Unit Plan

Grade 3 **Math**

Unit 1

Student E-Workbook (English) (Spanish)	Scope and Sequence	Curriculum Map/Pacing Guide	Instructional Routines	Home Connections (English) (Spanish)

Fluency Games

Grade 3, Unit 1: Making Meaning With Multiplication and Division

Duration - 3 weeks (15 days)

Consists of 10 lessons and 13 mini lessons

[Unit Overview]

Explanation of Content:

In Unit 1, students explore the meaning of multiplication and division within the context of single-step real world problems. Students develop an understanding of multiplication as repeated addition using pictures, skip counting, and arrays as strategies for problem solving. This builds from second grade work with skip counting and arrays, and provides a foundation for subsequent units throughout third grade.

Students' work begins with exploring equal groups and beginning to connect the terms factors, products, and differences with the operations on groups of objects as skip-counting and repeated addition are used. Students review their work from the previous grade as they partition rectangles by unit squares in preparation for building arrays with discrete objects later in the unit.

Students' initial work is extended as they work with the various common types of multiplication and division situations, beginning with the unknown factor to represent division. Students see that the roles of the factors differ as they begin to formalize the language of multiplication they are using in relation to rows and columns in arrays of discrete objects. Students investigate various mathematical properties of numbers as they work with multiplication.

This unit introduces concepts that are revisited over the course of the entire year as students develop deeper understandings and build fluency in later units.

Content Standards:

- **CC.3.OA.1** Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5 × 7. (All Lessons)
- **CC.3.OA.2** Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8

objects each. For example, describe a context in which a number of shares or a number of groups can be shown as 56 ÷ 8. (Lessons 1, 2, 3, 4, 5, 6, 10)

- **CC.3.OA.3** Use multiplication and division within100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. (All Lessons)
- **CC.3.OA.5** Understand properties of multiplication and the relationship between multiplication and division. Apply properties of operations as strategies to multiply and divide. Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15 then 15 × 2 = 30, or by 5 × 2 = 10 then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.) (Lessons 5, 7, 8, 9, 10)
- **CC.3.MD.7** Geometric measurement. Understand concepts of area and relate area to multiplication and to addition. Relate area to the operations of multiplication and addition. (Lesson 8)

Refer to the Achieve the Core Coherence Map

Enduring Understandings:

As students engage with the tasks in this unit, the following enduring understandings are addressed:

- Represent and solve problems involving multiplication and division. (Lessons 1, 2, 3, 4, 5, 6, 10)
- Represent and solve problems involving multiplication. (Lessons 7, 8, 9)
- Multiply and divide within 100. (Lessons 1, 2, 3, 4, 5, 6, 10)
- Understand properties of multiplication and the relationship between multiplication and division. (Lessons 5, 6, 7, 8, 9, 10)
- Multiply within 100. (Lessons 7, 8, 9)
- Understand concepts of area and relate area to multiplication and to addition. (Lesson 8)

Essential Questions:

- How can I use what I know about repeated subtraction, equal sharing, and forming equal groups to solve division problems? (Lessons 1, 6)
- Why are there multiple ways of multiplying to get the same product for some products? (Lesson 1)
- How can I relate what I know about skip counting to help me learn the multiples of 2 and 5? (Lesson 2)
- How can I relate what I know about skip counting to help me learn the multiples of 10? (Lesson 3)
- What is the relationship between repeated addition and multiplication? (Lessons 3, 4, 5, 6, 8)

- How can I use what I know about repeated subtraction and forming equal groups to solve division problems? (Lesson 3)
- How does multiplication help us divide? (Lessons 3, 10)
- What does an array model help me visualize? (Lessons 4, 7)
- What does an area model help me visualize? (Lessons 5, 9)
- How does understanding the commutative property help us multiply? (Lesson 5)
- How can I use number lines to help solve multiplication and division problems? (Lesson 6)
- How does understanding the distributive property help us multiply large numbers? (Lessons 7, 9)
- How can I use what I know about repeated addition and multiplication to find the area of rectangles? (Lesson 8)
- How are multiplication and division alike? (Lesson 10)
- In what ways do operations affect numbers? (Lesson 10)

Acquisition / Skill Mastery:

- Understand the relationship between multiplication and division.
- Solve real-world multiplication and division problems involving groups of 2, 5, and 10.
- Solve real-world multiplication and division problems involving 4 and 8.
- Solve real-world multiplication and division problems involving 3 and 6.

