Academy of Dover Charter School

Math: Chapter 1: Place Value, Multiplication, and Expressions

Enduring Understanding: Extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations.

Grade: 5th

Vocabulary: period, Distributive property, base, exponent, inverse operations, numerical expression, evaluate, order of operations

Curricular Tools: Go Math Curriculum and Teacher Created Resources

Essential Questions:

- How can you describe the relationship between two place value positions?
- How do you read, write, and represent whole numbers through hundred millions?
- How can you use properties of operations to solve problems?
- How can you use an exponent to show powers of 10?
- How can you use a basic fact and a pattern to multiply by a 2 digit number?
- How do you multiply by 1 digit numbers?
- How do you multiply by 2 digit numbers?
- How is multiplication used to solve a division problem?
- How can you use the *solve a simpler problem* strategy to help you solve a division problem?
- How can you use a numerical to describe a situation?
- In what order must operations by evaluated to find the solution to a problem?
- In what order must operations be evaluated to find a solution when there are parentheses within parentheses?

Big Ideas:

- Recognize the 10 to 1 relationship among place value positions
- Read and write whole numbers through hundred millions
- Use properties of operations to solve problems
- Write and evaluate repeated factors in exponent form
- Use a basic fact and a pattern to multiply mentally by multiples of 10, 100, and 1,000

Timeframe: 14 days

- Multiply by 1 digit numbers
- Multiply by 2 digit numbers
- Use multiplication to solve division problems
- Use the strategy *solve a simpler problem* to solve problems
- Write numerical expressions
- Use the order of operations to evaluate numerical expressions
- Evaluate numerical expressions with parentheses, brackets, and braces

Educational Standards Addressed:

*Common Core State Standards:

- CC.5.NBT.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.
- CC.5.NBT.2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole number exponents to denote powers of 10.
- CC.5.NBT.5 Fluently multiply multi-digit whole numbers using the standard algorithm
- CC.5.NBT.6 Find whole number quotients of whole numbers with up to four digit dividends and two digit divisors, using strategies based on place value, the properties of operations, and /or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
- CC.5 OA.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.
- CC.5.OA.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.

Assessment of the Unit: (Overall Assessment of the Unit)	 Go Math chapter assessment Teacher created assessment 	
Summary/Reflection:		

Subject: Math Date: Unit 1 Day 1: Investigate Place value and patterns

Overview and Purpose:	Educational Standards Addressed:		
Recognize the 10 to 1 relationship among place value positions.	CC.5.NBT.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.		
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Recognize the 10 to 1 relationship among place value positions.	Materials Needed: • Base ten blocks	
Procedure: (Give and/or demonstrate necessary information.	 Warm up: Distribute the problem of the day. Have students work on it individually, then review as a whole class and determine how to get the answer. Introduction: Have students read today's Essential question: How can you describe the relationship between two place value positions? Let the students know that this is our focus for today's lesson. Direct Instruction: Review the value of each type of base ten blocks and the relationship from one type to the next. Ask: How many of the small cubes would it take to make 1 long? How many of the longs would it take to make 1 flat? How many of the flats would it take to make 1 large cube? Ten is how many times greater than 1? Explain that each block is 1/10 of the base ten block to its left. Check for understanding: How many times as much is the flat compared to the small cube? Explain Work through SE pages 5-6 as a whole group. Wrap up/Assessment: Review essential question 	Vocabulary: • Multiply • Place value	
Verification: (Steps to check for student understanding.)	 Visually Orally: Students explanation of work/answers to questions Completion of Assignment: Share and Show 	Additional Notes:	
Independent Activity: (Describe independent activity to reinforce this lesson)	SE pages 7-8 Math journal: Write a number that has four digits with the same number in all places, such as 4,444. Circle the digit with the greatest value. Underline the digit with the smallest value. Explain.	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention	

		•	extra time to complete assignments small group reread instructions/ questions/choices
Summary/Reflection:	Homework: Standards Practice (SP) book pages 3-4		

Subject: Math Date: Unit 1 Day 2: Place Value of Whole Numbers

Overview and Purpose: Understand the place value system.	Educational Standards Addressed: CC.5.NBT.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it reprint the place to its right and 1/10 of what it represents in the place to its left.		
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Read and write whole numbers through hundred millions.	Materials Needed:	
Procedure: (Give and/or demonstrate necessary information.	 Warm up: Distribute the problem of the day. Have students work on it individually, then review as a whole class and determine how to get the answer. Go over previous night's homework together. Introduction: Have students read today's Essential question: How do you read, write, and represent whole numbers through hundred millions? Let the students know that this is our focus for today's lesson. Direct Instruction: Introduce the lesson by discussing the sun's size and its location in our solar system. Explain that distances between the sun and the planets are very large numbers. Use the interactive board to show SE page 9. Read the problem and problem on the place value chart. Ask: What is the value of the digit 1 in 1,392,000? How does this relate to the expanded form of 1,392,000? Point out the use of the comma to separate periods. Write 25,025 on the board. What is 25,025 written in word form? 	Vocabulary: • period	

Verification:	 Explain how zero is a place holder in our number system. How would you write nine hundred thousand in our number system? Check for understanding: Be sure students recognize that the value of each place is 1/10 times the value of the place to its left. How do you know that 2,500 is less than 250,000? Explain that for each place value a number decreases, its value is 1/10 of the next larger place value. Complete SE pages 9-10 together, check answers. Complete independent work Wrap up/Assessment: Go over test prep question 22. Use TE to determine what students did if they got the answer incorrect. Review essential question Visually 	Additional Notes:
(Steps to check for student understanding.)	 Orally: Student explanations of work/answers to questions Completion of Assignment: Share and Show 	
Activity: (Describe independent activity to reinforce this lesson)	SE pages 11-12 Journal: Write standard form, expanded form, and word form at the top of the page. Write 5 numbers that are at least 8 digits long under standard form. Write the expanded form and the word form for each number under the appropriate heading.	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies:
Summary/Reflection:	Homework: Standards Practice (SP) book pages 5-6	

Subject: Math Date: Unit 1 Day 3: Algebra: Properties

Overview and Purpose:	Educational Standards Addressed:
Perform operations with multi-digit	CC.5.NBT.6 Find whole number quotients of whole numbers with up to four digit dividends and two digit divisors,
whole numbers and with decimals to	using strategies based on place value, the properties of operations, and /or the relationship between multiplication and
hundredths.	division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Objectives:	SWBAT:	Materials Needed:
(Specify skills/information that will be learned.)	Use properties of operations to solve problems.	• counters
D. I	W B' ' ' d ll Cd l W d l '	X7 1 1
Procedure:	Warm up: Distribute the problem of the day. Have students work on it	Vocabulary:
(Give and/or demonstrate necessary	individually, then review as a whole class and determine how to get the answer.	Distributive Property
information.	Go over previous night's homework together. Introduction: Have students read today's Essential question: How do you use	
	properties of operations to solve problems? Let the students know that this is our	
	focus for today's lesson.	
	Direct Instruction:	
	• Write the following problem on the board: 13+9+7. Ask: How would you	
	find the sum? Would it be easier to add 13 and 9 and then add 7, or to	
	add 13 and 7 and then add 9? Explain that in this lesson students will	
	learn mathematical rules that will make it easier to evaluate expressions	
	mentally.	
	 Review the commutative and Associative properties. How do they differ? 	
	Introduce the Distributive Property: multiplying a sum by a number is the	
	same as multiplying each addend by the number and then adding the	
	products.	
	 Use counters to model problems. Explain that when you solve problems 	
	in your head you are using mental math. Using properties can make	
	mental math easier.	
	Complete SE pages 13-14 together, check answers.	
	 Complete bil pages 13 14 togender, eneck answers. Complete independent work 	
	Wrap up/Assessment: Go over test prep question 17. Use TE to determine what	
	students did if they got the answer incorrect.	
	Review essential question	
Verification:	• Visually	Additional Notes:
(Steps to check for student	Orally: Students explanation of work/ answers to questions	
understanding.)	Completion of Assignment: Share and Show	
Activity:	SE pages 11-12	Special Education/ESL
	Journal: Explain how you could mentally find 8 x 45 by using the distributive	Accommodations: Based on
(Describe independent activity to	property.	students' needs the teacher will
reinforce this lesson)		differentiate with the following
		strategies:
		• time for intervention
		 extra time to complete
		assignments

		•	small group reread instructions/ questions/choices
Summary/Reflection:	Homework: Standards Practice (SP) book pages 7-8		

Subject: Math Date: Unit 1 Day 4: Algebra: Powers of 10 and Exponents

Overview and Purpose: Write and evaluate repeated factors in exponent form.	Educational Standards Addressed: CC.5.NBT.2 Explain patterns in the number of zeros of the product when multiplyin explain patterns in the placement of the decimal point when a decimal is multiplied whole number exponents to denote powers of 10.	
Objectives:	SWBAT:	Materials Needed:
(Specify skills/information that will be learned.)	Understand the place value system	Base ten blocks
Procedure:	Warm up: Distribute the problem of the day. Have students work on it	Vocabulary:
(Give and/or demonstrate necessary	individually, then review as a whole class and determine how to get the answer.	• Base
information.	Go over previous night's homework together.	 exponent
	Introduction: Have students read today's Essential question: How can you use an	
	exponent to show powers of 10? Let the students know that this is our focus for	
	today's lesson.	
	Direct Instruction:	
	Write the following problems on the board and have students come up The state of the s	
	and solve them: 10 x 1=, 10 x 10=, and 10 x 10 x 10=. Discuss how you	
	write a zero at the end of the product each time you multiply by 10.	
	• Introduce the new vocabulary words in SE pg. 17. Explain how the ordinal number can be used to name the exponent.	
	 Write examples of numbers in exponent form on the board using 10 as 	
	the base, and ask students to identify the base and the exponent.	
	Remind students that repeated multiplication is just that, repeatedly	
	multiplying the same number by itself a specified number of times.	
	Ask: in a number in exponent form, which number is used as the repeated	
	factor? What number tells how many times to repeat a factor?	
	Help students make the connection between the exponent and the number	

	of zeros in the value of each model. • Work through SE pgs. 17-18 together. Go over answers, and have students do the Share and Show on the board. • Complete Independent Work Wrap up/Assessment: Go over test prep question 18. Use TE to determine what students did if they got the answer incorrect. Review essential question	
Verification: (Steps to check for student understanding.)	 Visually Orally: Students explanation of work/ answers to questions 	Additional Notes:
Activity: (Describe independent activity to reinforce this lesson)	• Completion of Assignment: Share and Show SE pages 19-20 Journal: Consider 7 x 10 ³ . Write a pattern to find the value of the expression.	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/ • questions/choices
Summary/Reflection:	Homework: Standards Practice (SP) book pages 9-10	

Subject: Math Date: Unit 1 Day 5: Algebra: Multiplication Patterns

Overview and Purpose: Use a basic fact and a pattern to multiply mentally by multiples of 10, 100, and 1,000.	Educational Standards Addressed: CC.5.NBT.2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole number exponents to denote powers of 10.	
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Understand the place value system	Materials Needed: • Base ten blocks

