Amplify Desmos Math Texas lesson begins with a whole-class Warm-Up, an invitational Instructional Routine intended to provide a social moment at the start of the lesson in which every student has an opportunity to contribute. Some Warm-Ups build fluency or highlight a strategy that may be helpful in the current lesson. Other Warm-Ups act as an invitation into the math of the lesson. The Warm-Up for the first lesson of each unit introduces the Unit Story for the unit.

Kindergarten

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Navigating This Program

Navigating This Program

The **Purpose** of each activity is highlighted here, as well as suggestions for the **student grouping**, **time frame**, and **screen pacing** for the activity.

Teachers are provided with thoughtful **Short on time?** suggestions for how they can adjust their facilitation of the lesson as needed without compromising lesson goals.

Each lesson notes the corresponding **Teacher Presentation Screens** or related **Student Edition** pages also available to support the lesson.

For every activity, teachers will see the **corresponding student digital screens** or **Student Edition pages**, based on the recommended lesson modality.

Activity 1 Sorting Shape Cards

Purpose: Students sort shape cards into categories, explain how they sorted, and tell how many are in each category to prepare to represent their data in the next activity.

Materials

- Display Page 11 of the Unit Story, *Ying's New Town* during the Launch.

Lesson Resources:

- Distribute one set of pre-cut cards from the Activity 1 PDF to each pair.
- Provide students with access to the Graphic Organizer PDF, *Three-Column Table* (optional).

Student Edition

Unit 1 Lesson 2

Shapes Ying Saw

Let's sort picture cards and show how many.

Warm-Up

Activity 1

Sorting Shape Cards

Hands-On

1. Sort *Answers may vary.*

2. Discuss *Oral activity: No writing expected.*

Explain to another pair how you sorted the shapes. Tell how many are in each category.

We sorted the shapes by _____

This category has _____

2 Monitor

After students have completed **Problem 2**, refer to the **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "Which 2 shapes could be sorted together?"
- Ask, "What tools could help you sort the cards into 3 categories?"

MLR1: Stronger and Clearer Each Time *ELPS 1.E.2.B.2.E.2.F*

After students complete Problem 2, have pairs meet with 1 or 2 other pairs to share responses. Encourage listeners to ask clarifying questions using stems, such as:

- "What do you mean by . . .?"
- "Can you tell me more about . . .?"
- "How did you come up with that category?"

Have students revise their verbal responses based on the feedback they receive.

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Sort the shape cards and describe 2 categories.	I sorted the shapes into curves and no curves .	Support Ask, "What tool could help you sort the shapes into 3 categories?"
Sort the shape cards and describe 3 categories	I sorted by color . or I sorted the shapes into curves , curve and straight , and only straight .	Stretch Ask, "How could you organize the shapes to help you count how many in each category?"

3 Connect

Invite students to share the categories they used to sort and how they organized their work.

Ask, "What different ways did you see other students organizing their work and keeping track of the categories?"

Say, "Discuss with your partner whether you could organize your work in a new way." Have pairs discuss for 1 minute before organizing their shapes in a new way, if they choose to do so.

Key Takeaway: Say, "Objects, such as shapes, can be organized into categories."

In the **Launch, Monitor, Connect** guidance, teachers will find ways to help students get started, suggested facilitation moves, and discussion questions.

The **Key Takeaway** is called out to highlight the learning goal of the activity and provide teachers with an example of how to frame the big idea of the activity for students.

The guidance for every activity includes a **Differentiation Teacher Moves** table to support teachers in meeting the needs of all students during the activity. This table can help teachers anticipate the ways students may approach the activity, and provides prompts that they can use during the lesson to **Support**, **Strengthen**, and **Stretch** individual students in their thinking.

Activities

Each lesson includes one or two activities. These activities are the heart of each lesson. Students notice, wonder, explore, calculate, predict, measure, explain their thinking, settle disputes, create challenges for their classmates, and more.

Guidance is provided to help teachers Launch, Monitor, and Connect students' thinking over the course of each activity. Teachers will also find suggestions for pacing, facilitation moves, discussion questions, examples of early student thinking, and ideas for students who may enjoy a challenge, as well as opportunities to build and develop the math community in their classroom.

Each **Lesson Practice** begins with a **Summary** of the big ideas in the lesson, often including a worked example. Students can highlight parts of the summary or share it with a caregiver or classmate.

Whole Class

5 min

Presentation Screen

Lesson 2 Synthesis

Synthesis

Lesson Takeaway:

Objects, such as shapes, can be sorted and organized into categories based on their attributes.

Ask, "How could these shapes be organized into categories?"

Play the animation. **ELPS 1.F**

Say, "Objects, such as shapes, can be sorted and organized into categories."

Invite students to refer to the **Summary** during Practice or anytime during the year.

Lesson Synthesis

Show What You Know (Optional)

Independent | 5 min

Show What You Know PDF

Today's Goals

1. Goal:

Sort images into 3 categories.

2. Goal:

Represent the amount in each category.

In Problem 2 in the Show What You Know, students counted how many shapes are in each category.

3. Language Goal:

Describe what is included in a data representation that shows how images were sorted. **(Listening and Speaking) ELPS 1.E, 2.B**

In Problem 1 in the Show What You Know, students described how images were sorted.

Differentiation

See the last page of the lesson for differentiation and Math Language Development support.

Lessons conclude with an opportunity for students to reflect on the main learning goals and “show what they know.” This is a great way for both students and teachers to access a formative check for understanding. The Show What You Know is optional in Kindergarten–Grade 1.

Practice Independent

Provide students with sufficient practice to build and reinforce their conceptual understanding, fluency, and application of mathematical topics including connections to assessment practice, and ongoing spiral review.

Students using print

Summary 1.01

Objects can be organized into categories and represented with pictures, symbols, numbers, or words to make information clear for others to understand.

Category 1

Category 2

Practice 1.02

You'll play this Center.

Shake and Spill

Which is More?

Let's compare.

Practice 1.02

Spiral Review

For Problems 4–6, write the number that shows how many dots.

4

5

6

For Problems 7–9, write the number that shows how many cubes.

7

8

9

Practice Problem Item Analysis

Problem(s) DOK TEKS

On-Lesson

1 2 1.8.A*

3 2 1.8.A

2 1 1.8.A*

Spiral Review

Fluency

4–9 1 K.2.B

K.2.C

Need more Practice?

Additional practice can be found in the Practice Resources, Intervention and Extension Resources, and online resources (Item banks, Boost Personalized Learning, and Fluency Practice).

A **Practice Problem Item Analysis** table breaks down the problems by type, Depth of Knowledge (DOK), and corresponding standards.

Synthesis

The Synthesis is an opportunity for the teacher and students to pull all the learning of the lesson together into a lesson takeaway. Students engage in a facilitated discussion to consolidate and refine their ideas about the learning goals, and the teacher synthesizes students' learning.

Lesson Practice

Daily practice problems for the day's lesson are included in the print Student Edition, including Fluency and Spiral Review.

Kindergarten

xxiii

Navigating This Program

Stretch lists challenge opportunities for students who are ready to extend their learning.

Professional Learning callouts feature questions and prompts designed to help teachers reflect on how students' thinking developed over the course of the lesson.

A **Differentiation** table suggests specific teacher moves and resources to support students' understanding based on their responses to assessment problems.

Each unit typically includes one or two Sub-Unit Quizzes. Quizzes are designed for students to show what they know and can do based on what they have learned so far in the unit. Each unit includes Assess and Respond guidance for the Sub-Unit Quizzes and End-of-Unit Assessment.

Facilitating Lesson Activities

Launch, Monitor, Connect

Amplify Desmos Math Texas is designed with a structured approach to problem-based learning that systematically builds on students' curiosity. Students are first invited to explore problems that create an intellectual need for new mathematical ideas. Then the teacher builds on strategies used by students and connects their ideas to the learning goals of the lesson. This approach is an interpretation of Smith and Stein's 5 Practices for Orchestrating Productive Mathematics Discussions.

1 Launch



The Launch is a short, whole-class conversation that creates a need or excitement, provides clarity, or helps students connect to their prior knowledge or personal experience, which ensures that everyone has access to the upcoming work.

Considerations for Launching

- Try to keep it short. Set students up to get started with a clear and catchy invitation to the math.
- Don't model a specific way to solve. Leave space for a variety of different student approaches.
- Pair up. Encourage small groups of students to talk through their thinking as they work.

2 Monitor



As students work individually, in pairs, or in groups, teachers explore students' thinking, ask questions, and provide support to help move the conversations closer to the intended math learning goal.

Considerations for Monitoring

- Look for students' strategies and check in with students as they work.
- Ask questions to learn what students are thinking. The suggested differentiation moves can be used to support, strengthen, and stretch their ideas.
- Use the Differentiation Teacher Moves table to help select and sequence students' ideas to highlight during the Connect discussion.

3 Connect



Teachers connect students' ideas to the key learning goals of the lesson, facilitating class discussions that help students synthesize and solidify the big ideas.