WIDA Standards Alignment

WIDA Standards have been used in the development of the course lessons. There are two WIDA standards that the lessons are aligned to. These include:

Standard 1: Social and Instructional Language

- Domains: Listening, Speaking

Standard 3: The Language of Mathematics

- Domains: Listening, Speaking, Reading, Writing

Language Standards:
Throughout the unit, the curriculum encourages reading, writing, speaking and listening, provides opportunities for discourse, both student to student and student to teacher, and incorporates Language Routines.
Each individual TFG provides more specificity at the lesson level. Reference the TFG for MPIs and specific supports provided for varied English proficiency levels.

EL Support Mini Lessons	Learning Objective and Language Objective
3U1L1-3 Mini Lesson A: Dividing with Equal Groups (This mini lesson can be used between Lessons 1-3) TFG • Playlist • Playlist in Spanish	• **Learning Objective:** I can understand and create equal groups from a given total amount of items. I can solve division problems. • **Language Objective**: Explain and argue by listening, speaking, and reading about creating equal groups from a given total amount of items to solve division problems.
3U1L4-7 Mini Lesson B: Arrays and Multiplication (This mini lesson can be used between Lessons 4-7) TFG • Playlist • Blackline Master: Arrays and Multiplication • Playlist in Spanish • Blackline Master in Spanish: Arrays and Multiplication	• **Learning Objective:** I can describe how rows and columns in arrays relate to multiplication. I can understand multiplication as repeated addition. • **Language Objective**: Recount and explain by listening, speaking, reading, and writing about the relationship between arrays and equations used to represent the total number of objects contained in them.
3U1L5-10 Mini Lesson C: Area and Multiplication (This mini lesson can be used between Lessons 5-10) TFG • Playlist • Blackline Master: Area and Multiplication • Playlist in Spanish • Blackline Master in Spanish: Area and Multiplication	• **Learning Objective:** I can use area models to multiply. I can use the length and width of a rectangle to find its area. • **Language Objective**: Explain and discuss by listening and speaking about the length and width of a rectangle to find its area.

Related Topics:
Students have opportunities to make connections to their community and across mathematical domains throughout this unit.

💙 SEL Standards Alignment

ISBE Social and Emotional Learning Standards:

- **SEL Standards have been used in the development of the course lessons. Each individual TFG provides more specificity at the lesson level. Reference the TFG for specific supports.**

Opportunities for Discourse:
The lessons and teacher implementation support are designed to create a student-centered, problem-based classroom. Each lesson in this unit provides opportunities for student discourse, ranging from pairs to small groups to whole class discussion. Within each component of the lesson (math routine, launch, explore, and discuss), students are sharing their strategies and ideas related to the mathematical concept in each lesson. Students also engage in active listening as they listen and respond to their peers' explanations.

Opportunities for discourse are intentionally built into each of the following learning cycle components:

- Launch
- Explore
- Discuss

Assessment

Formative Assessments:

- A pre-unit assessment is located in Lesson 1 (English) and (Spanish)

Lesson Level Assessments:
This unit has 2 Quick Quizzes:

- Grade 3 Unit 1: Quick Quiz to be given after Lesson 4 (English) and (Spanish)

- Grade 3 Unit 1: Quick Quiz to be given after Lesson 8 (English) and (Spanish)

Summative Assessment:

- The post-unit assessment is located in lesson 10 (English) and (Spanish)

Assignments & Performance Tasks:

- Each lesson includes mathematical tasks for students to engage in. Lesson 10 provides an opportunity for students to apply their understanding of the mathematical concepts from the previous lessons.

Transfer:

- This unit provides a conceptual understanding of the meaning of multiplication and division. Many of the lessons in this unit ask students to work with equal groups. Students extend their understanding of equal groups to array and area models. Students have the opportunity to engage in real-world problem contexts as they develop their understanding of multiplication and division. Throughout the remaining units, students will have the opportunity to apply what they learned in this unit, as this unit is foundational to understanding what it means to multiply and divide.

