Grade 4 Go Math! Quarter 1 Planner **11-12 Days**

Chapter 1 Place Value, Addition, and Subtraction to One Million

Big Ideas:

In grade 4, students read, write, and compare numbers based on the meaning of the digits in each place. In the base-ten system, the value of each place is 10 times the value of the place to the immediate right. By reasoning that each unit in a place becomes one unit in the next left place (because it is multiplied by ten), students can come to see and understand that multiplying by 10 yields a product in which each digit of the multiplicand is shifted one place to the left.

Students become fluent with addition and subtraction with multi-digit whole numbers to 1,000,000 using standard algorithms. A central theme in multi-digit arithmetic is to encourage students to develop methods they understand, can explain, and can think about, rather than merely following a sequence of directions, rules or procedures they do not understand.

Adapted from CCSS Progressions K-5 NBT 214 2011.

Critical Area Projects: Food in Space; The Black-Footed Ferret

Professional Development Videos:

Place Value and Operations: Whole Numbers Grades 3-6
Represent Numbers in Flexible Ways
Add Whole Numbers
Subtract Whole Numbers

Quarter 1 Fluency Resources:

Fluency Resources in Go Math
Building Fluency through Word Problems
Building Fluency through Number Talks

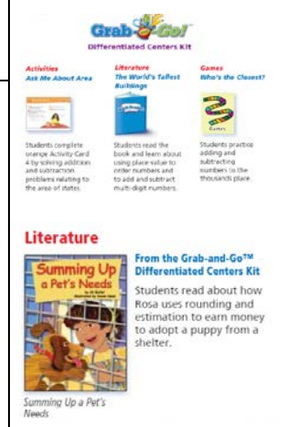
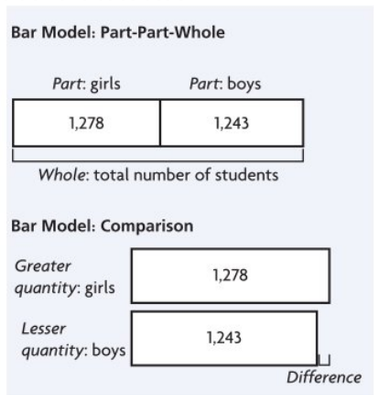
Essential Question: How can you use place value to compare, add, subtract, and estimate with whole numbers?
Standards: 4.NBT.1, 4.NBT.2, 4.NBT.3, 4.NBT.4

ELD Standards:

ELD.PI.4.1-Exchanging information/ideas via oral communication and conversations.
ELD.PI.4.3-Offering opinions and negotiating with/persuading others.
ELD.PI.4.5-Listening actively and asking/answering questions about what was heard.
ELD.PI.4.9- Expressing information and ideas in oral presentations.
ELD.PI.4.11- Supporting opinions or justifying arguments and evaluating others' opinions or arguments.
ELD.PI.4.12-Selecting and applying varied and precise vocabulary.

Lesson		Standards & Math Practices	Essential Question	Math Content and Strategies	Models/Tools Go Math! Teacher Resources G4	Connections (ENGAGE prior knowledge)	Vocabulary	Academic Language Support	Journal
1.1	Model Place Value Relationship	4. NBT. 1 MP 4 MP 6 MP 7 Companion pg. 79	How can you describe the value of a digit?	Model the 10-to-1 relationship among place-value positions in the base-ten number system using base-ten blocks and completing place value charts. Compare values of the same digit in different place value positions.	Base Ten Blocks, Place Value Chart Digit Tiles	Explain amount you'd rather win in lottery-$7, $70, $700, $7000. Build the following numbers on the place value chart and determine with is greater: 2,304 or 2,034 5,520 or 5,509	digit, place value	**ELD Standards** • ELD Standards • ELA/ELD Framework • ELPD Framework • ELL Math Instruction Framework **Access Strategies**	How does a digit in the 10,000 place compare to a digit in the 1,000 place? What's the difference between 56,000 and 65,000?