Procedure: (Give and/or demonstrate necessary information.	 Warm up: Distribute the problem of the day. Have students work on it individually, then review as a whole class and determine how to get the answer. Go over previous night's homework together. Introduction: Have students read today's Essential question: How can you use a basic fact and a pattern to multiply by a 2 digit number? Let the students know that this is our focus for today's lesson. Direct Instruction: Introduce the lesson by asking: Did you know the first magnifying lenses were developed in Italy in the 14th century? In 1590 the first microscope was made by putting two lenses in a tube. What are some things you can study by looking at them through a microscope? Look at the picture of a bumblebee through a microscope on SE pg. 21. Read the problem to students and write the problem on the board. See if the students can help you work through the problem recalling what they learned about basic facts and patterns in the previous day's lesson. Work through SE pgs. 21-22 together. You can do the problems on the board or overhead. Have students take turns showing how to solve the problems. Complete Independent Work Wrap up/Assessment: Go over test prep question 28. Use TE to determine what students did if they got the answer incorrect. Review essential question 	Vocabulary: •
Verification: (Steps to check for student understanding.)	 Visually Orally: Students explanation of work/ answers to questions Completion of Assignment: Share and Show 	Additional Notes:
Activity: (Describe independent activity to reinforce this lesson)	SE pages 23-24 Journal: Do the products 40 x 500 and 40 x 600 have the same number of zeros? Explain.	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/ • questions/choices
Summary/Reflection:	Homework: Standards Practice (SP) book pages 11-12	

Subject: Math Date: Unit 1 Mid Chapter Checkpoint

Overview and Purpose: Assess student's learning and progress in the first half of the chapter.	Educational Standards Addressed: CC.5.NBT.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left. CC.5.NBT.2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole number exponents to denote powers of 10. CC.5.NBT.6 Find whole number quotients of whole numbers with up to four digit dividends and two digit divisors, using strategies based on place value, the properties of operations, and /or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Understand the place value system	Materials Needed: • Base ten blocks
Procedure: (Give and/or demonstrate necessary information.	Warm up: Go over previous night's homework together. Introduction: Let students know that they are going to take a quiz on the information they learned the last 5 days of school. Direct Instruction: Review: vocabulary, place value, distributive and associative properties, and how to find the pattern in a problem. Wrap up/Assessment: The formative assessment provides the opportunity to adjust teaching methods for individual or whole class instruction.	Vocabulary: Base Exponent period
Verification: (Steps to check for student understanding.)	 Visually Orally: Students explanation of work/ answers to questions Completion of Assignment: Quiz 	Additional Notes:
Activity: (Describe independent activity to reinforce this lesson)	Mid Chapter Quiz	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/ • questions/choices

Summary/Reflection:	Use Reteach book if additional help is needed.	

Subject: Math Date: Unit 1 Day 6: Multiply by 1-Digit Numbers

Overview and Purpose: Perform operations with multi digit whole numbers and with decimals to hundredths.	Educational Standards Addressed: CC.5.NBT.5 Fluently multi-digit whole numbers using the standard algorithm	
Objectives: (Specify skills/information that will be learned.)	SWBAT: • multiply by 1-digit numbers	Materials Needed:
Procedure: (Give and/or demonstrate necessary information.	 Warm up: Distribute the problem of the day. Have students work on it individually, then review as a whole class and determine how to get the answer. Go over previous night's homework together. Introduction: Have students read today's Essential question: How do you multiply by 1-digit numbers? Let the students know that this is our focus for today's lesson. Direct Instruction: Read the problem aloud on page SE 27. Write the problem 293 x 9= on the board. Go over steps to solve the problem by multiplying the ones, tens and then hundreds, and how to add the regrouped tens and hundreds. Make sure students know the importance of starting in the ones digits rather than the hundreds first. Continue with other 3 digit number problems. If helpful, use a place value chart to show how the numbers represent ones, tens, hundreds (use reteach pg. 6 as ex.) Introduce a number with 4 digits multiplied by a 1-digit number. Let students know that the steps are the same as multiplying with 3 digits. Write 1,978 x 7 on the board. Call on students to show how to solve the problem step by step (ones, tens, hundreds, thousands). Work through SE pgs. 27-28 together. You can do the problems on the board or overhead. Have students take turns showing how to solve the 	Vocabulary: •

Verification: (Steps to check for student understanding.) Activity: (Describe independent activity to reinforce this lesson)	problems. • Help students see the importance of keeping their answers aligned with the correct place values to avoid confusion. • Complete Independent Work Wrap up/Assessment: Go over problems 1-4 and have students Share and Show. Review essential question • Visually • Orally: Students explanation of work/ answers to questions • Completion of Assignment: Share and Show SE pages 29-30 Journal: Show how to solve the problem 378x6 using place value with regrouping. Explain how you knew when to regroup.	Additional Notes: Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following
		strategies: time for intervention extra time to complete assignments small group reread instructions/ questions/choices
Summary/Reflection:	Homework: Standards Practice (SP) book pages 13-14	

Subject: Math Date: Unit 1 Day 7: Multiply by 2-Digit Numbers

Overview and Purpose:	Educational Standards Addressed:	
Perform operations with multi digit	CC.5.NBT.5 Fluently multiply multi-digit whole numbers using the standard alg	gorithm
whole numbers and with decimals to		
hundredths.		
Objectives:	SWBAT:	Materials Needed:
(Specify skills/information that will be	multiply by 2-digit numbers	•
learned.)		
Procedure:	Warm up: Distribute the problem of the day. Have students work on it	Vocabulary:

(Give and/or demonstrate necessary	individually, then review as a whole class and determine how to get the answer.	
information.	Go over previous night's homework together.	•
information.		
	Introduction: Have students read today's Essential question: How do you	
	multiply by 2-digit numbers? Let the students know that this is our focus for	
	today's lesson.	
	Direct Instruction:	
	 Review previous day's lesson on multiplying with 1-digit. Ask students what it means when they are going to multiply with a 2-digit number. Read the problem in SE pg. 31 about Tigers. Identify the important 	
	information in the problem. After the students come up with the problem and know that they do not need to use the number 40 in the problem, write the problem on the board 28 x 18.	
	 Ask: How is multiplying by a 2 digit number like multiplying by a one digit number? How is it different? 	
	• Let students know that using place value and regrouping is the traditional algorithm to solve multiplication problems.	
	 Work through SE pgs. 31-32 together. You can do the problems on the board or overhead. Have students take turns showing how to solve the problems. 	
	Help students see the importance of keeping their answers aligned with the correct place values to avoid confusion.	
	Complete Independent Work	
	Wrap up/Assessment: Go over test prep question 21. Use TE to determine what	
	students did if they got the answer incorrect.	
	Review essential question	
Verification:	Visually	Additional Notes:
(Steps to check for student	Orally: Students explanation of work/ answers to questions	
understanding.)	Completion of Assignment: Share and Show	
		Special Education/ESL
Activity:	SE pages 33-34	
(David 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	Journal: Write a problem multiplying a 3 digit number by a 2 digit number. Show	Accommodations: Based on
(Describe independent activity to	all the steps to solve it by using place value and regrouping and by using partial	students' needs the teacher will
reinforce this lesson)	products.	differentiate with the following
		strategies:
		• time for intervention
		 extra time to complete
		assignments
		• small group
		• reread instructions/
		questions/choices
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Summary/Reflection:	Homework: Standards Practice (SP) book pages 15-16	

Subject: Math Date: Unit 1 Day 8: Relate Multiplication to Division

Overview and Purpose: Perform operations with multi digit whole numbers and with decimals to hundredths.	Educational Standards Addressed: CC.5.NBT.6 Find whole number quotients of whole numbers with up to four digit dividends and two digit divisors, using strategies based on place value, the properties of operations, and /or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Use multiplication to solve division problems	Materials Needed:
Procedure: (Give and/or demonstrate necessary information.	 Warm up: Distribute the problem of the day. Have students work on it individually, then review as a whole class and determine how to get the answer. Go over previous night's homework together. Introduction: Have students read today's Essential question: How is multiplication used to solve a division problem? Let the students know that this is our focus for today's lesson. Direct Instruction: Review basic multiplication facts. Write factor x factor = product on the board. Call on a student to name 2 factors and another student to give the product. Repeat until everyone has a turn. Discuss operations and emphasize that if two operations are inverse operations, one operation undoes the other. Compare the related multiplication and division sentences, and make sure students recognize this relationship. In a related division sentence, the dividend represents the product, and the divisor and quotient represent factors. Use 9 x 4 = 36 to come up with two related division sentences. On SE page 35 help students make an array to find the quotient of 126÷6. Discuss Review what the distributive property is and how it can be used to divide. Work through SE pg. 36 together. You can do the problems on the board 	Vocabulary: • Inverse operations

	or overhead. Have students take turns showing how to solve the problems. • Complete Independent Work Wrap up/Assessment: Go over test prep question 15. Use TE to determine what students did if they got the answer incorrect. Review essential question	
Verification: (Steps to check for student understanding.)	 Visually Orally: Students explanation of work/ answers to questions Completion of Assignment: Share and Show 	Additional Notes:
Activity: (Describe independent activity to reinforce this lesson)	SE pages 37-38 Journal: For the problem 135 ÷ 5, draw two different ways to break apart the array. Use the Distributive Property to write products for each different way.	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/ • questions/choices
Summary/Reflection:	Homework: Standards Practice (SP) book pages 17-18	

Subject: Math Date: Unit 1 Day 9: Problem Solving Multiplication and Division

Overview and Purpose: Perform operations with multi digit whole numbers and with decimals to hundredths.	Educational Standards Addressed: CC.5.NBT.6 Find whole number quotients of whole numbers with up to four digit dividends and two digit divisors, using strategies based on place value, the properties of operations, and /or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Use the strategy <i>solve a simpler problem</i> to solve problems.	Materials Needed:
Procedure:	Warm up: Distribute the problem of the day. Have students work on it	Vocabulary:

Verification: (Steps to check for student understanding.) Activity: SE pages 41-42 Journal: Rewrite exercise 4 with different numbers. Solve the new problem and show your work. SE pages 41-42 Journal: Rewrite exercise 4 with different numbers. Solve the new problem and show your work. Sepecial Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/ • questions/choices Summary/Reflection: Homework: Standards Practice (SP) book pages 19-20	(Give and/or demonstrate necessary information.	 individually, then review as a whole class and determine how to get the answer. Go over previous night's homework together. Introduction: Have students read today's Essential question: How can you use the strategy solve a simpler problem to help you solve a division problem? Let the students know that this is our focus for today's lesson. Direct Instruction: Share a pet story with the class. Invite other students to share a pet story of their own. Have you ever been responsible for feeding your pet? What does your pet eat? How much food does your pet eat each day? Read the pet problem on SE page 39 to the class, or post on interactive white board. Work through the problem. Show the graphic organizer to the class. Explain that in order to solve the problem you need to know what it is you have to find, what information you need to use and how to use the information. Do the same thing with the problem on page 40. Explain the steps and have students help fill out the graphic organizer. Complete Independent Work Wrap up/Assessment: Go over test prep question 10. Use TE to determine what students did if they got the answer incorrect. Review essential question 	
Journal: Rewrite exercise 4 with different numbers. Solve the new problem and show your work. Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/ • questions/choices	(Steps to check for student	Orally: Students explanation of work/ answers to questions	Additional Notes:
Summary/Reflection: Homework: Standards Practice (SP) book pages 19-20	(Describe independent activity to reinforce this lesson)	SE pages 41-42 Journal: Rewrite exercise 4 with different numbers. Solve the new problem and show your work.	Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/
	Summary/Reflection:	Homework: Standards Practice (SP) book pages 19-20	