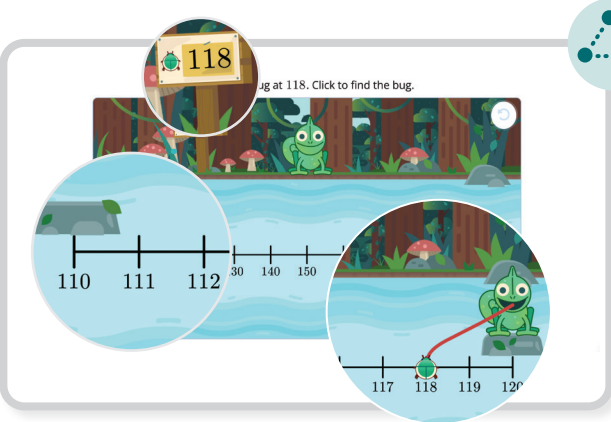
Considerations for Connecting

- Save a few minutes at the end of each lesson activity to bring students back together to discuss.
- As soon as you find you're ready to have discussions about common strategies, bring the class back for the connect. Often, this is before all students have finished on work.
- Students will be able to contribute to the discussion and learn from their classmates based on their in-progress work.
- Center discussions on students' ideas by displaying one or more of their responses and connecting the responses to the Key Takeaway of the activity.

🕒 **Considerations for Pacing:** Pacing will vary by activity. Teachers can typically plan on spending 1–3 minutes for the Launch and 5–8 minutes for the Connect, and the remainder for the Monitor depending on the suggested length of the activity.

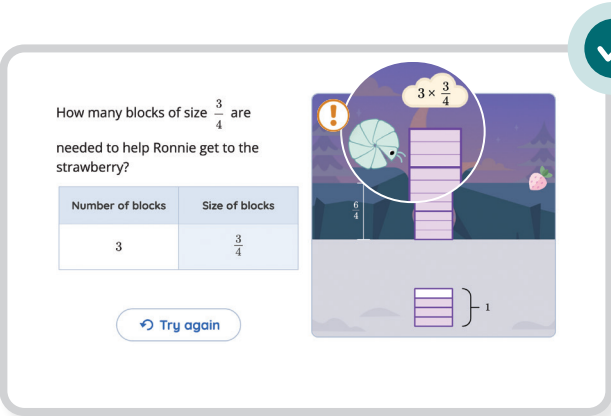
The Power of Digital

Lessons include visual and dynamic interactions that pique students’ interest and invite all students to engage in the mathematics. The embedded interactions and animations allow students to test predictions, get feedback, share ideas, and connect representations.



Delightful, engaging interactions

The digital interactions included in the lesson activities are designed to elicit students’ thinking in a way that feels fun and inviting. As students play and explore math concepts, teachers can highlight the ideas that students share, connect those ideas to other students’ ideas, and build on their thinking through productive class discussion.



Responsive Feedback™

In Amplify Desmos Math Texas, students are invited to try their thinking out — even if that thinking is still in the “rough draft” phase. As students interact with the digital screens, they see visuals and simulations that respond faithfully to their inputs. This meaningful feedback allows students to experience the joy of causing the animation to react to their mathematical ideas. As a result, students may notice interesting things about both correct and incorrect answers more readily.

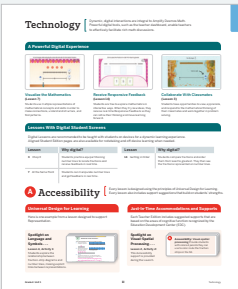


Social, collaborative experiences

Digital tools allow students to interact with each other’s ideas in a variety of ways. Students can use the “Share With Class” button to exchange ideas with each other directly on an activity screen. Activities like Challenge Creator and Polygraph offer fun ways for students to play with the math together. Whether working solo or in tandem on devices, students are never alone as they work through activities.

Digital Lesson Recommendations

Check out the Technology page at the beginning of every unit to learn which lessons are recommended to be taught with students using devices for a dynamic learning experience. Lessons with digital student screens have been carefully selected, and the amount of these lessons increases developmentally across grade levels. If needed, aligned Student Edition pages are also available for notetaking and offline learning.

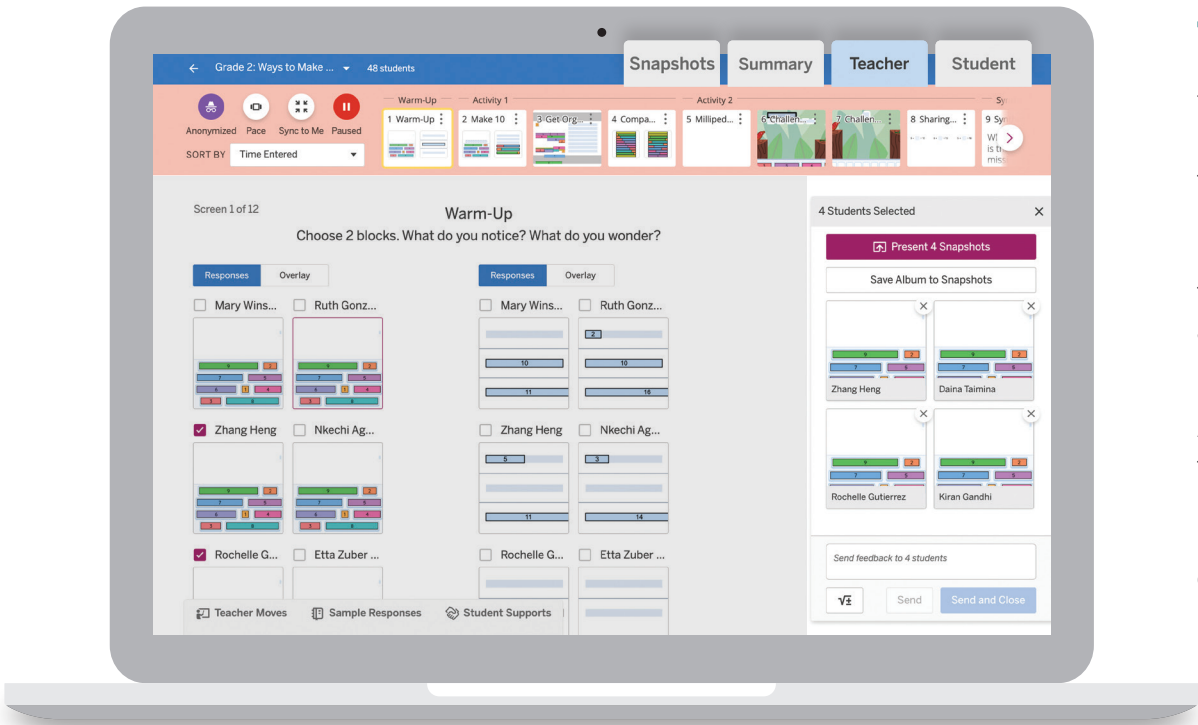


Presentation Screens

Print lessons also benefit from the power of digital. Teachers display Presentation Screens that include important animations and interactions to help guide and facilitate students’ learning.

Digital Facilitation Tools

Amplify Desmos Math Texas includes a suite of digital facilitation tools for lessons that are recommended to have students using devices. These tools foster collaborative classrooms and help teachers share their students' thinking.



Teacher Dashboard

The dashboard gives the teacher insight into students' thinking in real time. Teachers can zoom in on a particular student or view all students' responses at once. This can help to identify students that may need additional support and those who are ready for extensions.

After reviewing students' thinking, teachers can select and display specific ideas or the distribution of responses to invite students into productive, student-centered discussions.

Snapshot View

Select and sequence students' work to connect mathematical ideas. Teachers can even add their own questions to prompt further thinking.

Summary View

Monitor students' progress or accuracy for a set of screens. Click into any box to see a specific student's work on that screen.

Teacher View

Answer questions such as:





- How did all students answer this question?
- What answers were most common?

Student View

Preview screens for students. For example, the teacher might work through a screen with the class or talk through upcoming screens before students work on their own.

A powerful conversation toolkit

Pacing, pausing, and sync tools can support teachers as they encourage mathematical discourse and collaborative thinking in their classes.

-  **Anonymize** swaps out students' names to help them feel more comfortable sharing their ideas. Students' names are replaced by the names of famous mathematicians, with a special emphasis toward mathematicians with diverse backgrounds.
-  **Pace** allows the teacher to make a certain number of screens available for students to work on.
-  **Sync to Me** enables the teacher to bring all students to the same screen.
-  **Pause** stops students from working so that the teacher can gather everyone's attention for discussion.

A screenshot of the Amplify Desmos Math Texas Teacher Dashboard showing a table of student responses. The table has columns for student names and their answers to various questions. The 'Warm-Up' section is active, showing a table with 8 rows of student names and their answers. The 'Activity 1' section is also visible, showing a table with 5 rows of student names and their answers. The 'Activity 2' section is also visible, showing a table with 5 rows of student names and their answers. The table is titled 'Grade 2: Ways to Make ...' and '48 students'.

Instructional Routines

Instructional routines that are used repeatedly create efficiencies for teachers so that they can attend to student thinking and communicate what is important in their classroom. Instead of focusing on the directions of an activity, students can focus on making sense of and communicating about the math.