1.2	Read and Write Numbers	4. NBT. 2 MP 4 MP 6 MP 7 Companion pg. 76	How can you read and write numbers through hundred thousands?	Read and write whole numbers in standard form, word form, and expanded form. Use tables to interpret place value of numbers and solve a problem using place value knowledge to determine a possible score for a game. Place-value periods are the key to reading and writing large numbers. Commas are the key to understanding the place-value periods. • Commas in the standard form of a number separate the place-value periods. **678,934** • Commas in the word form of a number separate the place-value period names. **six hundred seventy-eight thousand, nine hundred thirty-four**	Place Value Chart Digit Tiles Use place value periods as the key to reading and writing large numbers.	Use playing cards or digit tiles; pull 3-4 cards and have students write and read five different 3-4 digit numbers.	Expanded form, period, standard form, word form, sum	• Organizing Learning for Student Access to Challenging Content • Student Engagement Strategies • Problem Solving Steps and Approaches **Equitable Talk** • Accountable Talk Simply Stated • Equitable Talk Conversation Prompts • Accountable Talk Posters • Five Talk Moves Bookmark • Effective Math Talks **Cooperative Learning** • Cooperative Learning Role Cards • Collaborative Learning Table Mats • Seating Chart Suggestions Math Word Wall - Grades 3-6 **Place Value Language**: have students use **place value language** when composing, decomposing numbers. i.e. 349 + 285 = Adding 9 + 5 gives me 14 or 1 ten, 4 ones, then 8 + 4 + 1 tens give 15 tens, or 1 hundred, 5 tens, etc. or 213-45, means decomposing 1 ten into 10 ones to give 13 ones subtract 5 ones, etc.	Is 70 thousand written in standard form or word form? Explain. Write it in standard and word form.
1.3	Compare and Order Numbers	4. NBT. 2 MP 2 MP 4 MP 5 Companion pg. 76	How can you compare and order numbers?	Compare and order whole numbers based on the values of the digits in each number using place value charts and number lines. Interpret tables to answer questions using place value knowledge. A place-value chart helps students see that even though the digits 4 and 2 are the first digits in each number, they are not in the same place. If there is no digit in a place on a place-value chart, then 0 can be written there without changing the value of the number.  The place-value chart shows that the digits 0 and 2 are located in the greatest place. Since $0 < 2$, $49{,}135 < 236{,}970$.	Place Value Chart Digit Tiles Estimation Number Lines	Use playing cards or digit tiles; pull 4 cards and create 4-dgit numbers, ordering them from largest to smallest.	compare, equal sign, greater and less than signs, number line, order		Suppose the leftmost digits of two numbers are 8 and 3. Can you tell which number is greater? Explain. Write a number where 3 is the leftmost digit and is bigger than a number with 8 as the leftmost digit.
1.4	Round Numbers	4. NBT. 3 MP 1 MP 2 MP 5 MP 7 Companion pg. 78	How can you round numbers?	Round a whole number to any place using place value knowledge. Determine the greater and lesser rounding numbers for a given number, and use number lines and halfway points to determine whether the number is closer to the greater or lesser rounding number.	Place Value Chart Digit Tiles Estimation Number Lines	Use number lines and the place value chart to round numbers to the given place value. • 257 to nearest 100, 10 • 8,437 to nearest 10, 100, 1000 • 13,501 to nearest 10,000 About 40,000 people attended the football game. What could be the exact number of people who attended?	estimate, round		Jesse says to round 763,400 to the nearest ten thousand, he will round to 770,000. Is he right? Explain why or why not. Create a number that rounds to 770,000 when rounding to the nearest ten thousand.