Subject: Math Date: Unit 1 Day 10: Algebra: Numerical Expressions

Educational Standards Addressed:	
CC.5.OA.2 Write simple expressions that record calculations with numbers, and int	ret numerical expressions
without evaluating them.	
SWBAT:	Materials Needed:
Write numerical expressions	•
Warm up: Distribute the problem of the day. Have students work on it	Vocabulary:
individually, then review as a whole class and determine how to get the answer.	Numerical expression
Go over previous night's homework together.	
Introduction: Have students read today's Essential question: How can you use a	
numerical expression to describe a situation? Let the students know that this is our	
focus for today's lesson.	
Direct Instruction:	
• Ask students to describe fishing trips they have taken, read about, or plan	
to take. Explain that a fishing tournament is a contest to see who catches	
the most fish. Discuss different ways to compare each person's catch to	
determine the winner, including number of fish, size of fish, or pounds of	
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*	Additional Notes:
· ·	
	CC.5.OA.2 Write simple expressions that record calculations with numbers, and int without evaluating them. SWBAT: • Write numerical expressions Warm up: Distribute the problem of the day. Have students work on it individually, then review as a whole class and determine how to get the answer. Go over previous night's homework together. Introduction: Have students read today's Essential question: How can you use a numerical expression to describe a situation? Let the students know that this is our focus for today's lesson. Direct Instruction: • Ask students to describe fishing trips they have taken, read about, or plan to take. Explain that a fishing tournament is a contest to see who catches the most fish. Discuss different ways to compare each person's catch to

Activity:	SE pages 45-46	Special Education/ESL
	Journal: Write a numerical expression. Then write words to match the	Accommodations: Based on
(Describe independent activity to	expression.	students' needs the teacher will
reinforce this lesson)		differentiate with the following
		strategies:
		 time for intervention
		 extra time to complete
		assignments
		 small group
		 reread instructions/
		 questions/choices
Summary/Reflection:	Homework: Standards Practice (SP) book pages 21-22	

Subject: Math Date: Unit 1 Day 11: Algebra: Evaluate Numerical Expressions

Overview and Purpose: Write and interpret numerical expressions	Educational Standards Addressed: CC.5 OA.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.	
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Use the order of operations to evaluate numerical expressions.	Materials Needed:
Procedure: (Give and/or demonstrate necessary information.	 Warm up: Distribute the problem of the day. Have students work on it individually, then review as a whole class and determine how to get the answer. Go over previous night's homework together. Introduction: Have students read today's Essential question: In what order must operations be evaluated to find the solution to a problem? Let the students know that this is our focus for today's lesson. Direct Instruction: Write the expression 10 – 2 x 3 on the board. Ask students what they think the value of the expression is. Point out that in today's lesson students will learn why the value of the expression is 4 and not to 24. Ask students to recall what a numerical expression is. 	Vocabulary:

Verification:	 Introduce the new vocabulary: evaluate (find the value of a numerical expression) and the order of operations (tells you in what order you should evaluate an expression). Put the order of operations on the board: 1. Perform operations in parentheses 2. Multiply and divide from left to right 3. Add and subtract from left to right. Write (5-2) x7 on the board. Ask: Why do we need to follow the order of operations whenever we evaluate an expression that has more than one operation? Point out to students that regardless of other operations in an expression, they should always perform the operations in parentheses first. Work through pages 47-48 together. Complete Independent Work Wrap up/Assessment: Go over test prep question 16. Use TE to determine what students did if they got the answer incorrect. Review essential question Visually 	Additional Notes:
(Steps to check for student	Orally: Students explanation of work/ answers to questions	
understanding.)	Completion of Assignment: Share and Show	
Activity: (Describe independent activity to reinforce this lesson)	SE pages 49-50 Journal: Give two examples that show how using parentheses can change the order in which operations are performed in an expression.	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/ • questions/choices
Summary/Reflection:	Homework: Standards Practice (SP) book pages 23-24	

Subject: Math Date: Unit 1 Day 12: Algebra: Grouping Symbols

Overview and Purpose:	Educational Standards Addressed: CC.5 OA.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these	
Write and interpret numerical expressions	symbols.	ate expressions with these
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Evaluate numerical expressions with parentheses, brackets, and braces.	Materials Needed:
Procedure: (Give and/or demonstrate necessary information.	 Warm up: Distribute the problem of the day. Have students work on it individually, then review as a whole class and determine how to get the answer. Go over previous night's homework together. Introduction: Have students read today's Essential question: In what order must operations be evaluated to find a solution when there are parentheses within parentheses? Let the students know that this is our focus for today's lesson. Direct Instruction: Introduce the lesson by recalling the order of operations from the previous day's lesson. Write the following problems on the board to determine which operation they need to perform first in the expression: 12x6+7-5, 12x(6+7)-5, (12x6)+7-5, and 12x6+(7-5) Explain that if two expressions have the same numbers and operations in the same order, you must perform the operations within the parentheses first. Where the parentheses are located can change the value of the expression. Read the problem on the top of SE page 51. Make sure students know that using grouping symbols such as parentheses and brackets to write an expression is a way of organizing the information in a problem. This problem can be solved using several steps but students can use parentheses and brackets to write one expression to solve the problem. Remind students to pay close attention to the wording in a problem to understand where to place the parentheses and brackets. Work through page 51 together. Introduce braces as another symbol for expression. Work through page 52 together. Complete Independent Work Wrap up/Assessment: Go over test prep question 14. Use TE to determine what 	Vocabulary: •

	students did if they got the answer incorrect. Review essential question	
Verification: (Steps to check for student understanding.)	 Visually Orally: Students explanation of work/ answers to questions Completion of Assignment: Share and Show 	Additional Notes:
Activity: (Describe independent activity to reinforce this lesson)	SE pages 53-54 Journal: Explain how to use grouping symbols to organize information appropriately. Study	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/ • questions/choices
Summary/Reflection:	Homework: Standards Practice (SP) book pages 25-26	

Subject: Math Date: Unit 1 Test

Overview and Purpose:	Educational Standards Addressed:
Assess student's learning and progress in	CC.5.NBT.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents
Chapter 1.	in the place to its right and $1/10$ of what it represents in the place to its left.
	CC.5.NBT.2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and
	explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use
	whole number exponents to denote powers of 10.
	CC.5.NBT.5 Fluently multi-digit whole numbers using the standard algorithm
	CC.5.NBT.6 Find whole number quotients of whole numbers with up to four digit dividends and two digit divisors,
	using strategies based on place value, the properties of operations, and /or the relationship between multiplication and
	division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
	CC.5 OA.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these
	symbols.
	CC.5.OA.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions
	without evaluating them.

Objectives: (Specify skills/information that will be learned.)	SWBAT: • Recall information learned in the first unit on Place Value, Multiplication and Expressions	Materials Needed:
Procedure: (Give and/or demonstrate necessary information.	 Warm up: Go over previous night's homework together. Introduction: Let students know that they are going to take a test today on what they learned about place value, multiplication and expressions. Direct Instruction: Review the Chapter's essential question: How can you use place value, multiplication and expressions to represent and solve problems? Ask the following focus questions: How can you read, write, and represent whole numbers through millions? How can you use properties and multiplication to solve problems? How can you use expressions to represent and solve a problem? Give assessment Wrap up/Assessment: The summative assessment provides feedback on how the students understood the information presented in chapter 1. Check the scoring rubric found in the TE page 57-58. 	Vocabulary: •
Verification: (Steps to check for student understanding.)	 Visually Orally: Students explanation of work/ answers to questions Completion of Assignment: Test 	Additional Notes:
Activity: (Describe independent activity to reinforce this lesson)	Summative Assessment	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/ • questions/choices
Summary/Reflection:	Use Reteach book if additional help is needed.	•

Academy of Dover Charter School Grade: 5th Math: Chapter 2: Divide Whole Numbers Timeframe: 11 days

Enduring Understanding: Extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations. Vocabulary:	Big Ideas: • Place the first digit in the quotient by estimating or using place value • Divide 3 and 4 digit dividends by 1 digit divisors • Model division with 2 digit divisors using base ten blocks • Use partial quotients to divide by 2 digit divisors • Estimate quotients using compatible numbers • Divide by 2 digit divisors • Solve division problems and decide when to write a remainder as a
Curricular Tools: Go Math Curriculum and Teacher Created Resources	fraction Adjust the quotient if the estimate is too high or too low Solve problems by using the strategy draw a diagram
 Essential Questions: How can you tell where to place the first digit of a quotient without dividing? How do you solve and check division problems? How can you use base ten blocks to model and understand division of whole numbers? How can you use partial quotients to divide by 2 digit divisors? How can you use compatible numbers to estimate quotients? How can you divide by 2 digit divisors? When solving a division problem, when do you write the remainder as a fraction? How can you adjust the quotient if your estimate is too high or too low? How can the strategy draw a diagram help you solve a division problem? 	Educational Standards Addressed: *Common Core State Standards: CC.5.NBT.6 Find whole number quotients of whole numbers with up to four digit dividends and two digit divisors, using strategies based on place value, the properties of operations, and /or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. CC.5.NF.3 Interpret a fraction as division of the numerator by the denominator. Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers.
Assessment of the Unit: (Overall Assessment of the Unit) • Go Math chapter assessment • Teacher created assessment	
Summary/Reflection:	

Subject: Math Date: Unit 2 Day 1: Divide Whole Numbers: Place the First Digit

Overview and Purpose: Perform operations with multi-digit whole numbers and with decimals to hundredths.	Educational Standards Addressed: CC.5.NBT.6 Find whole-number quotients of whole numbers with up to four-digit of using strategies based on place value, the properties of operations, and/or the relational division. Illustrate and explain the calculation by using equations, rectangular	tionship between multiplication
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Place the first digit in the quotient by estimating or using place value	Materials Needed: Vocabulary cards Paper/pencil Base ten blocks Math journal Math board
Procedure: (Give and/or demonstrate necessary information.	 Warm up: Distribute Problem of the Day. Have students work on it individually, then review as whole class and determine how to get the answer. Introduction: Have students read today's Essential Question: How can you tell where to place the first digit of a quotient without dividing? Let students know this will be the focus for today's lesson. Direct Instruction: Introduce the lesson by asking: What do you know about daisies? List responses on the board. Read problem on SE p. 61about daisies. Display on board. Ask: What are we trying to find in the problem? Ask: What numbers will we use to solve the problem? Put the problem on the board: 128÷8. Work through steps 1-3 together. Ask: Why is division used to solve the problem? Explain that we are using the division algorithm with a 3-digit dividend for the first time. As we discuss the steps, make sure student understand how the basic division fact, 16÷8, is used to make compatible numbers for an estimate, and is also used to place the first digit in the quotient. Put the problem 4236÷5 on the board. Have students explain the steps to make in order to solve the problem. Discuss the steps together. Complete Independent Work and Check for understanding, completing Share and Show (p. 63-64) Use the Test Prep Coach to go over test prep question and determine why students may have selected incorrect response. 	Vocabulary:

	Wrap up/Assessment: Review essential question (How can you tell where to place the first digit of a quotient without dividing?)	
Verification: (Steps to check for student understanding.)	 Visually Orally: Students explanation of work/answers to questions Completion of Assignment: Share and Show (p 63) 	Additional Notes:
Independent Activity: (Describe independent activity to reinforce this lesson)	SE page 63-64 Math journal: Write a word problem that must be solved by using division. Include the equation and the solution, and explain how to place the first digit in the quotient.	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/ • questions/choices
Summary/Reflection:	Homework: Standards Practice (SP) book pages 31-32	

Subject: Math Date: Unit 2 Day 2: Divide by One-Digit Divisors

Overview and Purpose: Perform operations with multi-digit whole numbers and with decimals to hundredths.	Educational Standards Addressed: CC.5.NBT.6 Find whole-number quotients of whole numbers with up to four-digit of using strategies based on place value, the properties of operations, and/or the related and division. Illustrate and explain the calculation by using equations, rectangular	ationship between multiplication
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Divide 3- and 4-digit dividends by 1-digit divisors	Materials Needed: • Vocabulary cards • Pencil/Paper • Base ten blocks • Math journal • Math board

Procedure:	Warm up: Distribute Problem of the day. Have students work on it individually,	Vocabulary:
(Give and/or demonstrate necessary	then review as whole class and determine how to get the answer.	 Inverse operations
information.	 Introduction: Go over previous night's homework. Have students read today's Essential Question: How do you solve and check division problems? Let students know this will be the focus for the day. Direct Instruction: Access prior knowledge: write the following numbers on the board: 24 regroup the tens 153 regroup the hundreds 3,544 regroup the thousands Have students come to the board to complete. Discuss. Read the problem on SE page 65. Ask: What is it we are trying to find? What numbers will we need to use? Why do we use division to solve this problem? Write the problem 2754÷9 on the board. Work through the problem together. Discuss Remind students to check their answers by multiplying Continue with another problem: 614÷6. Have students work through the steps to complete the problem together. Complete Independent Work and Check for understanding, completing Share and Show (p. 67-68) Use the Test Prep Coach to go over test prep question and determine why students may have selected incorrect response. Wrap up/Assessment: Review essential question (How do you solve and check 	• Inverse operations
	division problems?)	
Verification: (Steps to check for student understanding.)	 Visually Orally: Students explanation of work/answers to questions Completion of Assignment: Share and Show 	Additional Notes:
Independent Activity: (Describe independent activity to reinforce this lesson)	SE page 67-68 Math journal: Use a map to plan a trip in the U.S. Find the number of miles between your current location and your destination, and divide the mileage by the number of days or hours that you wish to travel.	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/ • questions/choices

Summary/Reflection:	Homework: Standards Practice (SP) book pages 33-34	

Subject: Math Date: Unit 2 Day 3: Investigate: Division with 2 Digit Divisors

Overview and Purpose: Perform operations with multi-digit whole numbers and with decimals to hundredths.	Educational Standards Addressed: CC.5.NBT.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.		
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Model division with 2 digit divisors using base ten blocks.	Materials Needed: Vocabulary cards Pencil/Paper Base ten blocks Math journal Math board	
Procedure: (Give and/or demonstrate necessary information.	 Warm up: Distribute Problem of the day. Have students work on it individually, then review as whole class and determine how to get the answer. Introduction: Go over previous night's homework. Have students read today's Essential Question: How can you use base ten blocks to model and understand division of whole numbers? Let students know this will be the focus for the day. Direct Instruction: Access prior knowledge: Have students draw a quick picture to show 14×1. Ask: what partial products does your picture show? How can you use your partial products to find the product of 14×15? Remind students that multiplication and division are inverse operations. So, just as they can multiply by drawing quick pictures to find products, they can divide by drawing quick pictures to find quotients. Read the problem on SE page 69. Ask: What operation will be used to solve the problem? Why is division used to solve the problem? Have students use base ten blocks to answer the questions or use the blocks on the overhead to model. Work through the additional problem using base ten blocks on page 70. 	Vocabulary: • Partial quotients	

	Have students draw a quick picture to find quotients. • Complete Independent Work and Check for understanding, completing Share and Show (p. 71-72) • Use the Test Prep Coach to go over test prep question and determine why students may have selected incorrect response. Wrap up/Assessment: Review essential question (How can you use base ten blocks to model and understand division of whole numbers?)	
Verification: (Steps to check for student understanding.) Independent Activity: (Describe independent activity to reinforce this lesson)	 Visually Orally: Students explanation of work/answers to questions Completion of Assignment: Share and Show SE page 71-72 Math journal: Write a division problem that has a 3 digit dividend and a divisor between 10 and 20. Show how to solve it by drawing a quick picture. 	Additional Notes: Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/ • questions/choices
Summary/Reflection:	Homework: Standards Practice (SP) book pages 35-36	1

Subject: Math Date: Unit 2 Day 4: Investigate: Division with 2 Digit Divisors

Overview and Purpose:	Educational Standards Addressed:
Perform operations with multi-digit	CC.5.NBT.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors,
whole numbers and with decimals to hundredths.	using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Objectives: (Specify skills/information that will be	SWBAT: • Use partial quotients to divide by 2 digit divisors.	Materials Needed: • Vocabulary cards
learned.)		 Pencil/Paper Base ten blocks Math journal Math board
Procedure:	Warm up: Distribute Problem of the day. Have students work on it individually,	Vocabulary:
(Give and/or demonstrate necessary information.	then review as whole class and determine how to get the answer. Introduction: Go over previous night's homework. Have students read today's Essential Question: How can you use partial quotients to divide by 2 digit divisors? Let students know this will be the focus for the day.	Partial quotients
	 Access prior knowledge: Write the multiplication problems on the board: 4×10=40, 52×10=520, and 916×10=9,160. Discuss the patterns of zeros, and have students state a rule that can be used to find the product of a number and 10 using only mental math. Read the problem on SE page 73 and discuss the relationship of the information. Ask: Why is division used to solve this problem? Remind students that the partial quotients method of division involves subtracting multiples of the divisors from the dividend. Work through the steps together on page 73 Have students try the problem 1450÷32 on their own. Check for understanding. Have students explain the steps used to come up with the answer. Complete Independent Work and Check for understanding, completing Share and Show (p. 75-76) Use the Test Prep Coach to go over test prep question and determine why students may have selected incorrect response. Wrap up/Assessment: Review essential question (How can you use partial quotients to divide by 2 digit divisors?) 	
Verification:	• Visually	Additional Notes:
(Steps to check for student understanding.)	 Orally: Students explanation of work/answers to questions Completion of Assignment: Share and Show 	
Independent Activity: (Describe independent activity to reinforce this lesson)	SE page 75-76 Math journal: Explain how using partial quotients to divide is similar to using the Distributive Property to multiply.	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention

		•	extra time to complete assignments
		•	small group
		•	reread instructions/
		•	questions/choices
Summary/Reflection:	Homework: Standards Practice (SP) book pages 37-38		

Subject: Math Date: Unit 2 Mid Chapter Checkpoint

Overview and Purpose: Assess student's learning and progress in the first half of the chapter.	Educational Standards Addressed: CC.5.NBT.6 Find whole number quotients of whole numbers with up to four digit dividends and two digit divisors, using strategies based on place value, the properties of operations, and /or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.		
Objectives: (Specify skills/information that will be learned.)	 SWBAT: Place the first digit in the quotient by estimating or using place value Divide 3- and 4-digit dividends by 1-digit divisors Model division with 2 digit divisors using base ten blocks. Use partial quotients to divide by 2 digit divisors. 	Materials Needed:	
Procedure: (Give and/or demonstrate necessary information.	 Warm up: Go over previous night's homework together. Introduction: Let students know that they are going to take a quiz on the information they learned in the last 4 lessons. Direct Instruction: Review: How to place the first digit in the quotient by estimating or using place value How to divide 3 and 4 digit dividends by 1 digit divisors How to divide 2 digit divisors using base ten blocks How to use partial quotients to divide by 2 digit divisors Wrap up/Assessment: The formative assessment provides the opportunity to adjust teaching methods for individual or whole class instruction. 	Vocabulary: Dividend Divisor Quotient Remainder Inverse operations Partial quotients	
Verification: (Steps to check for student understanding.)	 Visually Orally: Students explanation of work/ answers to questions Completion of Assignment: Quiz 	Additional Notes:	
Activity: (Describe independent activity to	Mid Chapter Quiz	Special Education/ESL Accommodations: Based on students' needs the teacher will	

reinforce this lesson)		differentiate with the following	
		strategies:	
		•	time for intervention
		•	extra time to complete
			assignments
		•	small group
		•	reread instructions/
		•	questions/choices
Summary/Reflection:	Use Reteach book if additional help is needed.		

Subject: Math Date: Unit 2 Day 5: Estimate with 2 Digit Divisors

Overview and Purpose: Perform operations with multi-digit whole numbers and with decimals to hundredths.	Educational Standards Addressed: CC.5.NBT.6 Find whole-number quotients of whole numbers with up to four-digit dusing strategies based on place value, the properties of operations, and/or the relational division. Illustrate and explain the calculation by using equations, rectangular	ationship between multiplication
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Estimate quotients using compatible numbers.	Materials Needed: Vocabulary cards Pencil/Paper Base ten blocks Math journal Math board
Procedure: (Give and/or demonstrate necessary information.	 Warm up: Distribute Problem of the day. Have students work on it individually, then review as whole class and determine how to get the answer. Introduction: Go over previous night's homework. Have students read today's Essential Question: How can you use compatible numbers to estimate quotients? Let students know this will be the focus for the day. Direct Instruction: Access prior knowledge: Challenge students to name a different basic division fact such as 24÷3=8. If you have fewer than 20 students in your class, challenge them to each name two different facts. Share. Ask: Is dividing by 10 more like dividing by 9 or by 11? Discuss the pattern that is generated by the division fact 35÷5=7 on SE page 79. Explain that you can estimate quotients using compatible 	Vocabulary:

Verification:	 numbers that are found by using basic facts and patterns. Describe the relationship shared by the dividends, divisors, and quotients in this pattern. Discuss. Read the problem on SE page 79. Ask: Have you ever visited the Willis Tower in Chicago? Solve the problem to learn how fast one of its elevators travels. Discuss both steps of the solution. Make sure students understand how rounding and multiples are used to produce the compatible numbers. Say: Suppose we divided 1353 by 60 to find an exact quotient. Will the exact quotient be greater or less than the estimate of 1200÷60? Why? Remind students that the partial quotients method of division involves subtracting multiples of the divisors from the dividend. Ask: Will the division used to find the exact quotient produce a remainder? Explain how you know. Yes. Continue with another problem on SE page 80 (estimate money). Read the problem. Estimate: 650÷18. Complete Independent Work and Check for understanding, completing Share and Show (p. 80-82) Use the Test Prep Coach to go over test prep question and determine why students may have selected incorrect response. Wrap up/Assessment: Review essential question (How can you use compatible numbers to estimate quotients?) Visually 	Additional Notes:
(Steps to check for student	Orally: Students explanation of work/answers to questions	Traditional Protess
understanding.)	Completion of Assignment: Share and Show	Special Education /ESI
Independent Activity: (Describe independent activity to reinforce this lesson)	SE page 80-82 Math journal: Create a division problem with a 2 digit divisor. Using more than 1 set of compatible numbers, observe what happens when you estimate using a different divisor, a different dividend, and when both are different.	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/ • questions/choices
	Homework: Standards Practice (SP) book pages 39-40	

Subject: Math Date: Unit 2 Day 6: Divide by 2 Digit Divisors

Overview and Purpose: Perform operations with multi-digit whole numbers and with decimals to hundredths.	Educational Standards Addressed: CC.5.NBT.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.		
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Divide by 2 digit divisors.	Materials Needed: Vocabulary cards Pencil/Paper Base ten blocks Math journal Math board	
Procedure: (Give and/or demonstrate necessary information.	 Warm up: Distribute Problem of the day. Have students work on it individually, then review as whole class and determine how to get the answer. Introduction: Go over previous night's homework. Have students read today's Essential Question: How can you divide by 2 digit divisors? Let students know this will be the focus for the day. Direct Instruction: Access prior knowledge: At the board, invite one volunteer to write a 2 digit divisor and another to write a 3 or 4 digit dividend. Invite a third volunteer to name compatible numbers that could be used to estimate the quotient, and explain why those numbers were named. Read the problem on SE page 83. Do you know what an orange punch smoothie is? Read the problem to learn the answer. Ask: What are we trying to find? What numbers will we use? After determining the information needed ask: why is division used to solve this problem? Discuss the solution Practice with the problem on SE page 84, working together. Complete Independent Work and Check for understanding, completing Share and Show (p. 85-86) Use the Test Prep Coach to go over test prep question and determine why students may have selected incorrect response. Wrap up/Assessment: Review essential question (How can you divide by 2 digit divisors?) 	Vocabulary:	

Verification:	Visually	Additional Notes:
(Steps to check for student	Orally: Students explanation of work/answers to questions	
understanding.)	Completion of Assignment: Share and Show	
Independent Activity: (Describe independent activity to reinforce this lesson)	SE page 85-86 Math journal: Choose a problem that you solved in the lesson, and solve the same problem using the partial quotients method. Compare the methods to solve the problems. Name the method you like better, and explain why.	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/ • questions/choices
Summary/Reflection:	Homework: Standards Practice (SP) book pages 41-42	

Subject: Math Date: Unit 2 Day 7: Interpret the Remainder

Overview and Purpose: Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	Educational Standards Addressed: CC.5.NBT.3 Interpret a fraction as division of the numerator by the denominator $(a/b=a \div b)$. Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, by using visual fraction models or equations to represent the problem.		
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Solve division problems and decide when to write a remainder as a fraction.	Materials Needed: Vocabulary cards Pencil/Paper Base ten blocks Math journal Math board	

Procedure: (Give and/or demonstrate necessary information.	 Warm up: Distribute Problem of the day. Have students work on it individually, then review as whole class and determine how to get the answer. Introduction: Go over previous night's homework. Have students read today's Essential Question: When solving a division problem, when do you write the remainder as a fraction? Let students know this will be the focus for the day. Direct Instruction: Access prior knowledge: Challenge students to use only mental math and name the remainder for each of the following divisions: 17÷2, 10÷4, 13÷8, 12÷9, 16÷6, 17÷7, 14÷3, 21÷5 Read the problem on SE page 87. How could you hike a trail that is 1365 miles long? Read to find out how one family plans to do this. Guide students to identify the numbers they will use as the dividend and the divisor. Ask: What does the number 1,365 represent? What does the number 12 represent? Have students write the remainder as a fraction. Explain that the answer 113 r9 tells you that Scott and his family will hike 113 miles each trip. There are 9 miles remaining to divide equally among 12 trips: 9÷12 can be written as 9/12. Make sure students understand that writing a remainder as a fraction involves writing the fraction in simplest form, whenever possible. Ask: How do you know when a fraction is in simplest form? Explain how to change a fraction that is not in simplest form to a fraction that is in simplest form. Look at SE page 88: another way. Work through problem together. Complete Independent Work and Check for understanding, completing Share and Show (p. 89-90) Use the Test Prep Coach to go over test prep question and determine why students may have selected incorrect response. Wrap up/Assessment: Review essential question (When solving a division problem, when do you write the remainder as a fraction?) 	Vocabulary: •
Verification:	Visually	Additional Notes:
(Steps to check for student	Orally: Students explanation of work/answers to questions	
understanding.)	Completion of Assignment: Share and Show	
Independent Activity:	SE page 89-90	Special Education/ESL Accommodations: Based on
(Describe independent activity to	Math journal: Suppose you have 192 marbles in groups of 15 marbles each. Find	students' needs the teacher will
reinforce this lesson)	the number of groups of marbles that you have. Write the quotient with the remainder written as a fraction. Explain what the fraction part of your answer	differentiate with the following strategies:
	means.	time for intervention

		•	extra time to complete assignments small group reread instructions/ questions/choices
Summary/Reflection:	Homework: Standards Practice (SP) book pages 43-44		

Subject: Math Date: Unit 2 Day 8: Adjust Quotients

Overview and Purpose: Perform operations with multi digit whole numbers and with decimals to hundredths.	Educational Standards Addressed: CC.5.NBT.6 Find whole-number quotients of whole numbers with up to four-digit of using strategies based on place value, the properties of operations, and/or the related and division. Illustrate and explain the calculation by using equations, rectangular	ationship between multiplication
Objectives:	SWBAT:	Materials Needed:
(Specify skills/information that will be learned.)	Adjust the quotient if the estimate is too high or too low.	 Vocabulary cards Pencil/Paper Base ten blocks Math journal Math board
Procedure:	Warm up: Distribute Problem of the day. Have students work on it individually,	Vocabulary:
(Give and/or demonstrate necessary	then review as whole class and determine how to get the answer.	•
information.	Introduction: Go over previous night's homework. Have students read today's	
	Essential Question: How can you adjust the quotient if your estimate is too high or too low? Let students know this will be the focus for the day.	
	Direct Instruction:	
	 Access prior knowledge: Point out that the first problem in this lesson involves music CDs. Invite volunteers to tell what they know about music CDs. Then ask the class to create and solve a division problem about music CDs. Students should understand that when using compatible numbers, the estimates that result may be too high or too low. After discussing the two examples on SE page 91 (3382÷48, 453÷65) 	
	remind students that finding each digit of a quotient involves division, multiplication, and subtraction.	

	 Ask: How can we recognize if the digit in a quotient is too low? Why is the quotient too low if the difference is larger than the divisor? Explain how to recognize if a digit in a quotient is too high. Complete Independent Work and Check for understanding, completing Share and Show (p. 92-93) Use the Test Prep Coach to go over test prep question and determine why students may have selected incorrect response. Wrap up/Assessment: Review essential question (How can you adjust the quotient if your estimate is too high or too low?) 	
Verification: (Steps to check for student understanding.)	 Visually Orally: Students explanation of work/answers to questions Completion of Assignment: Share and Show 	Additional Notes:
Independent Activity: (Describe independent activity to reinforce this lesson)	SE page 93-93 Math journal: Explain the different ways that you can use multiplication to estimate and solve division problems.	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/ • questions/choices
Summary/Reflection:	Homework: Standards Practice (SP) book pages 45-46 Test Prep	

Subject: Math Date: Unit 2 Day 9: Problem Solving: Division

Overview and Purpose:	Educational Standards Addressed:
Perform operations with multi digit	CC.5.NBT.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors,
whole numbers and with decimals to	using strategies based on place value, the properties of operations, and/or the relationship between multiplication
hundredths.	and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Objectives: (Specify skills/information that will be learned.)	SWBAT: • Solve problems by using the strategy <i>draw a diagram</i> .	Materials Needed: Vocabulary cards Pencil/Paper Base ten blocks Math journal
		Math board
Procedure: (Give and/or demonstrate necessary information.	 Warm up: Distribute Problem of the day. Have students work on it individually, then review as whole class and determine how to get the answer. Introduction: Go over previous night's homework. Have students read today's Essential Question: How can the strategy draw a diagram help you solve a division problem? Let students know this will be the focus for the day. Direct Instruction: Introduce the lesson by asking: Do you know what amberjack and blue marlin are? Accept different responses. Read the problem on SE page 95 about chartering a fishing boat. Show the graphic organizer on page 95 to students (display on smart board). Read and discuss the first column of the graphic organizer to determine what we need to find. In the second column make sure students understand that if we use one box to represent the weight of the amberjack, we must use 12 boxes to represent the weight of the marlin, because the weight of the marlin is 12 times as great as the weight of the amberjack. Lead students to conclude that all 13 boxes represent 273 pounds, and since 273 pounds has been divided into 13 equal parts, we can use division to find the weight of each equal part. Finish the graphic organizer together. Have students work together to complete the problem on SE page 96 the same way. Complete Independent Work and Check for understanding, completing Share and Show (p. 97-98) 	Vocabulary: •
	 Use the Test Prep Coach to go over test prep question and determine why students may have selected incorrect response. Wrap up/Assessment: Review essential question (How can the strategy <i>draw a diagram</i> help you solve a division problem?) 	
Verification: (Steps to check for student understanding.)	 Visually Orally: Students explanation of work/answers to questions Completion of Assignment: Share and Show 	Additional Notes:

Independent Activity:	SE page 97-98	Special Education/ESL
(Describe independent activity to reinforce this lesson)	Math journal: Create a word problem that uses division. Draw a bar model to help you write an equation to solve the problem.	Accommodations: Based on students' needs the teacher will differentiate with the following strategies:
		 time for intervention extra time to complete assignments small group reread instructions/ questions/choices
Summary/Reflection:	Homework: Standards Practice (SP) book pages 47-48 Test Prep	

Subject: Math Date: Unit 2 Test

Overview and Purpose: Assess student's learning and progress in Chapter 2.	Educational Standards Addressed: CC.5.NBT.3 Interpret a fraction as division of the numerator by the denominator (<i>a/b=a÷b</i>). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, by using visual fraction models or equations to represent the problem. CC.5.NBT.6 Find whole number quotients of whole numbers with up to four digit dividends and two digit divisors, using strategies based on place value, the properties of operations, and /or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Recall information learned in the second unit on compatible numbers, interpreting remainders, and finding the quotient in division problems.	Materials Needed: • Test
Procedure: (Give and/or demonstrate necessary information.	 Warm up: Go over previous night's homework together. Introduction: Let students know that they are going to take a test today on what they learned about in the 2nd chapter on Dividing Whole numbers. Direct Instruction: Review the Chapter's essential question: How can you divide whole numbers? Ask the following focus questions: What strategies have you used to place the first digit in the quotient? How can you use estimation to help you divide? How do you know when to use division to solve a problem? Give assessment 	Vocabulary: Dividend Divisor Quotient Remainder Inverse operations Partial quotients Compatible numbers estimate

	Wrap up/Assessment: The summative assessment provides feedback on how the students understood the information presented in chapter 2. Check the scoring rubric found in the TE page 101-102 for the constructed response.	
Verification: (Steps to check for student understanding.)	 Visually Orally: Students explanation of work/ answers to questions Completion of Assignment: Test 	Additional Notes:
Activity: (Describe independent activity to reinforce this lesson)	Summative Assessment	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/ • questions/choices
Summary/Reflection:	Use Reteach book if additional help is needed for Math RTI.	