Here are some examples:

- The **Which One Doesn't Belong?** routine communicates to students that their ideas have value, that there are many ways to be correct in math, and that they can learn math by sharing their math thinking with each other.
- The **Stronger and Clearer Each Time** routine communicates the importance of feedback and creates an opportunity for students to learn from each other as they construct and refine their viable arguments.

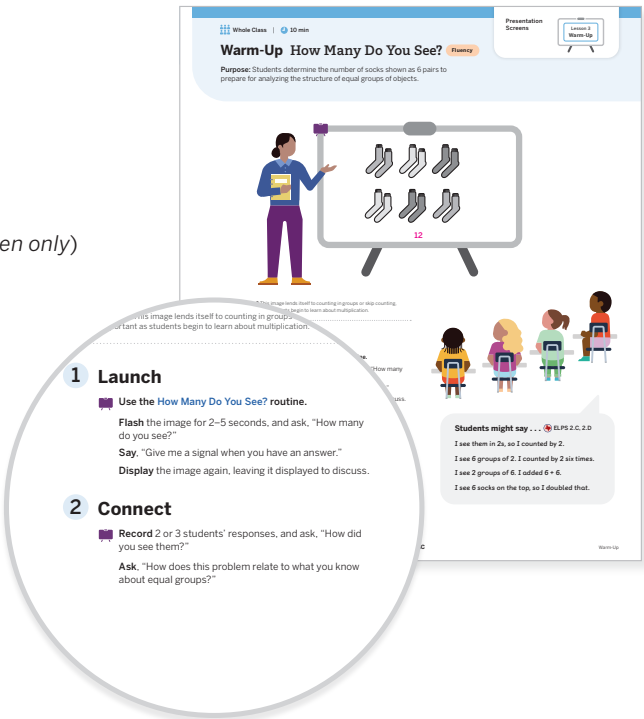
Each instructional routine included in an Amplify Desmos Math Texas lesson creates opportunities for conversations and supports meaningful discussion. Implementing these routines can be a practical tool for establishing a classroom learning community that values students' thinking.

Instructional Routines Embedded in the Curriculum

Instructional routines can be found throughout each lesson in the Teacher Edition. Here is a list of the instructional routines used in the Amplify Desmos Math Texas curriculum:

- **MLR1:** Stronger and Clearer Each Time
- **MLR2:** Collect and Display
- **MLR3:** Critique, Correct, Clarify (*Grades 2–5*)
- **MLR4:** Information Gap (*Grades 3–5*)
- **MLR5:** Co-Craft Questions
- **MLR6:** Three Reads
- **MLR7:** Compare and Connect
- **MLR8:** Discussion Supports
- Choral Count
- Estimation Exploration
- Gallery Tour
- How Many Do You See?
- Mix and Mingle
- Notice and Wonder
- Number Talk
- Stories and Questions (*Kindergarten only*)
- Think-Pair-Share
- True or False?
- What Do You Know About ____?
- Which One Doesn't Belong?

Fluency Instructional Routines are used in many lesson warm-ups to help students build fluency skills. Because fluency requires repeated practice, fluency is also embedded in Centers, Lessons, Lesson Practice, and Fluency Practice cards.



Bringing Math to Life

Amplify Desmos Math Texas K–5 has two features specifically designed to increase active engagement in the math classroom.

Unit Stories

Every unit in Amplify Desmos Math Texas K–5 contains a **Unit Story**. These are brief fiction stories read aloud by the teacher at the beginning of each unit that introduce contexts and characters connected to the math of the unit. Unit Stories help students see themselves and their communities in math and see math as part of their identities and communities.

How do they work?

- Teachers read the story aloud from their Teacher Edition while presenting illustrations for students.
- Students get to know the characters, setting, and plot of the story, all of which they will encounter again across the unit. Students engage in the **Notice and Wonder** routine throughout the story and discuss how they see math in the story.
- Across the unit, the Unit Story context and characters are used at appropriate points to inspire and engage students in the math as well as in reflections about their math identity and community.

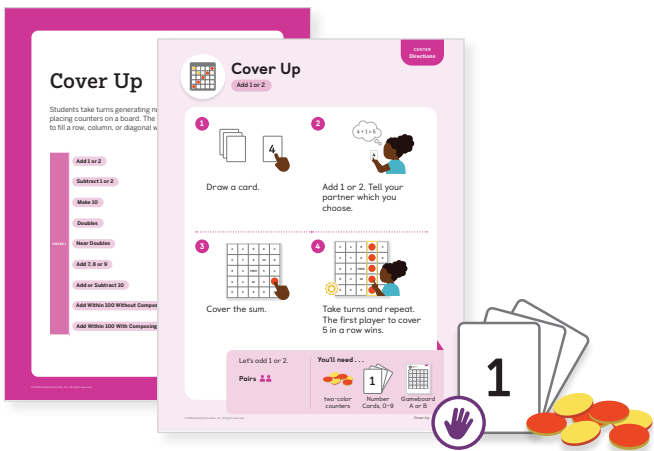


GAMES Centers

Centers in Amplify Desmos Math Texas help strengthen students' understanding of key skills and concepts through engaging, hands-on, 15-minute games for students to play collaboratively.

How do they work?

- Teachers have access to all Centers** from their grade level as well as all Centers from other grade levels.
- Work Mats and instruction cards are included in the **Centers Resources book** and in the optional **Centers Kit**. Manipulatives are included in the optional **Manipulative Kit**. Centers are designed for students to engage in with minimal teacher direction and support.
- Each Center has multiple stages** so that students return to the same Center game repeatedly within and across grade levels, with the content of the Center growing in complexity to align with grade-level standards in a scaffolded manner.



Daily Center Time

The last 15 minutes of the daily lesson is always Center Time. Depending on where the lesson falls in the learning trajectory, students will either:

- All be introduced to a new Center.
- Engage in Center Choice Time, choosing previously introduced Centers to revisit.

Centers as Activities

New Centers are strategically introduced to the whole class as one of the Lesson Activities.

Students return to these Centers in future Center Choice Times.

Differentiation

Each lesson lists one recommended Center teachers can use with small groups to strengthen their understanding of key learning goals.

- These are Centers that students have already been introduced to.
- Teachers can also use Centers after Assessments.

Accessibility

Amplify Desmos Math Texas is built to support all students in accessing and participating in meaningful and challenging learning. This support is incorporated into the curriculum structure, lesson-level guidance, and digital tools.

Universal Design for Learning

Each lesson incorporates opportunities for engagement, representation, action, and expression based on the guidelines of Universal Design for Learning (UDL). UDL is a research-based framework designed to ensure meaningful learning experiences for all students. ¹

Multiple Means of Engagement

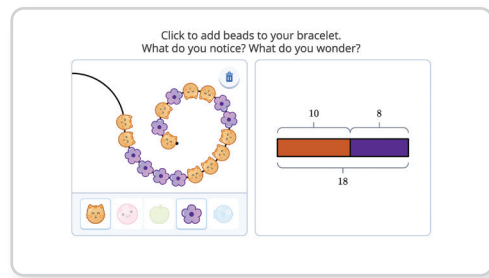
Individuals are each motivated in different ways, at different times, and in different contexts. Lessons are designed to welcome interests and identities, support sustaining effort and persistence, and develop emotional capacity.



Sustain Effort and Persistence: Students are invited to build their own challenge for other students to solve, which provides opportunities for choice and autonomy, as well as joy and play.

Multiple Means of Representation

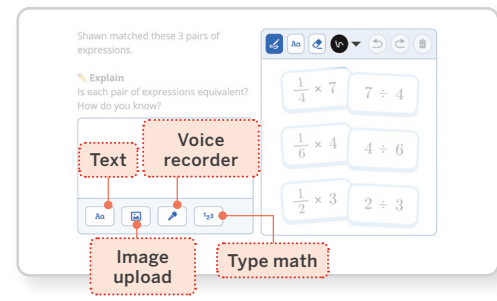
Learners make sense of information differently. Amplify Desmos Math Texas includes options for presenting information in multiple ways to support comprehension and understanding of language.



Cultivate Multiple Ways of Knowing and Making Meaning: Classes engage in open-ended discussions about what individual students notice and wonder about mathematical concepts.

Multiple Means of Action and Expression

Learners differ in how they navigate learning environments and express what they know. Amplify Desmos Math Texas ensures that materials and interactions are accessible, support multiple means of students' expression and communication, and scaffold executive functioning.



Support Multiple Means of Student Expression and Communication: Students can communicate their ideas in multiple ways, including sketching, uploading photos, or recording an audio response.

Lesson Facilitation Supports

Every lesson includes at least one specific suggestion the teacher can use to increase access to the lesson without reducing the mathematical demand of the tasks. These suggestions address the following areas:

- Conceptual Processing
- Visual-Spatial Processing
- Executive Functioning
- Memory and Attention
- Fine Motor Skills

A

Accessibility: Visual-Spatial Processing: Guide visualization by demonstrating the connections between the expression and the base-ten blocks. Use annotations, such as arrows and labels, to highlight the connections.