Procedures & Routines:

Each lesson in this unit incorporates the 5 Practices for mathematical discussion: anticipate, monitor, select, sequence, and connect. Each lesson includes a math routine, launch, explore, discuss, and check for understanding. During the **launch** phase, the mathematical task is introduced, and steps are taken to ensure the context of the problem is understood through using the three-read strategy and asking prompting questions.

The **explore** phase provides space for students to work on the task individually and then with a partner or small group. It is important to provide students time to individually work on the task prior to having them work with a partner or small group. This allotted time provides opportunities for students to think and process what the task is asking and begin to engage in strategies they would use to solve the task. After the individual process time, it is important to provide opportunities for students to work collaboratively and share their strategies with their partner and/or small group as they continue to work on the task. Within the explore phase for each lesson, possible monitoring questions are provided that can be used for students who are struggling to start the mathematical task and for students who may finish early or may need an extension. To support students in explaining their thinking and reasoning, sentence stems are provided. For each lesson within the explore phase, a monitoring chart is provided that includes anticipated strategies students may use to solve the task. For each anticipated strategy, assessing questions and advancing questions are included that can be asked to further clarify, deepen, and extend students' thinking. The monitoring chart also includes possible sentence stems to help

and encourage students to explain their mathematical reasoning. The monitoring chart also provides additional rows for teachers to include other anticipated strategies students may use to solve the task as the ones included are not the only strategies students may use. The monitoring chart for each lesson includes columns for teachers to purposefully select and sequence students to share their strategies during the discuss phase of the lesson. It is important for teachers to select and sequence students' strategies that will align to the mathematical goal/objective/purpose of the lesson. The teacher should *not* select all students to share their strategies, and it is not necessary to select only the students who have the "correct" answer. The purpose is to build and extend students' thinking and understanding of the mathematical concept.
During the **discuss** phase, students who were purposefully selected to share their strategies in the explore phase, share their strategies with the class. As students share their strategies, the teacher asks probing questions that enable students to make connections between and among the strategies, which build toward understanding the mathematical concept. Within the **check for understanding**, students are able to demonstrate their mathematical understanding of the lesson in the form of an exit slip or a quick write.

Grade 3, Unit 1: Making Meaning With Multiplication and Division

Lesson 1: Packaging Equal Groups TFG and Playlist
In this lesson, students engage in a Notice and Wonder instructional routine about images with equal groups. They then solve a task creating equal groups from candy that is to be bagged and sold at a candy store. Students work independently, in pairs, and in whole class discussion grouping candies in a variety of ways.

Learning Objectives:

- Understand and create equal groups from a given total amount of items.
- Use multiple strategies to create equal groups.

Challenge Mini Lesson:
Equal Groups Extension TFG

Content Standards:	**Vocabulary:**

• **CC.3.OA.1** Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5 × 7. • **CC.3.OA.2** Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be shown as 56 ÷ 8. • **CC.3.OA.3** Use multiplication and division within100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	• Equal Groups **Check for Understanding:** (English) and (Spanish)

Lesson 2: Introductions to Things that Come in Groups of 2 and 5 TFG and Playlist

In this lesson, students engage in a number sense routine to practice skip counting. They brainstorm things that come in groups of two, use skip counting and drawings to represent problems with things that come in twos, and discuss strategies and solutions for the problems. They then brainstorm and solve problems with things that come in groups of five. Students work independently, in pairs, and in whole class discussion with things that come in groups of two and five.

Learning Objectives:

- Solve real-world multiplication and division problems involving 2 and 5.
- Skip count to multiply problems involving 2 and 5.

Review Mini Lesson:

Quick Images with 2s and 5s TFG

Challenge Mini Lesson:

Skip Counting Blunders TFG

Content Standards:

- **CC.3.OA.1** Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5 × 7.
- **CC.3.OA.2** Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be shown as 56 ÷ 8.
- **CC.3.OA.3** Use multiplication and division within100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

Vocabulary:

- Skip counting

Check for Understanding:

(English) and (Spanish)

Lesson 3: Introduction to Things that Come in Groups of 10 TFG and Playlist

In this lesson, students engage in a number sense routine to practice skip counting. They brainstorm things that come in groups of ten, use skip counting and drawings to represent problems of things that come in tens, and discuss strategies and solutions for the problems. They then make sense of the problems from Lesson 2 and develop meaning for multiplication and division. Students work independently, in pairs, and in whole class discussion.