Grade: 5th

Enduring Understanding: Extending division to 2-digit divisors, integrating Big Ideas: decimal fractions into the place value system and developing understanding of Model, read, and write decimals to thousandths operations with decimals to hundredths, and developing fluency with whole Read and write decimals through thousandths number and decimal operations. Compare and order decimals to thousandths using place value Round decimals to any place Model decimal addition using base ten blocks Vocabulary: thousandth, sequence, term Model decimal subtraction using base ten blocks Make reasonable estimates of decimal sums and differences Add decimals using place value Curricular Tools: Go Math Curriculum and Teacher Created Resources Subtract decimals using place value Identify, describe, and create numeric patterns with decimals Solve problems using the strategy *make a table* Choose a method to find a decimal sum or difference **Essential Questions:** Educational Standards Addressed: *Common Core State Standards: • How can you describe the relationship between two decimal place value • CC.5.NBT.1 Recognize that in a multi-digit number, a digit in one place positions? How do you read, write, and represent decimals through thousandths? represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left. How can you use place value to compare and order decimals? CC.5.NBT.3 Read, write, and compare decimals to thousandths. A) Read How can you use place value to round decimals to a given place? and write decimals to the thousandths using base ten numerals, number How can you use base ten blocks to model decimal addition? names and expanded form. B) Compare two decimals to thousandths How can you use base ten blocks to model decimal subtraction? based on meanings of the digits in each place using <, >, and = symbols to How can you estimate decimal sums and differences? record the results of comparisons How can place value help you add decimals? CC.5.NBT.4 Use place value understanding to round decimals to any How can place value help you subtract decimals? place How can you use addition or subtraction to describe a pattern or create a CC.5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, sequence with decimals? using concrete models or drawings and strategies based on place value, How can the strategy make a table help you organize and keep track of properties of operations, and/or the relationship between addition and your bank account balance? subtraction; relate the strategy to a written method and explain the Which method could you choose to find decimal sums and differences? reasoning used. Assessment of the Unit: Go Math chapter assessment (Overall Assessment of the Teacher created assessment Unit) Summary/Reflection:

Math: Chapter 3: Add and Subtract Decimals

Timeframe: 14 days

Subject: Math Date: Unit 3: Introduce the Chapter

Overview and Purpose: Pre-assess what students retained from chapters 1-2.	Educational Standards Addressed: CC.5.NBT.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.		
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Take a pre-assessment to determine if they have the pre-requisite skills to proceed in the next lesson.	Materials Needed:	
Procedure: (Give and/or demonstrate necessary information.	 Warm up: Go over previous night's math homework Introduction: Let students know that you are going to do a review today to assess what they learned in the last chapter. Direct Instruction: Write the following on the board: 467+259=. Remind students that when you find the sum of whole numbers, you must regroup when the value of a place is 10 or more. Then ask them to find the sum by regrouping. Have students work together on page SE 103. Go over as a class, having students share their answers. Review the vocabulary words from previous chapter: benchmark, hundredth, place value, round, tenth. Introduce the chapters preview words: sequence, term, and thousandth. Let student's complete page 104 with a partner. Go over answers. Wrap up/Assessment: Let students know that in the next several lessons they will be learning how to add and subtract decimals. Give a 3 digit addition problem for an Exit Pass. 	Vocabulary: •	
Verification: (Steps to check for student understanding.)	 Visually Orally: Students explanation of work/answers to questions Completion of Assignment: Exit pass 	Additional Notes:	
Independent Activity: (Describe independent activity to reinforce this lesson)		Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments	

		•	small group reread instructions/ questions/choices
Summary/Reflection:	Homework:		

Subject: Math Date: Unit 3 Day 1: Investigate- Thousandths

Overview and Purpose: Understand the place value system	Educational Standards Addressed: CC.5.NBT.1 Recognize that in a multi-digit number, a digit in one place represents in the place to its right and 1/10 of what it represents in the place to its left.	10 times as much as it represents
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Model, read, and write decimals to thousandths.	Materials Needed:
Procedure: (Give and/or demonstrate necessary information.	 Warm up: Distribute the problem of the day. Have students work on it individually, then review as a whole class and determine how to get the answer. Introduction: Go over previous night's homework. Have students read today's Essential question: How can you describe the relationship between two decimal place-value positions? Let the students know that this is our focus for today's lesson. Direct Instruction: Show a place value chart (or draw one on the board) and review the names of places near the decimal point. Have students come up and write the following numbers in the chart: 103.357, 30.608, 135.078, 25.78, and 1.006 Have students outline several 10x10 squares on grid paper. As you name fractions with denominators of ten or one hundred, have volunteers shade the grids and share them. Then have students write the shaded part as a fraction and as a decimal. Use the following fractions: 6 tenths, 25 hundredths, 2 tenths, 50 hundredths. Ask: why is a 10x10 grid a good model to represent decimals? Work through questions on SE page 105 together. Ask the following questions: What is the relationship between one and one tenth? What is the relationship between one tenth and one 	Vocabulary: • thousandths

	hundredth? What is the relationship between one hundredth and one thousandth? • Give students the opportunity to share their answers with the class. Reinforce the concept that as you move from tenths to hundredths to thousandths, the value of each place value position is 1/10 the value of the previous position. • Work through SE pages 106 as a whole group. Wrap up/Assessment: Review essential question	
Verification: (Steps to check for student understanding.)	 Visually Orally: Students explanation of work/answers to questions Completion of Assignment: Exit pass 	Additional Notes:
Independent Activity: (Describe independent activity to reinforce this lesson)	SE pages 107-108 Math Journal: Write four decimals with the digit 4 in a different place in eachones, tenths, hundredths, and thousandths. Then write a statement that compares the value of the digit 4 in the different decimals.	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/ • questions/choices
Summary/Reflection:	Homework: Standards Practice pages 53-54	•

Subject: Math Date: Unit 3 Day 2: Place Value of Decimals

Overview and Purpose: Understand the place value system	Educational Standards Addressed: CC.5.NBT.3 Read, write, and compare decimals to thousandths. A) Read and write decimals to the thousandths using base ten numerals, number names and expanded form.	
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Read, and write decimals through thousandths.	Materials Needed:

Procedure: (Give and/or demonstrate necessary information.	 Warm up: Distribute the problem of the day. Have students work on it individually, then review as a whole class and determine how to get the answer. Introduction: Go over previous night's homework. Have students read today's Essential question: How do you read, write, and represent decimals through thousandths? Let the students know that this is our focus for today's lesson. Direct Instruction: Introduce the lesson by discussing how measurements are often given using decimals to provide a more precise measurement. Brainstorm examples when decimals are used for measuring. Ex. Swimming competitions give times using decimals to the hundredths place to determine a winner. Unlock the problem: show students the problem on SE page 109. Read and discuss the problem. Direct students attention to the place value chart. Ask: How does each decimal place value compare to the place value to its left? What about to the right? Work through the problem together. Remind students that the value of the last digit in a decimal can help you read a decimal. Have students practice the example on SE pg. 110 as a whole. Be sure students recognize that the value of each place is 1/10 the value of the place to its left or 10 times as much as the value of the place to its right. Have students work on pages 111-112 on their own. Stop and check for understanding using the Share and Show problem. Use the Test prep coach to determine why students might have gotten the wrong answer. Wrap up/Assessment: Review essential question 	Vocabulary: •
Verification: (Steps to check for student understanding.)	 Visually Orally: Students explanation of work/answers to questions Completion of Assignment: Share and Show 	Additional Notes:
Independent Activity: (Describe independent activity to reinforce this lesson)	SE pages 111-112 Math Journal: Write standard form, expanded form, and word form at the top of a page. Under standard form, write five decimals that have at least 3 digits to the right of the decimal point. Write the expanded form and the word form for each number under the appropriate heading.	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/ • questions/choices
Summary/Reflection:	Homework: Standards Practice pages 55-56	1

Subject: Math Date: Unit 3 Day 3: Compare and Order Decimals

Overview and Purpose: Understand the	Educational Standards Addressed:	
place value system	CC.5.NBT.3 Read, write, and compare decimals to thousandths. B) Compare two d meanings of the digits in each place using <, >, and = symbols to record the results	
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Compare and order decimals to thousandths using place value	Materials Needed:
Procedure: (Give and/or demonstrate necessary information.	 Warm up: Distribute the problem of the day. Have students work on it individually, then review as a whole class and determine how to get the answer. Introduction: Go over previous night's homework. Have students read today's Essential question: How can you use place value to compare and order decimals? Let the students know that this is our focus for today's lesson. Direct Instruction: Write the following numbers on the board: 32,045; 321,459; 32,405. Discuss how to order whole numbers. Ask: How can you order these numbers from least to greatest? Unlock the problem: read and discuss the problem on SE page 113. Have students decide what it is that they need to compare. Explain to students what it means to line up the decimal points. Model this on the board: 2.495 2.488 Ask: What happens if you do not line up the decimal points? Why do you compare the digits from left to right? What do you do if the digits in the greatest place value position are the same? Discuss how to compare two numbers using a place value chart. Continue with problems on page 114, working together to solve. Have students work on pages 115-116 on their own. Stop and check for understanding using the Share and Show problem. Use the Test prep coach to determine why students might have gotten the wrong answer. Wrap up/Assessment: Review essential question 	Vocabulary: •
Verification:	Visually	Additional Notes:
(Steps to check for student understanding.)	 Orally: Students explanation of work/answers to questions Completion of Assignment: Share and Show 	
Independent Activity:	SE pages 115-116	Special Education/ESL Accommodations: Based on students'

(Describe independent activity to reinforce this lesson)	Math Journal: Write a word problem that can be solved by ordering three decimals to thousandths. Include a solution.	needs the teacher will differentiate with the following strategies:
Summary/Reflection:	Homework: Standards Practice pages 57-58	