¹ <https://udlguidelines.cast.org/>

Accessibility Tools

With their teacher's support, students have the ability to use accessibility tools on their device to customize the learning experience to their individual student needs.

Text to speech: Use the screen reader on a student's device to read text instructions to students in multiple languages, including narration of digital interactions.

Font: The font used in our elementary program is a large font that has easier-to-read text styling.

Zoom: Students can zoom the page using their device zoom options to make the text and images larger.

Language selection: Toggles between languages.

Differentiation

Differentiation in Amplify Desmos Math Texas enables teachers to ensure all students have access to grade-level math content. This support is organized for teachers into three categories:

S Support	S Strengthen	S Stretch
Provide targeted intervention for students by using these resources.	Reinforce students' understanding of the concepts assessed by using these resources.	Challenge students and extend their learning with these resources.

Differentiation: In-Lesson Teacher Moves

Within every lesson activity, teachers can use the **D Differentiation Teacher Moves** suggestions to provide **in-the-moment instructional support** to learners as they engage in the work of the lesson.

Teachers are provided with clear student actions and understandings to look for, each matched with immediately usable suggestions for how to respond to the student thinking illustrated in each row of the table.

In addition to using these suggestions in the moment as teachers monitor student work, teachers can review the Differentiation table in advance to help them anticipate how students are likely to approach the activity.

D Differentiation Teacher Moves		
Look for students who ...	For example ...	Provide support ...
Use their fingers to find the missing addend.	I can count the amount I know, 1, 2, 3, 4, 5, 6, 7, 8. Then I have 2 fingers left, 9, 10. So, 2 is the number that will make 10.	Strengthen Ask, "Where do you see the amount you know in the blocks or in the equation?"
Count on or count back to find the missing addend.	I have 8, so I can count 2 more: 9, 10. or I need 10, so I can count back 2 to get to 8: 9, 8.	
Use a known fact to find the missing addend.	I know $2 + 8 = 10$, so I know $8 + 2 = 10$. or I know $9 + 1 = 10$, so I know $8 + 2 = 10$.	Stretch Ask, "Why might it be helpful to know pairs that make 10?"

Differentiation: Beyond the Lesson

In each lesson, students' understanding of the learning goals is broken down for teachers into three categories: students who need support to understand the learning goals, students who need to continue strengthening their understanding of the learning goals, and students who are ready to stretch their learning.

Each **Support**, **Strengthen**, and **Stretch** resource is designed to take 15 minutes:

- **Mini-Lessons:** Targeted intervention for students who need additional support or need more time.
- **Centers:** Collaborative hands-on games.
- **Extensions:** Small group or independent challenges.



Teachers can also assign digital resources to Support, Strengthen, and Stretch student learning: **Boost Personalized Learning**, **Fluency Practice**, and **Math Adventures**.

- » Amplify Desmos Math Texas includes digital, adaptive practice that provides the personalized support students need to access grade-level math every day.
- » Boost Personalized Learning activities target a skill or concept aligned to the unit, with each student receiving personalized scaffolds based on what they already know.

D Differentiation: Assess and Respond

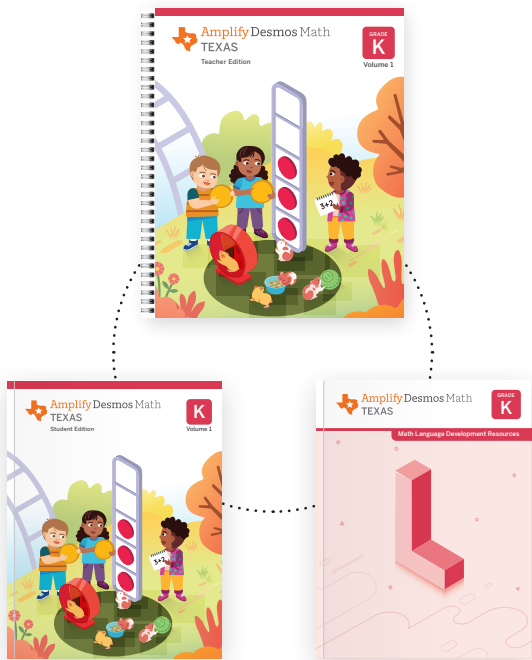
At each Assessment point in a unit, teachers have the opportunity to respond to students' understanding. For each assessment item, teachers are provided with clear suggestions for how to support students who are showing they need intervention. Based on the assessment, students who are ready to strengthen or stretch their learning can access any of the strengthen or stretch resources aligned to the content of the assessment.

Supporting Students' Math Language Development

Follow the throughline of Amplify Desmos Math Texas integrated system of math language development shown on these pages with a Grade 1 example.

Math language acquisition and development benefits all students, including Emergent Bilinguals. Amplify Desmos Math Texas is designed with an integrated system of math language acquisition and development that utilizes the following:

- **Point-of-use lesson-level language supports** in the Student and Teacher Editions and *Math Language Development Resources*.
 - ✓ Diagrams and visuals
 - ✓ Sentence frames and word banks
 - ✓ Graphic organizers, including Frayer models
 - ✓ Vocabulary routines
 - ✓ Embedded language supports aligned to the ELPS
- **Unit-level language supports** in the Teacher Edition and *Math Language Development Resources*.
 - ✓ Words With Multiple Meanings
 - ✓ Vocabulary Cards in all grades, including Greek and Latin word histories in Grades 4 and 5
 - ✓ Contextual vocabulary
- **Course-level language supports** in the Teacher Edition and *Math Language Development Resources*.
 - ✓ English/Spanish cognates
 - ✓ Pronunciation and spelling support



Teacher Edition

Each lesson is designed around a targeted **Language Goal**.

Key Concepts

- **Today's Goals**
 1. **Goal:** Represent and solve addition story problems.
 2. **Language Goal:** Tell story problems that match add and speaking) ELPS 1.E, 2.D, 2.E

At the Aquarium

Generating Addition Stories from Equations

Let's use our new development addition story problems.

Key Concepts

- **Today's Goals**
 - 1. Represent and solve addition story problems.
 - 2. Tell story problems that match add and speaking) ELPS 1.E, 2.D, 2.E

Connections and Cohesion

Students use a visual model to represent the problem. They identify the key information in the problem and use it to write the equation. They use the equation to solve the problem and check their work.

Form Learning

Students use a visual model to represent the problem. They identify the key information in the problem and use it to write the equation. They use the equation to solve the problem and check their work.

Form Learning

Students use a visual model to represent the problem. They identify the key information in the problem and use it to write the equation. They use the equation to solve the problem and check their work.

Integrating Rigor in Student Thinking

Students use a visual model to represent the problem. They identify the key information in the problem and use it to write the equation. They use the equation to solve the problem and check their work.

Building Math Identity

Students use a visual model to represent the problem. They identify the key information in the problem and use it to write the equation. They use the equation to solve the problem and check their work.

Grade 1, Unit 1, Lesson 7
Lesson Overview

The Lesson at a Glance **Math Language Development** section provides an overview of the proficiency-levelled scaffolds and supports for a targeted activity in the lesson. The targeted activity is aligned to the lesson's Language Goal.

Math Language Development

Emergent Bilinguals

Consider using the Math Language Development Resources with Activity 2, Monitor to support math language acquisition.

- ✓ Cognates
- ✓ Sentence frames and word bank

ELPS 1.B, 1.E, 2.B, 2.C, 2.D, 2.E, 2.F

Pre-Production

Students listen to spoken English and respond using their primary languages and gestures.

Beginning

Students listen to spoken English and speak using their primary languages, gestures, and single words or short phrases.

Intermediate

Students listen to spoken English and speak using short phrases or simple sentences.

High Intermediate

Students listen to spoken English and speak using a variety of sentence types.

Advanced

Students listen to spoken English and speak using longer sentences and complex sentences.

Lesson at a Glance

Warm-Up (5 min) | Q 1 min

Activity 1 (10 min) | Q 1 min

Activity 2 (10 min) | Q 1 min

Exit Ticket (5 min) | Q 1 min

Reflection (5 min) | Q 1 min

Grade 1, Unit 1, Lesson 7
Lesson at a Glance

Teacher Edition (continued)

Embedded **Math Language Routines (MLRs)** and scaffolds and supports for **Emergent Bilinguals** are provided and aligned to the Texas English Language Proficiency Standards (ELPS).

For the activity targeted on the Lesson at a Glance page, refer to the *Math Language Development Resources* for proficiency-leveled scaffolds and supports that are also aligned to the ELPS.

MLR6: Three Reads
Read aloud Problem 2 with students.
• **Read 1:** Ask, "What is this story about?"
• **Read 2:** Ask, "What amount are we looking for?"
• **Read 3:** Ask, "What amount pairs for 2–3 minutes to solve?"

Emergent Bilinguals: Help by moving 2 hands toward the total. **ELPS 1.B**

Grade 1, Unit 1, Lesson 7, Activity 1

Grade 1, Unit 1, Lesson 7, Activity 2

Student Edition

In **Hands-On** activities, students use physical manipulatives to support conceptual understanding. Many **Discuss** prompts contain sentence frames for all students.

The **Summary** includes definitions for **vocabulary terms**.