1.5	Investigate ● Rename Numbers	4. NBT. 1 MP 2 MP 4 MP 7 Companion pg. 75	How can you rename a whole number?	Rename whole numbers by regrouping in different ways using base-ten blocks and quick pictures. Students connect the models to a place-value chart and rename numbers. (5 hundred thousands is the same as 50 ten thousands or 500 thousands…)	Base-Ten Blocks Quick Pictures, Place Value Chart Digit Tiles	Rename 2,3-digit numbers with ones only, combo of 10s & 1s or combo 1s,10s,100s (i.e. 34 = 34 1s, 3 10s + 4 1s)	Regroup, rename, standard form, place value chart	   	Explain how you can rename 5,400 as hundreds. Include a quick picture or a place-value chart in your explanation.
1.6	Add Whole Numbers	4. NBT. 4 MP 1 MP 5 MP 8 Companion pg. 80	How can you add whole numbers?	Add whole numbers and determine whether solutions to addition problems are reasonable. (Use Estimation to check) Before adding, students align digits by place value (up to 6-digit numbers) Students transition from using a place value chart to aligning digits in correct place value on their own.	Place Value Chart Base-Ten Grid Paper (for aligning addends)	Add two 3-digit numbers with **strategies, models** only (i.e. 116 + 118 by breaking each number into its place value or making tens or adding up in chunks)	Addend, reasonable sum, regroup		Write a story problem that can be solved by finding the sum of 506,211 and 424,809. Solve the problem.
1.7	Subtract Whole Numbers	4. NBT. 4 MP 1 MP 5 MP 8 Companion pg. 80	How can you subtract whole numbers?	Subtract whole numbers and determine whether solutions to subtraction problems are reasonable, by carefully aligning the digits according to place value. Students must recognize that if the digit being subtracted is greater than the digit it is being subtracted from, they must regroup in order to subtract. (Use Estimation to check)	Place Value Chart Base-Ten Grid Paper (for aligning addends)	Subtract 2-3 digit numbers with **strategies**, **model**s only (i.e. 100 – 50, 100- 52, 100 – 60, 100- 64; 150 – 20, 150 – 28, 155 – 20, 155 - 28)	addition, difference		Write a story problem that can be solved by finding the difference of 432,827 and 61,827. Solve the problem.
1.8	Problem Solving ● Comparison Problems with Addition and Subtraction	4. NBT. 4 MP 3 MP 4 MP 5 MP 8 Companion pg. 80	How can you use strategy draw a diagram to solve comparison problems with + and -?	Use the strategy draw a diagram (bar models) to solve comparison problems with addition and subtraction. 	Bar Models 	Review bar models with 2-3 digit add/sub word problems: Steven has 122 jelly beans. He eats 49 of them in one weekend. How many jelly beans are left? Kim has 238 shopkins. Her father gives her 166 more. Now how many shopkins does she have?	Comparison problems, bar model, diagram		Arizona has a land area of 113,998 square miles. Wyoming has a land area of 97,813 square miles. How much greater is the area, in square miles, of Arizona than the area of Wyoming? Draw a bar model to represent the situation and use it to solve the problem.

DRAFT

Assessments:
Go Math Prerequisite Skills Inventory
Go Math Chapter 1 Test
Go Math Chapter 1 Performance Task: An Amusement Park
Portfolio Assessment

Grade 4 Go Math! Quarter 1 Planner **15-16 Days**
Chapter 2 Multiply by 1-Digit Numbers

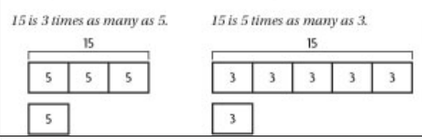
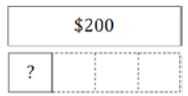
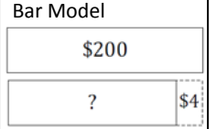
Big Idea: In grade four, students extend multiplication and division to include whole numbers greater than 100. Students should use methods they understand and can explain to multiply and divide. The standards call for students to use visual representation such as area and array models that students draw and connect to equations and written numerical work that supports student reasoning and explanation of methods. By reasoning repeatedly about the connections between math drawings and written numerical work, students can come to see multiplication and division algorithms as abbreviations or summaries of their reasoning about quantities.

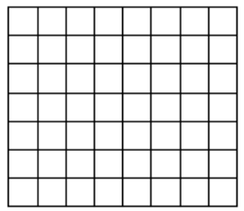
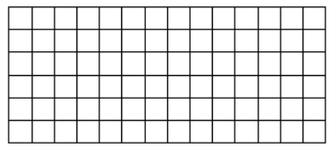
Adapted from the CCSS Progressions NBT K-5, pg. 13-17.