Subject: Math Date: Unit 3 Day 4: Round Decimals

Overview and Purpose: Understand the place value system	Educational Standards Addressed: CC.5.NBT.4 Use place value understanding to round decimals to any place	
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Round decimals to any place	Materials Needed:
Procedure: (Give and/or demonstrate necessary information.	 Warm up: Distribute the problem of the day. Have students work on it individually, then review as a whole class and determine how to get the answer. Introduction: Go over previous night's homework. Have students read today's Essential question: How can you use place value to round decimals to a given place? Let the students know that this is our focus for today's lesson. Direct Instruction: Write the following number on the board: 45,926. Explain how you can round this number to the nearest thousand. Unlock the problem: read and discuss the problem about the length of the smallest frog in the world on SE page 113. Ask: What number are you rounding? To what place are you rounding? Discuss how to use a place value chart to round decimals. Ask: How does a place value chart help you round? How can you round using place value? Ask: What happens when there is a zero in the place to which you are rounding? Model on the board: Round 14,603 to the nearest hundredth. 	Vocabulary: •

	 Discuss what it means to round to the nearest whole number. Use the above problem to now round to the nearest whole number. Have students work on pages 119-120 on their own. Stop and check for understanding using the Share and Show problem. Use the Test prep coach to determine why students might have gotten the wrong answer. Wrap up/Assessment: Review essential question 	
Verification: (Steps to check for student	 Visually Orally: Students explanation of work/answers to questions 	Additional Notes:
understanding.)	Completion of Assignment: Share and Show	
Independent Activity: (Describe independent activity to reinforce this lesson)	SE pages 119-120 Math Journal: Describe how to round 3.987 to the nearest tenth.	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: time for intervention extra time to complete assignments small group reread instructions/ questions/choices
Summary/Reflection:	Homework: Standards Practice pages 59-60	

Subject: Math Date: Unit 3 Day 5: Investigate- Decimal Addition

Overview and Purpose: Perform operations with multi-digit whole numbers and with decimals to hundredths.	Educational Standards Addressed: CC.5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Model decimal addition using base ten blocks	Materials Needed: • Base ten blocks

Procedure:	Warm up: Distribute the problem of the day. Have students work on it	Vocabulary:
		•
(Give and/or demonstrate necessary information.	 individually, then review as a whole class and determine how to get the answer. Introduction: Go over previous night's homework. Have students read today's Essential question: How can you use base ten blocks to model decimal addition? Let the students know that this is our focus for today's lesson. Direct Instruction: Write the following addition problem on the board: 34+27. Have students explain and demonstrate the regrouping that is needed to complete the addition problem. Distribute base ten blocks to students. Have them to use the blocks to model the sum of 0.34 and 0.27. (SE pg. 121) Ask students to formulate generalizations that describe when and how to regroup during decimal addition. Model for students how to use a quick picture to add decimals 2.5 and 2.8, using squares for the ones and sticks for the tenths. Ask students to describe why you need to regroup when you combine the tenths. What place value does each part of their picture represent? Have students work on pages 123-124 on their own. Stop and check for 	•
	understanding. Wrap up/Assessment: Review essential question	
Verification: (Steps to check for student understanding.)	 Wrap up/Assessment: Review essential question Visually Orally: Students explanation of work/answers to questions Completion of Assignment: 	Additional Notes:
Independent Activity: (Describe independent activity to reinforce this lesson)	SE pages 123-124 Math Journal: Explain why drawing a quick picture is helpful when adding decimals.	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/ • questions/choices
Summary/Reflection:	Homework: Standards Practice pages 61-62	•

Subject: Math

Date: Unit 3 Day 6: Investigate- Decimal Subtraction

Grade Level: 5

Teacher(s):

Overview and Purpose: Perform operations with multi-digit whole numbers and with decimals to hundredths.	Educational Standards Addressed: CC.5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction relate the strategy to a written method and explain the reasoning used.	
Objectives:	SWBAT:	Materials Needed:
(Specify skills/information that will be learned.)	Model decimal subtraction using base ten blocks	Base ten blocks
Procedure:	Warm up: Distribute the problem of the day. Have students work on it	Vocabulary:
(Give and/or demonstrate necessary	individually, then review as a whole class and determine how to get the answer.	•
information.	Introduction: Go over previous night's homework. Have students read today's	
	Essential question: How can you use base ten blocks to model decimal	
	subtraction? Let the students know that this is our focus for today's lesson. Direct Instruction:	
	 Write the following subtraction problem on the board: 500-249. Have students explain and demonstrate the regroupings that must occur to complete the subtraction. Distribute base ten blocks to students. Have them to use the blocks to model the sum of 0.84-0.56. (SE pg. 125) Ask students to formulate generalizations that describe when and how to regroup during decimal subtraction. Review what it means to draw a quick picture to show regrouping. Model 2.82-1.47 using a quick picture. Ask students to describe the grouping needed to subtract the hundredths? Have students explain why there is no need to regroup to subtract the tenths. What place value does each part in the picture represent? Have students work on pages 127-128 on their own. Stop and check for understanding using the Share and Show problem. Use the Test prep coach to determine why students might have gotten the wrong answer. Wrap up/Assessment: Review essential question 	
Verification:	Visually	Additional Notes:
(Steps to check for student	 Orally: Students explanation of work/answers to questions 	
understanding.)	Completion of Assignment: Share and Show	

Independent Activity:	SE pages 127-128	Special Education/ESL Accommodations: Based on students'
(Describe independent activity to reinforce this lesson)	Math Journal: Describe a problem involving decimals that you would use a quick picture to solve. Then solve the problem.	needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/ • questions/choices
Summary/Reflection:	Homework: Standards Practice pages 63-64	

Subject: Math Date: Unit 3 Mid-Chapter Checkpoint

Overview and Purpose: Assess student's	Educational Standards Addressed:		
learning and progress in the first half of	CC.5.NBT.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to		
the chapter.	its right and 1/10 of what it represents in the place to its left.		
T	CC.5.NBT.3 Read, write, and compare decimals to thousandths. A) Read and write decimals	to the thousandths using base ten	
	numerals, number names and expanded form. B) Compare two decimals to thousandths based	d on meanings of the digits in each	
	place using <, >, and = symbols to record the results of comparisons		
	CC.5.NBT.4 Use place value understanding to round decimals to any place		
	CC.5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete mode		
	place value, properties of operations, and/or the relationship between addition and subtraction	n; relate the strategy to a written	
	method and explain the reasoning used.		
Objectives:	SWBAT:	Materials Needed:	
(Specify skills/information that will be	 Read, and write decimals through thousandths. 	 Base ten blocks 	
learned.)	Compare and order decimals to thousandths using place value		
	Round decimals to any place		
	Model decimal subtraction using base ten blocks		
	8		
Procedure:	Warm up: Go over previous night's homework together.	Vocabulary:	
(Give and/or demonstrate necessary	Introduction: Let students know that they are going to take a quiz on the	•	
information.	information they learned the last 6 days of school.		
	Direct Instruction: Review: vocabulary, place value, regrouping, decimals, and		
	how to regroup hundredths and tenths.		
	Wrap up/Assessment: The formative assessment provides the opportunity to		
	adjust teaching methods for individual or whole class instruction.		
Verification:	Visually	Additional Notes:	

(Steps to check for student	Orally: Students explanation of work/answers to questions	
understanding.)	Completion of Assignment: Quiz	
Independent Activity:	Mid-chapter Quiz	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with
(Describe independent activity to reinforce this lesson)		the following strategies: time for intervention extra time to complete assignments small group reread instructions/ questions/choices
Summary/Reflection:		

Subject: Math Date: Unit 3 Day 7: Estimate Decimal Sums and Differences

Overview and Purpose: Perform	Educational Standards Addressed:		
operations with multi-digit whole	CC.5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and		
numbers and with decimals to	strategies based on place value, properties of operations, and/or the relationship between addition and subtraction;		
hundredths.	relate the strategy to a written method and explain the reasoning used.		
Ohiostinon	CWDAT	Metariala Nandada	
Objectives:	SWBAT:	Materials Needed:	
(Specify skills/information that will be learned.)	Make reasonable estimates of decimal sums and differences	•	
Procedure:	Warm up: Distribute the problem of the day. Have students work on it	Vocabulary:	
(Give and/or demonstrate necessary	individually, then review as a whole class and determine how to get the answer.	•	
information.	Introduction: Go over previous night's homework. Have students read today's		
	Essential question: How can you estimate decimal sums and differences? Let the		
	students know that this is our focus for today's lesson.		
	Direct Instruction:		
	Tell students that music is often stored on a CD. Have students research		
	what is a reasonable estimate for how much music a CD can hold.		
	• Read the problem at the top of SE pg. 131. Point out the word "about" suggests that we estimate.		
	Have students relate how they round a decimal and how they would		

Verification: (Steps to check for student understanding.) Independent Activity: (Describe independent activity to reinforce this lesson)	round a whole number. They should conclude that rounding either decimals or whole numbers involves place value. Have students estimate the sum of the three decimals (3.4, 2.78, 4.19) by rounding each number to the nearest whole number. • Introduce Benchmarks as familiar numbers used as points of reference. Help students connect them to equivalent fractions. Ask: What fractions in simplest form are equivalent to the benchmarks 0.25, 0.5, and 0.75? • Point out that it may be helpful to think of whole numbers when graphing points for decimal points. Work through examples on SE pg. 132 together. • Have students work on pages 133-134 on their own. Stop and check for understanding using the Share and Show problem. Use the Test prep coach to determine why students might have gotten the wrong answer. Wrap up/Assessment: Review essential question • Visually • Orally: Students explanation of work/answers to questions • Completion of Assignment: Share and Show SE pages 133-134 Math Journal: Explain why estimations is an important skill to know when adding and subtracting decimals.	Additional Notes: Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/ • questions/choices
Summary/Reflection:	Homework: Standards Practice pages 65-66	

Subject: Math Date: Unit 3 Day 8: Add Decimals

Overview and Purpose: Perform	Educational Standards Addressed:
operations with multi-digit whole	CC.5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and
numbers and with decimals to	strategies based on place value, properties of operations, and/or the relationship between addition and subtraction;
hundredths.	relate the strategy to a written method and explain the reasoning used.