Hands-On
Use the Mat and connect cubes to act out the story problem. Tell your partner how many fish are in the aquarium. How many fish are in the aquarium? equation: $4 + 4 = 8$

Discuss
Listen to your partner's story problem. Does the equation match the story problem? If not, how can you change the equation to match the story problem?

Grade 1, Unit 1, Lesson 7, Activity 1

Grade 1, Unit 1, Lesson 7, Activity 2

Summary 1.07
Addition can be represented with story problems, objects, pictures, or equations.

Practice 1.07
Choose from these Centers.

Counting Collections
Shake and Spill
Shake and Spill

Grade 1, Unit 1, Lesson 7, Summary

Math Language Development Resources

Some of the scaffolds provided for point-of-use support include **sentence frame structures** for speaking and writing, **visuals** for contextual and content vocabulary, **English/Spanish word banks**, **Frayer models**, and other graphic organizers.

Teacher support is provided including **English/Spanish cognates**, **ELPS alignment**, and **proficiency-leveled supports** (Pre-Production, Beginning, Intermediate, High Intermediate, and Advanced).

Grade 1, Unit 1, Lesson 7, Activity 2

Proficiency-leveled ELPS Support

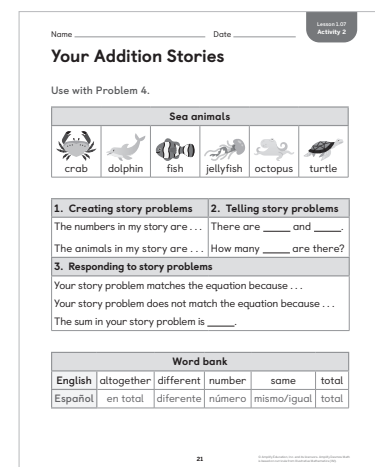
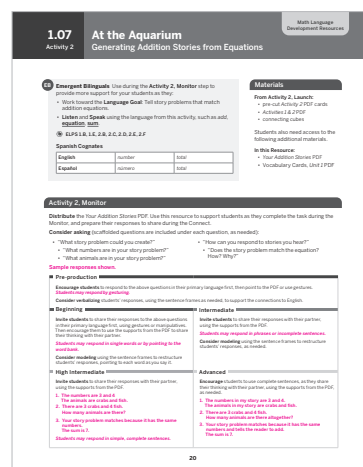
Language support aligned to the 5 ELPS proficiency levels are found in the *Math Language Development Resources*.

Amplify Desmos Math Texas math language support is built with the Texas English Language Proficiency Standards (ELPS) in mind. One activity in each lesson is paired with additional language support located in the *Math Language Development Resources*. These scaffolds and supports are designed for targeted language moments of listening, speaking, reading and/or writing within each Student Edition lesson, provided for each of the 5 ELPS proficiency levels. Pronunciation support and Greek and Latin word histories (Grades 4 and 5) are also provided at the unit level using the Vocabulary Cards.

ELPS Proficiency Levels

- Pre-Production
- Beginning
- Intermediate
- High Intermediate
- Advanced

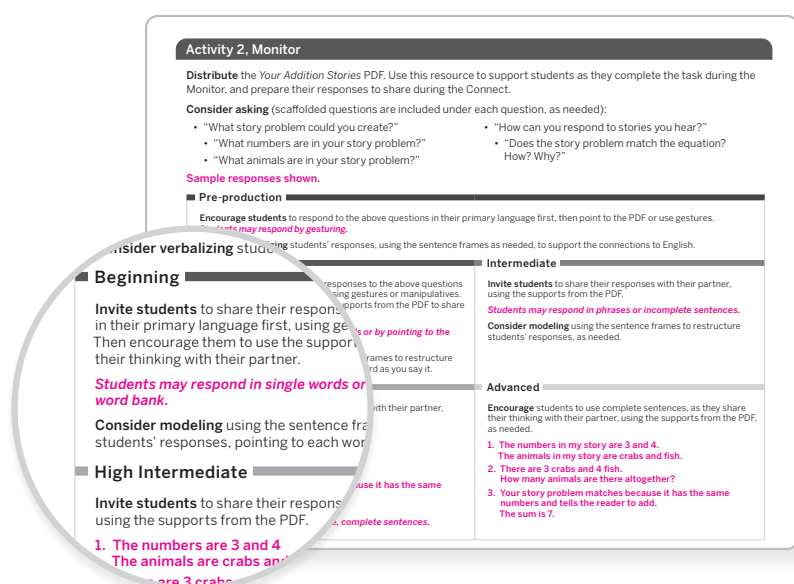
Support students in the selected activity by using the *Math Language Development Resources*. Each page provides ELPS-proficiency-leveled support using visuals, sentence frames, word banks, and graphic organizers. Discussion prompts for each level are provided. Consider asking your students to respond to these prompts to help them build math language acquisition and comprehension.



Grade 1, Unit 1, Lesson 7, Activity 2, *Math Language Development Resources*

Sample Leveled Supports at Each Proficiency Level

- Pre-Production:** Look for students to respond with gestures or their primary language as they develop receptive language. Consider using the sentence frames provided on the Student page to support connections to English by verbalizing their responses.
- Beginning:** Look for students to respond using single words or phrases using 2 or 3 words as they engage in the beginnings of expressive language.
- Intermediate:** Look for students to respond in short phrases or simple sentences as they demonstrate literal comprehensions with receptive and expressive language.
- High Intermediate:** Look for students to respond using a variety of sentence types and simple, complete sentences as they demonstrate both literal and abstract comprehension.
- Advanced:** Look for students to engage and respond using longer, complete sentences in English with a variety of grammatical structures and little to no linguistic support.

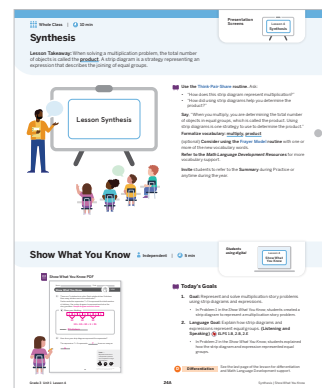


More Language Support

Additional language support is provided in the Teacher Edition and *Math Language Development Resources*.

Lesson-Level Supports

- During the Synthesis of lessons in which new vocabulary terms are formalized, suggestions for utilizing **Vocabulary Routines** are provided in the Teacher Edition. Refer to the Vocabulary Routines pages in the *Math Language Development Resources* for descriptions of these routines and alignment to the ELPS.



Grade 3, Unit 1, Lesson 4

When you multiply, you are using objects in equal groups, which is one strategy to use a strip diagram is one strategy to use a

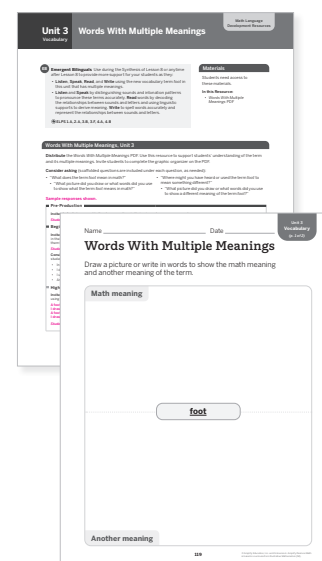
Formalize vocabulary: multiply, product (optional) Consider using the **Frayer Model** more of the new vocabulary words.

Refer to the Math Language Development Resources for more of the new vocabulary words.

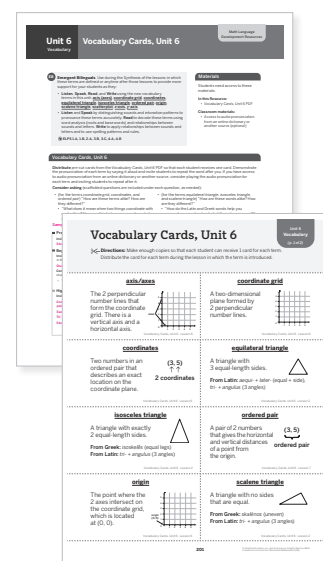
Invite students to refer to the Summary anytime during the year.

Unit-Level Supports

- A list of the **contextual vocabulary** used in each unit is provided on the Vocabulary of the Unit page in the Unit Overview of the Teacher Edition.
- To support students' understanding of words that may have multiple meanings, use the **Words With Multiple Meanings** pages provided in the *Math Language Development Resources*. Teacher support, including suggestions for implementation, is provided. **ELPS 1.B, 1.D, 2.B**
- To support students' understanding of new vocabulary terms, use the **Vocabulary Cards** provided in the *Math Language Development Resources*. In Grades 4 and 5, for vocabulary terms with Greek and Latin roots and word histories, those are provided on the vocabulary cards. Teacher support, including suggestions for implementation, is provided. **ELPS 1.A, 2.A, 3.B, 3.F, 4.A, 4.B**



Grade 2, Unit 3



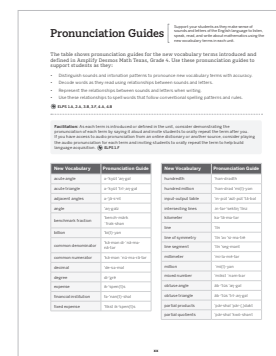
Grade 5, Unit 6

Course-Level Supports

- A list of the **English/Spanish Cognates** for each grade is provided in the *Math Language Development Resources*. **ELPS 1.B, 2.A, 3.B, 3.C, 3.D**
- Pronunciation Guides** are provided in the *Math Language Development Resources*, including suggestions for implementation. Use these guides to demonstrate the relationships between sounds and letters to support students as they listen to comprehend, speak to express using accurate pronunciations, read by decoding, and write using spelling patterns and rules for new vocabulary terms. **ELPS 1.A, 2.A, 3.B, 3.F, 4.A, 4.B**



Grade 4, English/Spanish Cognates



Grade 4, Pronunciation Guide

Program Assessments

A variety of performance data in Amplify Desmos Math Texas provides evidence of student learning while helping students bolster their skills and understanding.