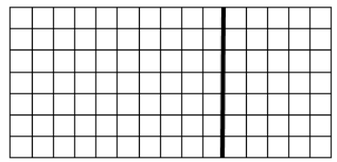
HMH Professional Development Videos:
Place Value and Operations: Whole Numbers Grades 3-6
Multiply Whole Numbers
Multiplication Strategies Video

Essential Question: What strategies can you use to multiply 1-digit numbers?
Standards: 4.OA.1, 4.OA.2, 4.NBT.5, 4.OA.3

ELD Standards:
ELD.PI.4.1-Exchanging information/ideas via oral communication and conversations.
ELD.PI.4.3-Offering opinions and negotiating with/persuading others.
ELD.PI.4.5-Listening actively and asking/answering questions about what was heard.
ELD.PI.4.9- Expressing information and ideas in oral presentations.
ELD.PI.4.11- Supporting opinions or justifying arguments and evaluating others' opinions or arguments.
ELD.PI.4.12-Selecting and applying varied and precise vocabulary.

Lesson		Standards & Math Practices	Essential Question	Math Content and Strategies	Models/Tools Go Math! Teacher Resources G4	Connections (ENGAGE prior knowledge)	Vocabulary	Academic Language Support	Journal
2.1	Algebra ● Multiplication Comparisons	4.OA.1 MP 1 MP 4 MP 7 Companion pg. 33	How can you model multiplication comparisons?	Relate multiplication equations and comparison statements, using bar models. 	Bar Model 	Practice multiplication facts with playing cards – 2 students hold up playing cards on forehead while 1 student gives product. 1st student to name the card (factor) on their forehead wins.	Bar model, multiplication comparisons, comparison sentence	134 + 95, 4 x 95 - Which is a sum, product? Talk about the difference between *5 more than* versus *5 times as many as* **Place value language:** 3 x 20 = 3 x 2 tens = 6 tens = 60 How many ____s? Use with plural How much ____? Use with non-plural	Draw a model, and write an equation to represent "4 times as many as 3 is 12." Explain your work.
2.2	Algebra ● Comparison Problems	4.OA.2 MP 1 MP 3 MP 4 MP 7 Companion pg. 34	How does a model help you solve a comparison problem?	Solve problems involving multiplicative comparison and additive comparison, using bar models and writing equations. Students identify when to use multiplication or subtraction to solve real-world comparison problems.	Bar Model 	Review part-part-whole: Joe has $65 but needs $100 for a bike. How much money does he need? Sue baked some cookies; her brother ate 9, leaving 27. How many did she bake?	Bar model, comparison problems, ***n*** to represent the unknown		Use a bar model to solve: Last weekend, Mandy collected 4 times as many shells as Cameron. Together, they collected 40 shells. How many shells did Mandy collect?
2.3	Multiply Tens, Hundreds, and Thousands	4.NBT.5 MP 4 MP 5	How does understanding place value help you	Multiply tens, hundreds, and thousands by whole numbers through 10 using quick pictures and patterns to find products (as	Quick picture, number lines, Place Value Chart	# talk strings: 3 x 5, 50, 500 7 x 2, 20, 200	factor, multiply, number line,		Explain how finding 7 X 20 is similar to finding 7 X

		MP 7 MP 8 Companion pg. 82	multiply 10s,100s,1000s?	the number of zeros in a factor increases, the number of zeros in the product increases).	Digit Tiles Large Number Line Student Number Line	15 x 1, 10, 100	place value, product	**Place value language:** 5 x 12 means 5 x 10 plus 5 x 2 and (5 x 10 = 50) + (5 x 2 = 10) = 60 3 x 456 = 3 x 400 + 3 x 50 + 3 x 6 Literature     	2,000. Then find each product.
2.4	Estimate Products **option – teach with 2.3 **option – teach 2.8 after this lesson	4.NBT.5 MP 1 MP 6 MP 7 MP 8 Companion pg. 82	How can you estimate products by rounding and determine if exact answers are reasonable?	Estimate products by rounding or by finding which two numbers the answer is between, and determine if exact answers to multiplication problems are reasonable. Helpful to students when they use calculators, as inputting mistakes are often made.	Estimation strategies Place Value Chart Digit Tiles Estimation Number Lines	Review rounding, see Fluency Builder About 40,000 people attended the football game. What could be the exact number of people who attended?	estimate, round		Describe a real-life multiplication situation for which an estimate makes sense.
2.5	Investigate ● Multiply Using the Distributive Property	4.NBT.5 MP 1 MP 7 Companion pg. 82	How can you use the Distributive Property to multiply a 2-digit number by a 1-digit number?	Use the Distributive Property to multiply a 2-digit number by a 1-digit number. 5 x 12 = 5 x (10 + 2) = (5 x 10) + (5 x 2)	Area model, Base-Ten Blocks, Base-Ten Grid Paper Base Ten 15x20 Base Ten 50x70	How many squares? How can I break the rectangle apart to make it easier to figure out? 7 x 8 = ?  6 x 14 = ? 	Distributive Property, partial product		Explain how you can use a model to find 6 X 17.
2.6	Multiply Using Expanded Form	4.NBT.5 MP 1 MP 2 MP 4 Companion pg. 82	How can you use expanded form to multiply a multi-digit number by a 1-digit number?	Use expanded form and Distributive Property to multiply a multi-digit number by a 1-digit number.	Area model expanded form Base-Ten Grid Paper Base Ten 15x20 Base Ten 50x70	Build the following numbers on the place value chart with digit tiles. Use the chart to determine the value of each digit. 2,356 5,309 24,627 36,078	expanded form		Explain how you can find 3 X 584 using expanded form.