Objectives: (Specify skills/information that will be learned.)	SWBAT: • Add decimals using place value	Materials Needed:
Procedure: (Give and/or demonstrate necessary information.	 Warm up: Distribute the problem of the day. Have students work on it individually, then review as a whole class and determine how to get the answer. Introduction: Go over previous night's homework. Have students read today's Essential question: How can place value help you add decimals? Let the students know that this is our focus for today's lesson. Direct Instruction: Point out that the average amount of rain fall a state receives each year may be described to the nearest inch or to the nearest centimeter. Ask: To the nearest centimeter, what is your estimate of the average amount of rainfall your town or city receives each year? Read the problem on SE pg. 135 and discover to which decimal place the rainfall is measured. How can we draw a quick picture to represent this problem? Go over Equivalent decimals. Have students estimate, and then find the sum for 20.4+13.76. Students should estimate to get 20+14=. Then have students add the hundredths first, then the tenths, ones, and tens. Regroup as needed. Work through the share and show problems on page 136 together. Have students work on pages 137-138 on their own. Stop and check for understanding. Use the Test prep coach to determine why students might have gotten the wrong answer for #26. Wrap up/Assessment: Review essential question 	Vocabulary: •
Verification: (Steps to check for student understanding.)	 Visually Orally: Students explanation of work/answers to questions Completion of Assignment: Share and Show 	Additional Notes:
Independent Activity: (Describe independent activity to reinforce this lesson)	SE pages 137-138 Math Journal: Describe an addition problem that you may need to regroup hundredths to solve.	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/ • questions/choices
Summary/Reflection:	Homework: Standards Practice pages 67-68	1

Subject: Math Date: Unit 3 Day 9: Subtract Decimals

Overview and Purpose: Perform operations with multi-digit whole numbers and with decimals to hundredths. Objectives: (Specify skills/information that will be learned.)	Educational Standards Addressed: CC.5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concr strategies based on place value, properties of operations, and/or the relationship be relate the strategy to a written method and explain the reasoning used. SWBAT: • Subtract decimals using place value	
Procedure: (Give and/or demonstrate necessary information.	 Warm up: Distribute the problem of the day. Have students work on it individually, then review as a whole class and determine how to get the answer. Introduction: Go over previous night's homework. Have students read today's Essential question: How can place value help you subtract decimals? Let the students know that this is our focus for today's lesson. Direct Instruction: Ask each student to name a favorite fruit. As a class, identify those fruits that are likely to be sold by the pound, and then discuss the accuracy that may be used to weigh the fruits. Ex. Is it reasonable for a store to round the weight to the nearest pound? What might be a more appropriate unit? Unlock the problem on page 139 and discuss the quick picture that students should draw. Ask: To complete this subtraction, why do you begin in the hundredths place? Do you have to regroup to subtract hundredths? Explain. Describe the regrouping using place value names. Check for understanding on when to regroup in a decimal subtraction problem. Explain how you can use addition to check your subtraction problems. Use 14.20-8.63 to get 5.57. Add 5.57+8.63 to get 14.20. Work through the share and show problems on page 140 together. Have students work on pages 141-142 on their own. Stop and check for understanding. Use the Test prep coach to determine why students might have gotten the wrong answer for #26. Wrap up/Assessment: Review essential question 	Vocabulary: •
Verification: (Steps to check for student understanding.)	 Visually Orally: Students explanation of work/answers to questions 	Additional Notes:

	Completion of Assignment: Share and Show	
Independent Activity: (Describe independent activity to reinforce this lesson)	SE pages 141-142 Math Journal: Write a decimal subtraction problem that requires regrouping to solve. Then solve the problem.	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: time for intervention extra time to complete assignments small group reread instructions/ questions/choices
Summary/Reflection:	Homework: Standards Practice pages 69-70	

Subject: Math Date: Unit 3 Day 10: Algebra- Patterns with Decimals

Overview and Purpose: Perform operations with multi-digit whole numbers and with decimals to hundredths.	Educational Standards Addressed: CC.5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Identify, describe, and create numeric patterns with decimals	Materials Needed:
Procedure: (Give and/or demonstrate necessary information.	 Warm up: Distribute the problem of the day. Have students work on it individually, then review as a whole class and determine how to get the answer. Introduction: Go over previous night's homework. Have students read today's Essential question: How can you use addition or subtraction to describe a pattern or create a sequence with decimals? Let the students know that this is our focus for today's lesson. Direct Instruction: Ask students if they have ever rented canoes at a state park. Have students recall, if possible, the cost of renting a canoe. Unlock the problem on pg. SE 143. Read the problem and point out the two new vocabulary words: sequence, term. Have students discuss why the total price increases with each additional hour. Ask: How does the cost of renting the canoe for 1 hour compare to 	Vocabulary:

Verification: (Steps to check for student	 the cost of renting the canoe for 2 hours? Ask students to identify the terms in the sequence. Make sure they understand that the sequence is made up of terms that follow a pattern, but the sequence is not the pattern. Work through the examples on 143-144 together and discuss. Have students work on pages 145-146 on their own. Stop and check for understanding using the Share and Show problems. Use the Test prep coach to determine why students might have gotten the wrong answer. Wrap up/Assessment: Review essential question Visually Orally: Students explanation of work/answers to questions 	Additional Notes:
understanding.)	Completion of Assignment: Share and Show	
Independent Activity: (Describe independent activity to reinforce this lesson)	SE pages 145-146 Math Journal: Give an example of a rule describing the pattern for a sequence. Then write the terms of the sequence for your rule.	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: time for intervention extra time to complete assignments small group reread instructions/ questions/choices
Summary/Reflection:	Homework: Standards Practice pages 71-72	

Subject: Math Date: Unit 3 Day 11: Problem Solving- Add and Subtract Money

Overview and Purpose: Perform operations with multi-digit whole numbers and with decimals to hundredths.	Educational Standards Addressed: CC.5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Solve problems using the strategy <i>make a table</i>	Materials Needed: • Bills and Coins • Transaction record book

Procedure:	Warm up: Distribute the problem of the day. Have students work on it	Vocabulary:
(Give and/or demonstrate necessary	individually, then review as a whole class and determine how to get the answer.	Sequence
information.	Introduction: Go over previous night's homework. Have students read today's	• Term
	Essential question: How can the strategy <i>make a table</i> help you organize and keep	
	track of your bank account balance? Let the students know that this is our focus	
	for today's lesson.	
	Direct Instruction:	
	 Introduce the lesson by asking students: Did you know that countries use different units of currency? You may want to show pictures or actual units of currency from other countries. 	
	 Let students know that in this lesson they will learn how to make a table to balance a checkbook. 	
	 Unlock the problem: Read the problem on SE pg. 147 about Mrs. Freeman's bank account. After reading the problem give students an opportunity to discuss the relationship in the information. Make sure they understand what the beginning balance was, that a deposit and withdrawal were made after the balance was established, that writing a check decreases a balance, and that making a deposit increases the balance. Look at the table to determine if the checkbook balance in the problem is correct and how to solve the problem. Have students complete the table and discuss. Have students work on pages 149-150 on their own. Stop and check for understanding using the Share and Show problems. Use the Test prep coach to determine why students might have gotten the wrong answer on #7. 	
	Wrap up/Assessment: Review essential question	
Verification:	• Visually	Additional Notes:
(Steps to check for student	 Orally: Students explanation of work/answers to questions 	
understanding.)	Completion of Assignment: Share and Show	
Independent Activity:	SE pages 149-150	Special Education/ESL
	Math Journal: Write a money problem that shows money being added to and	Accommodations: Based on students' needs the teacher will differentiate with
(Describe independent activity to reinforce this lesson)	subtracted from a bank account. Then solve the problem.	the following strategies: • time for intervention
,		extra time to complete
		assignments
		small groupreread instructions/
		questions/choices
	1	1

Summary/Reflection:	Homework: Standards Practice pages 73-74	

Subject: Math Date: Unit 3 Day 12: Choose a Method

Overview and Purpose: Perform operations with multi-digit whole numbers and with decimals to hundredths.	Educational Standards Addressed: CC.5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	
Objectives: (Specify skills/information that will be learned.)	SWBAT: • Choose a method to find a decimal sum or difference	Materials Needed: • Calculator
Procedure: (Give and/or demonstrate necessary information.	 Warm up: Distribute the problem of the day. Have students work on it individually, then review as a whole class and determine how to get the answer. Introduction: Go over previous night's homework. Have students read today's Essential question: Which method could you choose to find decimal sums and differences? Let the students know that this is our focus for today's lesson. Direct Instruction: Introduce the lesson by asking students: What is a long jump? Explain that it is a track and field event. Show and read the problem on SE page 151 about the track meet. Ask: What sentence tells you what you are going to find? Which numbers to we need to use? Which operation will we use? Let students know that adding is the best operation for this problem because it's asking for the total distance that was jumped. Ask: What does the commutative property of addition allow you to do? (change the order of two addends). What does the Associative property of addition allow you to do? (change the way addends are grouped). Remind students of the importance of aligning place values whenever they add or subtract decimal numbers. Work through solving the problem both ways together. Read another problem from SE page 152. Use the same steps as before to determine what operation to use. Work through the problem together and discuss. 	Vocabulary: •

	 Have students go to the board to complete the following problems: 4.19+0.58; 9.99-4.1; 5.7+2.25+1.3; 28.6-9.84; 15.79+32.81; and 38.44-25.86 Have students work on pages 153-154 on their own. Stop and check for understanding using the Share and Show problems. Use the Test prep coach to determine why students might have gotten the wrong answer on #34. Wrap up/Assessment: Review essential question 	
Verification: (Steps to check for student understanding.)	 Visually Orally: Students explanation of work/answers to questions Completion of Assignment: Share and Show 	Additional Notes:
Independent Activity: (Describe independent activity to reinforce this lesson)	SE pages 153-154 Math Journal: Write and solve a story problem for each method you can use to find decimal sums and differences.	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: time for intervention extra time to complete assignments small group reread instructions/ questions/choices
Summary/Reflection:	Homework: Standards Practice pages 75-76	

Subject: Math Date: Unit 3 Review/ Chapter Test

Overview and Purpose: Assess student's	Educational Standards Addressed:		
learning and progress in the third	CC.5.NBT.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to		
chapter.	its right and 1/10 of what it represents in the place to its left.		
	CC.5.NBT.3 Read, write, and compare decimals to thousandths. A) Read and write decimals to the thousandths using base ten		
	numerals, number names and expanded form. B) Compare two decimals to thousandths based on meanings of the digits in each		
	place using <, >, and = symbols to record the results of comparisons		
	CC.5.NBT.4 Use place value understanding to round decimals to any place		
	CC.5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on		
	place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written		
	method and explain the reasoning used.		
Objectives:	SWBAT:	Materials Needed:	
(Specify skills/information that will be	 Read, and write decimals through thousandths. 	•	
learned.)	Compare and order decimals to thousandths using place value		
	Round decimals to any place		

	Model decimal subtraction using base ten blocks	
Procedure: (Give and/or demonstrate necessary information.	 Warm up: Go over previous night's homework together. Introduction: Let students know that they are going to take a test on the information they learned in this chapter of adding and subtracting decimals. Direct Instruction: Review essential question: How can you add and subtract decimals? Ask the following to focus students' thinking: What methods can you use to find decimal sums and differences? How does using place value help you add and subtract decimals? Review vocabulary: sequence, term, thousandth Review the positions in place value, and how to align problems with decimals to make it easier to add/subtract or regroup. Distribute test Form A from Assessment Guide to students. Wrap up/Assessment: The Summative assessment provides the opportunity to assess students' progress in chapter 3. 	Vocabulary:
Verification: (Steps to check for student understanding.)	 Visually Orally: Students explanation of work/answers to questions Completion of Assignment: summative assessment 	Additional Notes:
Independent Activity: (Describe independent activity to reinforce this lesson)	Chapter 3 test (See above)	Special Education/ESL Accommodations: Based on students' needs the teacher will differentiate with the following strategies: • time for intervention • extra time to complete assignments • small group • reread instructions/ • questions/choices
Summary/Reflection:		questions enotees