Throughout lessons, units, and the entire program, teachers will find summative and formative assessments meant to provide insights into students’ conceptual understandings. Student learning is never a surprise at the end of a unit — with Amplify Desmos Math Texas, understanding is made continually visible.

Amplify Desmos Math Texas Reporting offers insightful and actionable data to help teachers understand their students’ strengths, create grades, and modify instruction.

Lesson-Level Assessments

Amplify Desmos Math Texas lessons are centered around sense-making and in-the-moment feedback. Daily moments of assessment provide insights into students’ understandings of concepts and skills.



Show What You Know (Optional)

Each lesson has a daily formative assessment focused on one of the **key concepts** in the lesson. Show What You Know moments are opportunities for students to show their teacher what they understand and what they are still learning.

Unit-Level Assessments

Our **embedded unit assessments** offer key insights into students’ conceptual understanding of math. These assessments provide regular, actionable information about how students are thinking about and processing math.



Pre-Unit Check

Each unit begins with a check to determine students’ **proficiency** with **prerequisite skills** that are helpful for success in the upcoming unit. This check serves as an affirmation of the knowledge and skills with which students come into the unit. **Suggestions for supports** students may need as they engage in the unit are provided.



Sub-Unit Checklists

Sub-Unit Checklists enable teachers to observe key skills and concepts that cannot be assessed on a pencil-and-paper assessment. The checklists outline the supports students need to get where they need to go.



End-of-Unit Assessment

Students engage with rigorous grade-level mathematics through a variety of formats and tasks in the End-of-Unit Assessment. These formats provide deep insight into students’ learning of skills and concepts.

Course-Level Assessments

The asset-based digital **mCLASS Assessments** system measures proficiency, reveals underlying mathematical thinking, and informs instructional support for every learner. A brief, yet powerful **Beginning-of-Year Screener** is provided when full access to mCLASS is not included. This screener helps target intervention areas and identify specific areas of strength and development to inform differentiation.

Texas Essential Knowledge and Skills (TEKS), Kindergarten

The following shows the alignment of Amplify Desmos Math Texas to the Texas Essential Knowledge and Skills (TEKS) for Kindergarten.

K.1 Mathematical process standards		Lesson(s)
The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:		
K.1.A	Apply mathematics to problems arising in everyday life, society, and the workplace;	Unit 1: Lessons 11–13 Unit 2: Lessons 1, 8 Unit 3: Lessons 1, 12, 17 Unit 4: Lessons 1, 7 Unit 5: Lesson 1 Unit 6: Lesson 1 Unit 7: Lessons 1, 2, 7–9
K.1.B	Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution;	Unit 2: Lesson 1 Unit 3: Lesson 1 Unit 4: Lesson 11 Unit 5: Lessons 1, 6, 7 Unit 6: Lessons 1–3 Unit 7: Lessons 1, 8
K.1.C	Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems;	Unit 1: Lessons 3, 5–10, 14–16, 18 Unit 4: Lessons 11, 12, 18, 19 Unit 5: Lessons 7, 13, 15 Unit 6: Lessons 2, 3 Unit 7: Lessons 3, 6
K.1.D	Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;	Unit 1: Lessons 9–11, 17 Unit 2: Lessons 4–6, 11, 13–16 Unit 3: Lessons 14, 17 Unit 4: Lessons 6, 7, 12, 16, 17, 19, 20 Unit 5: Lessons 1, 6, 8, 10–15 Unit 6: Lessons 2, 4, 5, 9, 10, 12 Unit 7: Lessons 3, 10–14
K.1.E	Create and use representations to organize, record, and communicate mathematical ideas;	Unit 1: Lessons 1, 2, 4, 9, 10, 17 Unit 2: Lessons 2, 12, 14–16, 19, 22 Unit 3: Lesson 11 Unit 4: Lessons 8, 9, 12, 13–15, 20 Unit 5: Lessons 2, 8–10, 13, 15 Unit 6: Lessons 1, 5, 120 Unit 7: Lessons 10–14

Texas Essential Knowledge and Skills (TEKS), Kindergarten (continued)

K.1.F	Analyze mathematical relationships to connect and communicate mathematical ideas; and	Unit 1: Lesson 14 Unit 2: Lessons 3, 7, 16–18, 21, 22 Unit 3: Lessons 1–9, 16 Unit 4: Lessons 2–6, 9–20 Unit 5: Lessons 3–5, 7, 8, 11–14 Unit 6: Lessons 1, 4, 6–8, 10–12 Unit 7: Lessons 1–3, 5, 13, 14
K.1.G	Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	Unit 2: Lessons 3–6, 9–11, 13, 20 Unit 3: Lessons 4–7, 10, 11, 13–16 Unit 4: Lessons 2, 5, 6, 9, 10, 12, 13, 19 Unit 5: Lessons 1–7, 9, 10, 12–15 Unit 6: Lessons 3, 4, 6, 8–12 Unit 7: Lessons 3–5, 7, 9, 10
K.2 Number and operations.		Lesson(s)
The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system. The student is expected to:		
K.2.A	Count forward and backward to at least 20 with and without objects;	Unit 1: Lessons 2, 4, 13–18 Unit 2: Lessons 2, 18, 20, 21 Unit 3: Lessons 5, 8, 15 Unit 4: Lessons 3, 4, 13, 14, 2 Unit 5: Lesson 10 Unit 6: Lessons 2–5, 7, 8, 12
K.2.B	Read, write, and represent whole numbers from 0 to at least 20 with and without objects or pictures;	Unit 1: Lessons 9, 10, 13, 14, 17 Unit 2: Lessons 2, 7, 12, 13, 15–19, 21, 22 Unit 3: Lessons 5, 8, 13 Unit 4: Lessons 3, 5–7 Unit 5: Lessons 11, 13, 14 Unit 6: Lessons 3, 5–10, 12 Unit 7: Lesson 5
K.2.C	Count a set of objects up to at least 20 and demonstrate that the last number said tells the number of objects in the set regardless of their arrangement or order;	Unit 1: Lessons 13–18 Unit 2: Lessons 2–16 Unit 3: Lessons 5, 13 Unit 4: Lessons 2–4 Unit 5: Lesson 11 Unit 6: Lessons 2, 3, 5–7, 12 Unit 7: Lesson 5

K.2.D	Recognize instantly the quantity of a small group of objects in organized and random arrangements;	Unit 1: Lessons 6–11, 17 Unit 2: Lessons 2, 4–6, 13–16 Unit 3: Lessons 14, 16, 17 Unit 4: Lessons 6, 7 Unit 5: Lessons 11, 13 Unit 6: Lessons 4, 5
K.2.E	Generate a set using concrete and pictorial models that represents a number that is more than, less than, and equal to a given number up to 20;	Unit 1: Lessons 11–14 Unit 2: Lessons 2, 5, 11, 14, 15, 17, 18, 22 Unit 5: Lesson 11 Unit 6: Lessons 6, 10 Unit 7: Lesson 5
K.2.F	Generate a number that is one more than or one less than another number up to at least 20;	Unit 2: Lesson 18 Unit 4: Lesson 19 Unit 6: Lessons 8, 11
K.2.G	Compare sets of objects up to at least 20 in each set using comparative language;	Unit 2: Lessons 4–6, 8–11, 19, 20 Unit 6: Lesson 9
K.2.H	Use comparative language to describe two numbers up to 20 presented as written numerals; and	Unit 2: Lessons 21, 22 Unit 6: Lessons 11, 12
K.2.I	Compose and decompose numbers up to 10 with objects and pictures.	Unit 4: Lessons 2–4, 18 Unit 5: Lessons 2–15

K.3	Number and operations.	Lesson(s)
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The student applies mathematical process standards to develop an understanding of addition and subtraction situations in order to solve problems. The student is expected to:

K.3.A	Model the action of joining to represent addition and the action of separating to represent subtraction;	Unit 4: Lessons 2–12, 17–20 Unit 5: Lessons 6–10, 13 Unit 6: Lesson 12 Unit 7: Lessons 5, 6
K.3.B	Solve word problems using objects and drawings to find sums up to 10 and differences within 10; and	Unit 4: Lessons 10–15 Unit 5: Lessons 7–10 Unit 7: Lesson 6
K.3.C	Explain the strategies used to solve problems involving adding and subtracting within 10 using spoken words, concrete and pictorial models, and number sentences.	Unit 4: Lessons 10–13, 15, 18, 19, 2 Unit 5: Lessons 3, 7, 8, 12, 13, 14 Unit 7: Lessons 5, 6, 14