2.7	Multiply Using Partial Products	4.NBT.5 MP 1 MP 7 Companion pg. 82	How can you use place value and partial products to multiply by a 1-digit number?	Use place value and partial products to multiply a multi-digit number by a 1-digit number, starting with the greatest place value.	Area model, partial products, Base-Ten Grid Paper Base Ten 15x20 Base Ten 50x70	Number Talk: Find 6 x 15 using a number line, addition facts, or known multiplication facts	Partial products, area model, possible estimates	**Activities** **Product Power**  Students complete purple Activity Card 5 by multiplying multi-digit numbers by single-digit numbers.	Explain how you can find 4 X 754 using two different methods.
2.8	Multiply Using Mental Math **option – teach after 2.4, focus on Distributive property	4.NBT.5 MP 1 MP 7 MP 8 Companion pg. 82	How can you use mental math and properties to help you multiply numbers?	Use mental math and properties to multiply a multi-digit number by a 1-digit number: • Commutative, Associative, and Distributive Properties • Friendly numbers • Halving/doubling • Distributive Property with adding or subtracting	Mental math strategies, Base-Ten Grid Paper Base Ten 15x20 Base Ten 50x70	Number talk: How can 10 x 15 help you find 5 x 15? 9 x 15? 11 x 15?	Associative Property of Multiplication		How can you use mental math and properties to help you multiply 4 x 75.
2.9	Problem Solving ● Multistep Multiplication Problems	4.OA.3 MP 1 MP 4 MP 8 Companion pg. 36	When can you use the draw a diagram strategy to solve a multistep multiplication problem?	Use the ***draw a diagram*** strategy to solve multistep problems, recording the steps of the problem in the order they should be performed.	Base-Ten Grid Paper Base Ten 15x20 Base Ten 50x70 Conceptual multiplication	The school auditorium has 8 rows with 9 seats in each row. If the first five rows are reserved for students, how many seats will be left for parents? Use grid paper to explain your answer.	Multistep multiplication	**Literature**  Multiplying a Good Deed From the Grab-and-Go™ Differentiated Centers Kit Students read about how Ramon uses multiplication to find how many cans can be collected for a food drive.	Use the *draw a diagram* strategy to solve: Amy planted 8 rows with 18 tulips in each row. In each of the 4-middle rows, there are 4 red tulips. All of the other tulips are yellow. How many of the tulips are yellow tulips?
2.10	Multiply 2-Digit Numbers with Regrouping **Algorithm – not 4th grade standard*	4.NBT.5 MP 1 MP 4 MP 7 Companion pg. 82	How can you use regrouping to multiply a 2-digit number by a 1-digit number?	Use regrouping to multiply a 2-digit number by a 1-digit number, using base-ten blocks to relate to the traditional multiplication algorithm.	Base-ten blocks, Base-Ten Grid Paper Base Ten 15x20 Base Ten 50x70 Relating Multiplication with Addition	Have students figure out how many squares are shown for the following: 7 x 15 = ?  Make connections between the following: 15 15 15 15 15 15 + 15 15 x 7	Regrouping, 2-Digit multiplication Place value, base-ten models	 **Activities** **First One Out**  Students complete orange Activity Card 5 by using multiplication to find numbers that match given products.	It costs 9,328 points to build each apartment building in the computer game Big City Building. What is the cost to build 5 apartment buildings?