Learning Objectives:

- Solve real-world multiplication and division problems involving groups of 2, 5, and 10.
- Skip count to multiply problems involving groups of 2, 5, and 10.
- Understand multiplication as repeated addition.
- Understand the relationship between multiplication and division.
- Write multiplication and division equations.

Review Mini Lesson:

Number Patterns on a Hundreds Board with 2s, 5s, and 10s TFG

Content Standards:

- **CC.3.OA.1** Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5 × 7**.**
- **CC.3.OA.2** Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be shown as 56 ÷ 8.
- **CC.3.OA.3** Use multiplication and division within100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

Vocabulary:

- Skip counting
- Multiply
- Divide
- Repeated addition
- Repeated subtraction

Check for Understanding:
(English) and (Spanish)

Lesson 4: Introduction to Arrays with Groups of 4 and 8 TFG and Playlist
In this lesson, students engage in a Notice and Wonder instructional routine about arrays. They then solve tasks creating arrays and using repeated addition and other strategies to solve multiplication and division problems with groups of four and eight. Students work independently, in pairs, and in whole class discussion.

Learning Objectives:

- Solve real-world multiplication and division problems involving 4 and 8.
- Understand and create arrays to multiply.
- Describe how rows and columns in arrays relate to multiplication.
- Understand multiplication as repeated addition.

Review Mini Lesson:
Understanding Arrays **TFG**

Review Mini Lesson:
Number Patterns on a Hundreds Board with 2s, 4s, and 8s TFG

Content Standards:

- **CC.3.OA.1** Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5 × 7.
- **CC.3.OA.2** Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be shown as 56 ÷ 8.
- **CC.3.OA.3** Use multiplication and division within100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

Vocabulary:

- Multiply
- Divide
- Array
- Row
- Column

Check for Understanding:
(English) and (Spanish)

Lesson 5: Introduction to Area Models and the Commutative Property with Groups of 4 and 8 TFG and Playlist
In this lesson, students engage in an instructional routine Which One Doesn't Belong with images of arrays and area models. They solve a task arranging 32 blocks in four or eight rows. They then find the total amount of squares in various area models making connections to the commutative property. Students work independently, in pairs, and in whole class discussion.

Learning Objectives:

- Solve real-world multiplication and division problems involving 4 and 8.
- Understand and create area models to multiply.
- Describe how rows and columns in area models relate to multiplication.
- Understand the commutative property of multiplication.

Content Standards:

- **CC.3.OA.1** Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5 × 7.
- **CC.3.OA.2** Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be shown as 56 ÷ 8.
- **CC.3.OA.3** Use multiplication and division within100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
- **CC.3.OA.5** Understand properties of multiplication and the relationship between multiplication and division. Apply properties of operations as strategies to multiply and divide. Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15 then 15 × 2 = 30, or by 5 × 2 = 10 then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)

Vocabulary:

- Multiply
- Divide
- Area model
- Row
- Column

Check for Understanding:
(English) and (Spanish)

Lesson 6: Introduction to Measurement Models with Groups of 3 and 6 TFG and Playlist
In this lesson, students engage in an instructional routine Notice and Wonder with images of number lines. They solve a task involving lengths of three or six inches of gummy worms and pens. Students work independently, in pairs, and in whole class discussion.

Learning Objectives:

- Solve real-world multiplication and division problems involving 3 and 6.
- Understand multiplication as repeated addition.
- Use what is known about repeated subtraction to solve division problems.

- Use number lines to solve multiplication and division problems.

Review Mini Lesson:
What Does it Mean to Multiply and Divide? **TFG**

Content Standards:

- **CC.3.OA.1** Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5 × 7**.**
- **CC.3.OA.2** Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be shown as 56 ÷ 8.
- **CC.3.OA.3** Use multiplication and division within100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

Vocabulary:

- Multiply
- Divide
- Length
- Number line

Check for Understanding:
(English) and (Spanish)

Lesson 7: Introduction to the Distributive Property TFG and Playlist
In this lesson, students engage in an instructional routine Quick Images with images of arrays and area models. They solve a task with plants in a garden creating a model for each problem, writing expressions for each part of the model, and finding the total amount of plants. Students work independently, in pairs, and in whole class discussion.