K.4	Number and operations.	Lesson(s)
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The student applies mathematical process standards to identify coins in order to recognize the need for monetary transactions. The student is expected to:

K.4	Identify U.S. coins by name, including pennies, nickels, dimes, and quarters.	Unit 3: Lessons 13, 14
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Texas Essential Knowledge and Skills (TEKS), Kindergarten (continued)

K.5 Algebraic reasoning.		Lesson(s)
The student applies mathematical process standards to identify the pattern in the number word list. The student is expected to:		
K.5	Recite numbers up to at least 100 by ones and tens beginning with any given number.	Unit 3: Lessons 5, 8, 15 Unit 4: Lessons 3–5, 13, 20 Unit 5: Lessons 8, 10, 15 Unit 6: Lessons 2, 4, 11, 12 Unit 7: Lessons 8, 13, 14
K.6 Geometry and measurement.		Lesson(s)
The student applies mathematical process standards to analyze attributes of two–dimensional shapes and three–dimensional solids to develop generalizations about their properties. The student is expected to:		
K.6.A	Identify two-dimensional shapes, including circles, triangles, rectangles, and squares as special rectangles;	Unit 3: Lessons 6–11
K.6.B	Identify three-dimensional solids, including cylinders, cones, spheres, and cubes, in the real world;	Unit 7: Lessons 2, 4
K.6.C	Identify two-dimensional components of three–dimensional objects;	Unit 3: Lesson 11 Unit 7: Lessons 3, 10
K.6.D	Identify attributes of two-dimensional shapes using informal and formal geometric language interchangeably;	Unit 3: Lessons 2, 4–7, 9–11
K.6.E	Classify and sort a variety of regular and irregular two- and three-dimensional figures regardless of orientation or size; and	Unit 3: Lessons 3, 5–7, 9 Unit 7: Lessons 3, 4, 10
K.6.F	Create two-dimensional shapes using a variety of materials and drawings.	Unit 3: Lessons 8, 10, 11 Unit 7: Lesson 5
K.7 Geometry and measurement.		Lesson(s)
The student applies mathematical process standards to directly compare measurable attributes. The student is expected to:		
K.7.A	Give an example of a measurable attribute of a given object, including length, capacity, and weight; and	Unit 7: Lesson 9
K.7.B	Compare two objects with a common measurable attribute to see which object has more of/less of the attribute and describe the difference.	Unit 3: Lessons 7, 8 Unit 7: Lessons 7–9
K.8 Data analysis.		Lesson(s)
The student applies mathematical process standards to collect and organize data to make it useful for interpreting information. The student is expected to:		
K.8.A	Collect, sort, and organize data into two or three categories;	Unit 3: Lessons 5, 13 Unit 7: Lessons 10–12
K.8.B	Use data to create real-object and picture graphs; and	Unit 7: Lessons 10–13
K.8.C	Draw conclusions from real-object and picture graphs.	Unit 7: Lessons 10, 11, 13, 14

K.9 Personal financial literacy.		Lesson(s)
The student applies mathematical process standards to manage one’s financial resources effectively for lifetime financial security. The student is expected to:		
K.9.A	Identify ways to earn income;	Unit 3: Lesson 16
K.9.B	Differentiate between money received as income and money received as gifts;	Unit 3: Lesson 16
K.9.C	List simple skills required for jobs; and	Unit 3: Lesson 17
K.9.D	Distinguish between wants and needs and identify income as a source to meet one’s wants and needs.	Unit 3: Lessons 15, 16

Texas English Language Proficiency Standards (ELPS)

The following shows the alignment of Amplify Desmos Math Texas to the Texas English Language Proficiency Standards (ELPS) for Kindergarten.

Student expectations – Listening.		Student Edition and Teacher Edition Lesson(s)	Math Language Development Resources
The EB student listens to a variety of speakers including teachers, peers, and multimedia to gain an increasing level of comprehension in all content areas. The EB student may be at the pre–production, beginning, intermediate, high intermediate, or advanced proficiency levels in listening. The student is expected to:			
1.A	Distinguish sounds and intonation patterns by responding orally, in writing, or with gestures.	Unit 2: Lessons 2, 4, 12, 18 Unit 3: Lessons 3, 4, 6–8, 10, 12, 17 Unit 4: Lessons 2, 5, 6, 13 Unit 5: Lesson 9 Unit 6: Lesson 2 Unit 7: Lessons 2–4, 6, 9, 10	<i>See also the Pronunciation Guides.</i> Kindergarten: Letters and Sounds, Putting Words Together Units 1–7: Vocabulary Cards
1.B	Demonstrate an understanding of content-area vocabulary when heard during formal and informal classroom interactions by responding with gestures or images, orally, or in writing.	Unit 1: Lessons 7–10 Unit 2: Lessons 2–5, 7, 8, 10–12, 18, 20 Unit 3: Lessons 2–8, 10–12, 15–17 Unit 4: Lessons 2–7, 13, 15 Unit 5: Lessons 2, 4, 6, 7, 11, 14, 15 Unit 6: Lessons 2, 3, 5–10 Unit 7: Lessons 1–12	Unit 3: Words With Multiple Meanings, Lessons 3–8, 10, 12, 15, 16, 17 Unit 4: Words With Multiple Meanings, Lessons 2, 5, 6, 13, 14, 15 Unit 5: Lesson 4 Unit 6: Lesson 2 Unit 7: Lessons 2–4, 7, 8–12
1.C	Follow oral directions with accuracy.	Unit 1: Lessons 1, 2, 3, 5, 7–10, 13, 14, 17 Unit 2: Lessons 1–5, 7, 9, 10–12, 18 Unit 3: Lessons 2–5, 7, 8, 10, 17 Unit 4: Lessons 2, 5, 6, 9, 13 Unit 5: Lessons 3, 7, 8, 10, 13, 15 Unit 6: Lessons 2, 3, 5, 6 Unit 7: Lessons 2–6, 9, 10	<i>Refer to the Student Edition and Teacher Edition for coverage of this standard.</i>
1.D	Use context to construct the meaning of descriptive language, words with multiple meanings, register, or figurative language such as idiomatic expressions, heard during formal and informal classroom interactions.	Unit 1: Lessons 11, 18 Unit 2: Lesson 9 Unit 3: Lessons 4, 5 Unit 4: Lessons 1, 14 Unit 5: Lesson 13 Unit 7: Lessons 6, 7	Unit 1: Lesson 18 Unit 3: Words With Multiple Meanings, Lesson 2 Unit 4: Words With Multiple Meanings, Lesson 1

1.E	Demonstrate listening comprehension from information presented orally during formal and informal classroom interactions by recalling, retelling, responding, or asking for clarification or additional details.	Unit 1: Lessons 1–18 Unit 2: Lessons 1–22 Unit 3: Lessons 1– 17 Unit 4: Lessons 1–20 Unit 5: Lessons 1–15 Unit 6: Lessons 1–12 Unit 7: Lessons 1–10, 12–14	Unit 1: Lessons 1–18 Unit 2: Lessons 1–22 Unit 3: Lessons 1, 3–17 Unit 4: Lessons 1–20 Unit 5: Lessons 1–15 Unit 6: Lessons 1–12 Unit 7: Lessons 1–14
1.F	Derive meaning from a variety of auditory multimedia sources to build and reinforce concepts and language acquisition.	<i>See also Boost Personalized Learning, available online under the Differentiation Beyond the Lesson tab.</i> Unit 1: Lessons 8, 13–17 Unit 2: Lessons 2–5, 10, 12, 14, 17, 20 Unit 3: Lessons 3, 7, 9, 10 Unit 4: Lessons 7–9, 19 Unit 5: Lessons 5, 8, 11, 14, 15 Unit 6: Lessons 2, 3, 6 Unit 7: Lessons 8, 14	<i>Refer to the Student Edition and Teacher Edition for coverage of this standard.</i>
Student expectations – Speaking.		Student Edition and Teacher Edition Lesson(s)	Math Language Development Resources
The EB student speaks using a variety of language structures for a variety of purposes with an awareness of different language registers (formal/informal) using vocabulary with increasing accuracy and fluency in all content areas. The EB student may be at the pre–production, beginning, intermediate, high intermediate, or advanced proficiency level of English language acquisition in speaking. The student is expected to:			
2.A	Produce sounds of newly acquired vocabulary such as long and short vowels, silent letters, and consonant clusters to pronounce words with accuracy.	<i>Refer to the Math Language Development Resources for coverage of this standard.</i>	<i>See also the Pronunciation Guides.</i> Kindergarten: Letters and Sounds, How Do You Say It? Units 1–7: Vocabulary Cards
2.B	Speak using content-area vocabulary during formal and informal classroom interactions to demonstrate acquisition of new words and high–frequency words.	Unit 1: Lessons 1, 5–10, 12, 14–18 Unit 2: Lessons 1–18, 20 Unit 3: Lessons 1–13, 15–17 Unit 4: Lessons 1–13, 15–19 Unit 5: Lessons 1–14 Unit 6: Lessons 1–3, 5–8, 10 Unit 7: Lessons 1–12	Unit 1: Lessons 1–17 Unit 2: Lessons 1–22 Unit 3: Words With Multiple Meanings, Lessons 3–17 Unit 4: Words With Multiple Meanings, Lessons 2–20 Unit 5: Lessons 1–15 Unit 6: Lessons 1–12 Unit 7: Lessons 1–14