2.11	Multiply 3-Digit and 4-Digit Numbers with Regrouping **Algorithm*	4.NBT.5 MP 4 MP 8 Companion pg. 82	How can you use regrouping to multiply?	Use regrouping to multiply a multi-digit number by a 1-digit number, with estimation or exact answers.	Estimation strategies	Write an expression that shows 6 x 535 using place value, properties.	Multi-digit multiplication Regrouping, digit, place value		Explain how finding 4 X 384 can help you find 4 X 5,384. Then find both products.
2.12	Algebra ● Solve Multistep Problems Using Equations **Focus the lesson on using bar models**	4.OA.3 MP 2 MP 4 MP 7 Companion pg. 36	How can you represent and solve multistep problems using equations?	Represent and solve multistep problems using equations and order of operations. -multiply or divide left to right, and then add or subtract from left to right. **order of operations" – not a 4th grade standard*	Bar models, order of operations	Use bar models to illustrate: 8 x 42 + 6 x 24 – 25 3 x 18 + 9 x 31 – 38 Maria has 2 boxes of earrings with 12 pairs in each box and 5 boxes of bracelets with 11 in each box. If she receives 3 more bracelets from a friend, how many pairs of earrings and how many bracelets does she have now?	Bar models, multistep problems, equations		There are 3 new seats in each row in a school auditorium. There are 15 rows in the auditorium. Each new seat costs $60. What is the cost for the new seats?
Assessments: **Go Math Chapter 2 Test** **Go Math Chapter 2 Performance Task: Cars, Trains, Boats, and Planes**									

Grade 4 Go Math! Quarter 1 Planner **10-11 Days**

Chapter 3 Place Value and Operations with Whole Numbers

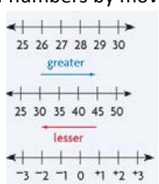
Big Ideas: Multiplication of 2-digit numbers with models and properties. In grade four students extend multiplication and division to include whole numbers greater than 100. Students should use methods they understand and can explain to multiply and divide. The standards call for students to use visual representation such as area and array models that students draw and connect to equations and written numerical work that supports student reasoning and explanation of methods. By reasoning repeatedly about the connections between math drawings and written numerical work, students can come to see multiplication and division algorithms as abbreviations or summaries of their reasoning about quantities.

Adapted from the CCSS Progressions NBT K-5, pg. 13-17.

HMH Professional Development Videos:
Multiplication and Division: Strategies and Facts, Grades 3-6
The Distributive Property
Effective Drill and Practice

Essential Question: What strategies can you use to multiply 2-digit numbers?
Standards: 4.NBT.5, 4.OA.3

ELD Standards:
ELD.PI.4.1-Exchanging information/ideas via oral communication and conversations.
ELD.PI.4.3-Offering opinions and negotiating with/persuading others.
ELD.PI.4.5-Listening actively and asking/answering questions about what was heard.
ELD.PI.4.9- Expressing information and ideas in oral presentations.
ELD.PI.4.11- Supporting opinions or justifying arguments and evaluating others' opinions or arguments.
ELD.PI.4.12-Selecting and applying varied and precise vocabulary.