Learning Objectives:

- Solve real-world multiplication problems.
- Understand and apply the distributive property when multiplying.

Review Mini Lesson:
Repeated Addition and Multiplication Matching **TFG**

Content Standards:

- **CC.3.OA.1** Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5 × 7.
- **CC.3.OA.3** Use multiplication and division within100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
- **CC.3.OA.5** Understand properties of multiplication and the relationship between multiplication and division. Apply properties of operations as strategies to multiply and divide. Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15 then 15 × 2 = 30, or by 5 × 2 = 10 then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)

Vocabulary:

- Multiply

Check for Understanding:

(English) and (Spanish)

Lesson 8: Introduction to Area Rectangles TFG and Playlist

In this lesson, students engage in a number sense routine to develop an understanding of multiplying by nines. Students use previous knowledge of working with groups of 2s, 3s, 4s, 5s, 6s, 8s, and 10s and apply that knowledge to understand the nine facts. Students apply their knowledge of multiplying to find the area of rectangles. Students work independently, in pairs, and in whole class discussion.

Learning Objectives:

- Understand multiplication as repeated addition.
- Use what is known about repeated addition and multiplication to find the area of rectangles.
- Understand area must be written in square units.

Review Mini Lesson:

Things That Come in Groups TFG

Content Standards:

- **CC.3.OA.1** Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5 × 7.
- **CC.3.OA.3** Use multiplication and division within100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
- **CC.3.OA.5** Understand properties of multiplication and the relationship between multiplication and division. Apply properties of operations as strategies to multiply and divide. Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15 then 15 × 2 = 30, or by 5 × 2 = 10 then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)
- **CC.3.MD.7** Geometric measurement. Understand concepts of area and relate area to multiplication and to addition. Relate area to the operations of multiplication and addition.

Vocabulary:

- Multiply
- Divide
- Commutative property
- Area
- Length
- Width
- Square units

Check for Understanding:
(English) and (Spanish)

Lesson 9: Revisiting the Distributive Property TFG and Playlist

In this lesson, students engage in a Notice and Wonder instructional routine with images of square tiles. They solve a task with colored tiles creating a model for each problem, writing expressions for each part of the model, and finding the total amount of tiles. Students work independently, in pairs, and in whole class discussion.

Learning Objectives:

- Solve real-world multiplication problems.
- Understand and apply the distributive property when multiplying

Review Mini Lesson:
Additional Practice with 5s TFG

Content Standards:

- **CC.3.OA.1** Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5 × 7.
- **CC.3.OA.3** Use multiplication and division within100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
- **CC.3.OA.5** Understand properties of multiplication and the relationship between multiplication and division. Apply properties of operations as strategies to multiply and divide. Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15 then 15 × 2 = 30, or by 5 × 2 = 10 then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)

Vocabulary:

- Multiply
- Distributive property

Check for Understanding:

(English) and (Spanish)

Lesson 10: Representing What We Know About Equal Groups TFG and Playlist

In this lesson, students engage in an instructional routine, Collect and Display, to recall strategies used for multiplication and division throughout Unit 1. They then solve a task creating equal groups with desserts that are to be bagged or boxed and sold at a bakery. Students work independently, in pairs, and in whole class discussion.

Learning Objectives:

- Solve real-world multiplication and division problems.
- Describe how multiplication and division are alike.

Challenge Mini Lesson:

Golf at Maggie Daley Park TFG

Challenge Mini Lesson:

Rides on the Ferris Wheel at Navy Pier TFG

Challenge Mini Lesson:
Water Displays at Buckingham Fountain **TFG**

Content Standards:

- **CC.3.OA.1** Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5 × 7**.**
- **CC.3.OA.2** Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be shown as 56 ÷ 8.
- **CC.3.OA.3** Use multiplication and division within100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
- **CC.3.OA.5** Understand properties of multiplication and the relationship between multiplication and division. Apply properties of operations as strategies to multiply and divide. Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15 then 15 × 2 = 30, or by 5 × 2 = 10 then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)

Vocabulary:

- Multiply
- Divide
- Equal groups

Check for Understanding:
(English) and (Spanish)

Universal Design for Learning (UDL)

The Skyline curriculum uses the Universal Design for Learning (UDL) framework, which guides the design of learning environments to ensure they are accessible and challenging for all. The UDL guidelines provide suggestions on how to support students through multiple means of engagement, representation, and action and expression. The tables below highlight UDL differentiation resources that are available for this unit.