Texas English Language Proficiency Standards (ELPS) (continued)

2.C	Speak using a variety of language and grammatical structures, sentence lengths and types, and connecting words.	Unit 1: Lessons 1–6, 10, 11, 13, 16–18 Unit 2: Lessons 1, 3–7, 11, 13–17, 19, 21, 22 Unit 3: Lessons 1, 3–7, 10–12, 14–17 Unit 4: Lessons 1, 2, 4, 6, 7, 9–12, 13, 15–20 Unit 5: Lessons 1, 3, 4, 5, 7, 8, 10, 12–15 Unit 6: Lessons 2–5, 7–12 Unit 7: Lessons 3–5, 8, 9, 12–14	Kindergarten: How Do You Say It?, Putting Words Together Unit 1: Lessons 1–17 Unit 2: Lessons 1–22 Unit 3: Lessons 1–17 Unit 4: Lessons 1–20 Unit 5: Lessons 1–15 Unit 6: Lessons 1–12 Unit 7: Lessons 1–14
2.D	Speak using appropriate register to convey a message during formal and informal classroom interactions with accuracy and fluency.	Unit 1: Lessons 2–15, 17, 18 Unit 2: Lessons 1, 3–9, 11–17, 19, 20 Unit 3: Lessons 3, 4, 6–8, 10–12, 14, 16, 17 Unit 4: Lessons 1, 2, 4–12, 15–19 Unit 5: Lessons 2–4, 6–13, 15 Unit 6: Lessons 1, 3–6, 8–10, 12 Unit 7: Lessons 1, 3–5, 8, 12–14	Unit 1: Lessons 1–18 Unit 2: Lessons 1–22 Unit 3: Lessons 2–17 Unit 4: Lessons 2–20 Unit 5: Lessons 1–15 Unit 6: Lessons 1–12 Unit 7: Lessons 1–14
2.E	Narrate, describe, or explain information or persuade orally with increasing specificity and detail during formal and informal classroom interactions.	Unit 1: Lessons 1–18 Unit 2: Lessons 1–22 Unit 3: Lessons 1–17 Unit 4: Lessons 1–20 Unit 5: Lessons 1–15 Unit 6: Lessons 1–12 Unit 7: Lessons 1–14	Unit 1: Lessons 1–18 Unit 2: Lessons 1–22 Unit 3: Lessons 1–17 Unit 4: Lessons 1–20 Unit 5: Lessons 1–15 Unit 6: Lessons 1–12 Unit 7: Lessons 1–14
2.F	Restate, ask questions about, or respond to information during formal and informal classroom interactions.	Unit 1: Lessons 1–18 Unit 2: Lessons 1, 3, 5–11, 13–22 Unit 3: Lessons 2, 7, 9, 11–15 Unit 4: Lessons 1–12, 14–20 Unit 5: Lessons 1–15 Unit 6: Lessons 1, 3–12 Unit 7: Lessons 1, 4, 5, 8, 13, 14	Unit 1: Lessons 1–18 Unit 2: Lessons 1–22 Unit 3: Lessons 1–17 Unit 4: Lessons 1–20 Unit 5: Lessons 1–15 Unit 6: Lessons 1–12 Unit 7: Lessons 1–14

Student expectations – Reading.		Student Edition and Teacher Edition Lesson(s)	Math Language Development Resources
<p>The EB student reads a variety of texts for different purposes with an increasing level of comprehension in all content areas. The EB student may be at the preproduction, beginning, intermediate, high intermediate, or advanced proficiency levels of English language acquisition in reading. For Kindergarten and Grade 1, certain student expectations apply to text read aloud for students not yet at the stage of decoding written text. The student is expected to:</p>			
3.A	Demonstrate awareness of print concepts and directionality of reading as left to right and top to bottom.	Unit 1: Lesson 18 Unit 2: Lessons 7, 9, 12 Unit 4: Lessons 10, 12 Unit 5: Lessons 7, 12 Unit 6: Lesson 6 Unit 7: Lessons 1, 5, 10	Refer to the Student Edition and Teacher Edition for coverage of this standard.
3.B	Decode words using relationships between sounds and letters.	Unit 3: Lesson 12	See also the Pronunciation Guides. Kindergarten: Letters and Sounds
3.C	Use high-frequency words, cognates, and content-area vocabulary to comprehend written classroom materials.	Unit 2: Lesson 4 Unit 3: Lessons 6, 12 Unit 4: Lessons 2, 3, 5, 6 Unit 6: Lessons 2, 6 Unit 7: Lessons 2, 9	See the English/Spanish Cognates on pages xvii–xviii.
3.D	Use context to construct the meaning of figurative language such as idiomatic expressions, descriptive language, and words with multiple meanings to comprehend classroom materials.	Unit 1: Lessons 4, 10, 13, 15 Unit 2: Lesson 11 Unit 3: Lessons 2, 5, 6, 8, 9, 12 Unit 5: Lessons 2, 3, 5, 6 Unit 6: Lesson 7 Unit 7: Lessons 2, 5–8, 10, 11	Refer to the Student Edition and Teacher Edition for coverage of this standard.
3.E	Use pre-reading strategies, including previewing text features, connecting to prior knowledge, organizing ideas, and making predictions, to develop comprehension.	Unit 1: Lesson 18 Unit 2: Lessons 9, 12 Unit 3: Lessons 1–4, 15, 16 Unit 5: Lesson 6 Unit 6: Lesson 7 Unit 7: Lessons 1, 2, 4, 8, 10–12	Refer to the Student Edition and Teacher Edition for coverage of this standard.
3.F	Derive meaning from and demonstrate comprehension of content-area texts using visual, contextual, and linguistic supports.	Unit 1: Lessons 1, 13, 15 Unit 2: Lessons 4, 5, 11 Unit 3: Lessons 2, 5–10, 12–14, 16 Unit 4: Lessons 2, 3, 5, 6, 10, 12 Unit 5: Lessons 2, 3, 5–9 Unit 6: Lessons 2, 3, 6 Unit 7: Lessons 2, 5–8, 10, 11	Refer to the Student Edition and Teacher Edition for coverage of this standard.

Texas English Language Proficiency Standards (ELPS) (continued)

3.G	Demonstrate reading comprehension of content-area texts by making connections, retelling, or responding to questions.	Unit 4: Lessons 10, 12, 18 Unit 5: Lesson 7	Refer to the Student Edition and Teacher Edition for coverage of this standard.
3.H	Read with fluency and demonstrate comprehension of content–area text.	Unit 3: Lesson 7 Unit 4: Lessons 10, 12 Unit 5: Lesson 7	Refer to the Student Edition and Teacher Edition for coverage of this standard.
Student expectations – Writing.		Student Edition and Teacher Edition Lesson(s)	Math Language Development Resources
The EB student writes using a variety of language structures with increasing accuracy to effectively address a variety of purposes (formal and informal) and audiences in all content areas. The EB student may be at the pre–production, beginning, intermediate, high intermediate, or advanced proficiency levels of English language acquisition in writing. For Kindergarten and Grade 1, certain student expectations do not apply until the student has reached the proficiency level of generating original written text using a standard writing system. The student is expected to:			
4.A	Apply relationships between sounds and letters of the English language to represent sounds when writing.	Refer to the Math Language Development Resources for coverage of this standard.	See also the Pronunciation Guides. Kindergarten: Letters and Sounds
4.B	Spell words following conventional spelling patterns and rules.	Refer to the Math Language Development Resources for coverage of this standard.	Kindergarten: Letters and Sounds, How Do You Say It?, Putting Words Together
4.C	Write using high-frequency words and content-area vocabulary.	Unit 5: Lesson 9 Unit 6: Lesson 4 Unit 7: Lesson 14	Kindergarten: Putting Words Together Unit 3: Lesson 1 Unit 6: Lesson 4
4.D	Write using a variety of grade-appropriate sentence lengths and types and connecting words.	Unit 5: Lesson 9 Unit 6: Lesson 4 Unit 7: Lesson 14	Kindergarten: Putting Words Together Unit 3: Lesson 1 Unit 6: Lesson 4
4.E	Write formal or informal text using conventions such as capitalization and punctuation and grammatical structures such as subject–verb agreement and verb tense.	Unit 7: Lesson 14	Kindergarten: How Do You Say It?, Putting Words Together
4.F	Write to narrate, describe, explain, respond, or persuade, with detail in the content areas.	Unit 5: Lesson 9 Unit 6: Lesson 4 Unit 7: Lesson 14	Unit 6: Lesson 4