Lesson		Standards & Math Practices	Essential Question	Math Content and Strategies	Models/Tools Go Math! Teacher Resources G4	Connections (ENGAGE prior knowledge)	Vocabulary	Academic Language Support	Journal
3.1	Multiply by Tens	4.NBT.5 MP 1 MP 4 MP 7 Companion pg. 82	What strategies can you use to multiply by tens?	Use place value and multiplication properties to multiply by tens. Make sure students understand the number line model, visualizing the relative magnitude of numbers by moving left to right. 	Number line, mental math Place Value Chart Digit Tiles	# Talk string: 25 x 1, 10, 100 32 x 1, 10, 100 58 x 1, 10, 100 125 x 1, 125 x 10, 125 x 100	Associative Property of Multiplication, factor, place value, product	12 x 40 = 12 x 4 tens = 48 tens = 480 **Place value language** Discuss rounding, compatible # I can use ____ and ____ to multiply 2-digit numbers by _ drawing an ___ ___ and adding the ___ ___ to find the final answer.	Write the steps for how to use a number line to multiply a 2-digit number by 20. Give an example.
3.2	Estimate Products **option: teach with 3.1	4.NBT.5 MP 1 MP 2 MP 5 MP 7	What strategies can you use to estimate products?	Estimate products by rounding, using a mental image of a number line, or by using basic facts and multiples to help choose compatible numbers.	Estimation strategies Number Line Student Number Line	# Talk: 5 x 10, 5 x 9, 5 x 11 – what do you notice? 10 x 12, 9 x 12, 11x 12 20 x 12, 19 x 12, 21 x 12	compatible numbers, estimate, round		Describe a real-life multiplication situation for which an estimate makes sense. Explain why it makes sense.

		Companion pg. 82						Describe and model the steps you take as you compute 36 x 14. Use **place value language.** 	
3.3	Investigate ● Area Models and Partial Products	4.NBT.5 MP 2 MP 4 MP 5 MP 8 Companion pg. 82	How can you use area models and partial products to multiply 2-digit numbers?	Use area models and partial products (Distributive Property) to multiply 2-digit numbers.	Area models Base-Ten Grid Paper Base Ten 15x20 Base Ten 50x70 2-Digit Multiplication Arrays	How is 14 x 12 like finding 7 x 12? 20 x 15 like 10 x 15?	partial product, area model		Describe how to model 2-digit by 2-digit multiplication using an area model ($18 x 26 people).
3.4	Multiply Using Partial Products	4.NBT.5 MP 4 MP 7 MP 8 Companion pg. 82	How can you use place value and partial products to multiply 2-digit numbers?	Use place value and partial products (Distributive Property) to multiply 2-digit numbers, and record by beginning with the greatest place value.	Record partial products in vertical form Base-Ten Grid Paper Base Ten 15x20 Base Ten 50x70	Use strategies to compute: 24 x 4 51 x 3 92 x 5	Partial products, place value, vertical form		How can you use place value and partial products to multiply 2-digit numbers ($18 x 26 people)?
3.5	Multiply with Regrouping **Algorithm – not 4th grade standard	4.NBT.5 MP 2 MP 7 MP 8 Companion pg. 82	How can you use regrouping to multiply 2-digit numbers?	Use regrouping to multiply 2-digit numbers and connect to partial – products method.	Regrouping with partial products, Base-Ten Grid Paper Base Ten 15x20 Base Ten 50x70	Use strategies to compute 12 x 16	Commutative Property of Multiplication		Write about which method you prefer to use to multiply two 2-digit numbers (38 x 26) regrouping, partial products, or breaking apart a model. Explain why.
3.6	Choose a Multiplication Method **option – just focus on 3.7	4.NBT.5 MP 2 MP 3 MP 8 Companion pg. 82	How can you find and record products of two 2-digit numbers?	Choose a method to multiply 2-digit numbers. (standard algorithm with regrouping or partial products method)	Standard algorithm with regrouping/partial products Conceptual multiplication	Use strategies to compute 15 x 25	Partial products, regrouping		How is multiplication using partial products different from multiplication using regrouping? How are they similar?
3.7	Problem Solving: Multiply 2-Digit Numbers	4.OA.3 MP 1 MP 2 MP 5 Companion pg. 36	How can you use the strategy *draw a diagram* to solve multi-step multiplication problems?	Use the strategy *draw a diagram* to solve multistep multiplication problems.	Bar models Conceptual multiplication	Discuss 3 different ways to compute 26 x 15.	Bar models, reasonable answer, products		How can bar models help you solve multistep multiplication problems? A computer game costs twice as much as a stuffed animal. The stuffed animal costs twice as much as a board game. Their total cost is $224. Find the cost of the stuffed animal.

								Activities ***Product Power***  Students complete purple Activity Card 5 by multiplying multi-digit numbers by single-digit numbers.	

Assessments:

Go Math Chapter 3 Test

****Common Assignment Go Math Chapter 3 Performance Task: Visiting New York City**

SBAC Practice Problems Hyperlink

SBAC Claim 1 Example Stems