Course Differentiation Resources

Self Regulation	Sustaining Effort & Persistence	Recruiting Interest
• Growth Mindset in Math • Fixed/Growth Mindset (English)(Spanish) • SEL Check-In (English)(Spanish)	• Classroom Community Anchor Chart • Goal Setting (English)(Spanish) • Group Roles (English)(Spanish)	• Student Survey (English)(Spanish) • Anchor Chart Activity
Comprehension	**Language & Symbols**	**Perception**
• Frayer Model Template (English)(Spanish) • Fluency Games	• EL Development Resource (English)(Spanish) • Word Wall *Coming soon!*	• Math Cognate Table
Physical Action	**Executive Functions**	**Expression & Communication**
• Accessibility with Safari	• Student Standards Tracker (English)(Spanish) • Learning Objectives/Target Tracker (English)(Spanish) • Self-Monitoring Reflection Checklist (English)(Spanish) • Math Language Routines • Student Discourse Rubrics (English)(Spanish) • Assessment Reflection (English)(Spanish)	• GeoGebra • Desmos • Three Reads Classroom Poster (English)(Spanish) • Sentence Starters Grades (English)(Spanish) • Conversation Cards (English)(Spanish)

Unit-Specific Differentiation Resources

Unit Level

- Google Practice Sets *(Found in each TFG)!* *(Self Regulation)*
- Choice Board *Coming soon!* (English)(Spanish) *(Recruiting Interest)*
- EL Support Mini Lessons (Language & Symbols)
- Glossary *Coming soon!* (Language & Symbols)
- E-Workbooks (English)(Spanish) (Perception)
- Khan Academy: Intro to Multiplication (Multiplication) (Executive Function)
- Khan Academy: 1-digit Multiplication (Multiplication) (Executive Function)
- Khan Academy: Intro to Division (Division) (Executive Function)
- Khan Academy: More with Multiplication and Division (Multiplication & Division) (Executive Function)

Lesson 1	• Challenge Mini Lesson (English)(Spanish) (Comprehension)	Lesson 2	• Review Mini Lesson (English)(Spanish) (Comprehension) • Challenge Mini Lesson (English)(Spanish) (Comprehension)
Lesson 3	• Review Mini Lesson (English)(Spanish) (Comprehension)	Lesson 4	• Review Mini Lesson (English)(Spanish) (Comprehension) • Review Mini Lesson (English)(Spanish) (Comprehension)
Lesson 6	• Review Mini Lesson (English)(Spanish) (Comprehension)	Lesson 7	• Review Mini Lesson (English)(Spanish) (Comprehension)
Lesson 8	• Review Mini Lesson (English)(Spanish) (Comprehension)	Lesson 9	• Review Mini Lesson (English)(Spanish) (Comprehension)
Lesson 10	• Challenge Mini Lesson (English)(Spanish) (Comprehension) • Challenge Mini Lesson (English)(Spanish) (Comprehension)		

Accommodations For Students with an Individual Education Program (IEP) or 504 Plan:

For students with an individualized Education Program or a 504 Plan, consult the individual document to plan and implement individual accommodations for all lessons in this unit.

🖨️Unit Materials

Materials

A Check for Understanding is available with each lesson to formatively assess the students on the math content. All student facing materials are also found in a student e-workbook **(English) (Spanish)**

Below are all of the materials that can be assigned via Google Classroom or printed for use.

Lesson 1	Lesson 2	Lesson 3
Blackline Master: Lesson 1 Monitoring Chart Blackline Master (Spanish): Lesson 1 Monitoring Chart Blackline Master: Exit Ticket	Blackline Master: Lesson 2 Monitoring Chart Blackline Master (Spanish): Lesson 2 Monitoring Chart Blackline Master: Things that Come in 2s	Blackline Master: Lesson 3 Monitoring Chart Blackline Master in Spanish: Lesson 3 Monitoring Chart Blackline Master: Things that Come in 10s

Blackline Master (Spanish): Exit Ticket CPS Three Reads Overview Materials: A variety of counter manipulatives (e.g. counting bears, colored counting chips, square tiles) Materials: cups of bags for students to group counters	Blackline Master (Spanish): Things that Come in 2s Blackline Master: Things that Come in 5s Blackline Master (Spanish): Things that Come in 5s Blackline Master: Exit Slip Blackline Master (Spanish): Exit Slip	Blackline Master in Spanish: Things that Come in 10s Blackline Master: Star Cut-Outs Blackline Master in Spanish: Star Cut-Outs Blackline Master: Party! Blackline Master in Spanish: Party! Blackline Master: Exit Slip Blackline Master in Spanish: Exit Slip Materials: Large cotton balls (marshmallow for s'mores) Materials: 3x3 squares made from tan paper (graham cracker for s'more) Materials: 2x3 rectangle brown paper (chocolate for s'more) Materials: Plastic beads Materials: Scotch tape Materials: 3 different light-colored crayons or colored pencils
Lesson 4	**Lesson 5**	**Lesson 6**
Blackline Master: Lesson 4 Monitoring Chart Blackline Master in Spanish: Lesson 4 Monitoring Chart Blackline Master: Donut Task Blackline Master in Spanish: Donut Task Blackline Master: Donut Task 2 Blackline Master in Spanish: Donut Task 2 Blackline Master: Chairs Task Blackline Master in Spanish: Chairs Task Blackline Master: Exit Slip Blackline Master in Spanish: Exit Slip Materials: A variety of counter manipulatives (e.g., colored counting chips, square tiles) Materials: Three different light-colored crayons or colored pencils	Blackline Master: Lesson 5 Monitoring Chart Blackline Master in Spanish: Lesson 5 Monitoring Chart Blackline Master: Block Task Blackline Master in Spanish: Block Task Blackline Master: Block Company Block Sets Blackline Master in Spanish: Block Company Block Sets Blackline Master: Exit Slip (for primary lesson) Blackline Master in Spanish: Exit Slip (for primary lesson) Graph Paper Graph Paper in Spanish	Blackline Master: Lesson 6 Monitoring Chart Blackline Master in Spanish: Lesson 6 Monitoring Chart Blackline Master: Gummy Worms and Pens Blackline Master in Spanish: Gummy Worms and Pens Blackline Master: Exit Slip Blackline Master in Spanish: Exit Slip Materials: Amanda Bean's Amazing Dream A Mathematical Story by Cindy Neuschwander (Option A) Materials: Multiplication Video by Math for Kids (Option B)

Lesson 7	Lesson 8	Lesson 9
Blackline Master: Lesson 7 Monitoring Chart Blackline Master in Spanish: Lesson 7 Monitoring Chart Blackline Master: Plants in a Garden Blackline Master in Spanish: Plants in a Garden Blackline Master: Exit Slip (for primary lesson) Blackline Master in Spanish: Exit Slip (for primary lesson) Graph Paper Graph Paper in Spanish Materials: Manipulatives such as colored square tiles or two-sided colored chips.	Blackline Master: Lesson 8 Monitoring Chart Blackline Master in Spanish: Lesson 8 Monitoring Chart Blackline Master: Which Area is Larger Blackline Master in Spanish: Which Area is Larger Blackline Master: Mini Assessment (for primary lesson) Blackline Master in Spanish: Mini Assessment (for primary lesson) Graph Paper Graph Paper in Spanish Materials: Cubes or counters	Blackline Master: Lesson 9 Monitoring Chart Blackline Master in Spanish: Lesson 9 Monitoring Chart Blackline Master: Tile Task Blackline Master in Spanish: Tile Task Blackline Master: Exit Slip (for primary lesson) Blackline Master in Spanish: Exit Slip (for primary lesson) Graph Paper Graph Paper in Spanish Materials: Cubes or counters
Lesson 10		
Blackline Master: Lesson 10 Monitoring Chart Blackline Master in Spanish: Lesson 10 Monitoring Chart Blackline Master: Equal Groups of Desserts Blackline Master in Spanish: Equal Groups of Desserts Graph Paper Graph Paper in Spanish Materials: A variety of counter manipulatives (e.g., counting bears, colored counting chips, square tiles)		