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| **Date:** | 10-23-13 – Lesson One |
| **CCSS(s):** | 4.NBT.5 Multiply a whole digit number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculations by using equations, rectangular arrays, and/or area models. |
| **Learning Target(s)/Objective(s):** | I can use place value to multiply and divide multi-digit numbers.  I can use estimation to check the reasonableness of an answer. |
| **Rationale:** | These skills are important to students understanding how multiplication works, especially by relating it to place value. It will help them solve multiplication problems by thinking in terms of their previously learned knowledge involving place value. Reviewing vocabulary will be beneficial to all students, especially the ELL students. |
| **Brief description/overview of lesson:** | Calendar  -Students will go over the cartoon found in the book on pg. 69.  -We will discuss as a class the problem that the students are having in the cartoon picture.  -Then we will discuss the Big Idea and talk about what it means and what they will be learning to be able to accomplish with the “I can” statement.  -Next, I will go over the vocabulary words and students will write down definitions and examples in their math journals, as well as the words will be placed on the word wall in the room.  -Students will go over pg 70 as a class  -Students work on pg 76 #1-4 and #5-10 only  Big 2  (Go over homework?) |
| **Materials:** | Math in Focus – Hardcover book  Students math journals  Vocabulary words for the word wall  Pre-test copies  Smartboard to project lesson |
| **Plans for Formative Assessment:** | Assess if students wrote the vocabulary words in their journals.  Assess how students perform on the pre-test.  Assess which students participate in answering questions verbally, and the answers that they provide.  Check students Big 2 work for assessment. |
| **Daily Reflection:**  (blank for rough draft of unit) |  |

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| **Date:** | 10-24-13 – Lesson Two |
| **CCSS(s):** | 4.NBT.5 Multiply a whole digit number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculations by using equations, rectangular arrays, and/or area models. |
| **Learning Target(s)/Objective(s):** | I can use place value to multiply and divide multi-digit numbers.  I can multiply two 2-digit numbers using an area model. |
| **Rationale:** | These skills are important to students understanding how multiplication works, especially by relating it to place value. It will help them solve multiplication problems by thinking in terms of their previously learned knowledge involving place value.  Having students work on multiplying using an area model will give students an idea about multiplication in a visual sense. It will provide a visual example of multiplication for students. |
| **Brief description/overview of lesson:** | -Students will start by looking at the hardcover book at pg. 70 and I will teach the example provided on that page that shows multiplication of 5 x 3, discussing how multiplication is like repeated addition.  -Then, we will do an example discussing multiplying mentally by skip counting or recalling multiplications facts.  -For all of these examples we will use the manipulative of base 10 blocks to model each example.  -Continue to work on pgs. 70, 71, 72 doing problems as demonstrations and students can work on pg. 76 numbers 1-4 and 5-10 only individually.  -Give homework to class on multiplication practice problems pgs 41 and 42 |
| **Materials:** | Math in Focus – Hardcover book  Students math journals  Vocabulary words for the word wall  Smartboard to project lesson  Base 10 blocks |
| **Plans for Formative Assessment:** | Assess if students wrote the vocabulary words in their journals.  Assess by monitoring if students are correctly using and modeling problems using base 10 blocks.  Assess if students are writing down problems and solving them in journals.  Assess which students participate in answering questions verbally, and the answers that they provide.  Check students Big 2 work for assessment. |
| **Daily Reflection:**  (blank for rough draft of unit) |  |

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| **Date:** | 10-25-13 – Lesson Three |
| **CCSS(s):** | CCSS.Math.Content.4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret 35=5x7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.  [CCSS.Math.Content.4.OA.2](http://www.corestandards.org/Math/Content/4/OA/A/2) Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.  [CCSS.Math.Content.4.NBT.1](http://www.corestandards.org/Math/Content/4/NBT/A/1) Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. *For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division*.  [CCSS.Math.Content.4.NBT.2](http://www.corestandards.org/Math/Content/4/NBT/A/2) Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.  CCSS.Math.Content.4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place.  CCSS.MATH.Content.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. |
| **Learning Target(s)/Objective(s):** | I can use place value to multiply and divide multi-digit numbers.  I can multiply two 2-digit numbers using an area model.  I can use different methods to multiply up to 4-digit numbers by 1-digit numbers, with or without regrouping. |
| **Rationale:** | These skills will help students relate multiplication to division by thinking about place value and making connections between all three. Students will be able to visually see what is being discussed using base-10 blocks, and they will see pictures of what is being modeled in the problem to help provide a different aspect of the problem. Division will be related to subtraction. |
| **Brief description/overview of lesson:** | We will start on pg. 70 in the hardcover using a problem that discusses how division is like repeated subtraction.  -I will model this example for the students, and then the students will use manipulative of base-ten blocks to try another problem that is similar.  -We will move on to pg. 73 that models division with remainders and follow some examples.  -Then we will do pg. 34 and work on numbers 11-16 in the hardcover in class.  -Homework will be pgs. 41 and 42 in softcover book |
| **Materials:** | Math in Focus – Hardcover book  Students math journals  Vocabulary words for the word wall  Smartboard to project lesson  Base 10 blocks  Math in Focus – Softcover book |
| **Plans for Formative Assessment:** | Assess by monitoring if students are correctly using and modeling problems using base 10 blocks.  Assess if students are writing down problems and solving them in journals.  Assess which students participate in answering questions verbally, and the answers that they provide.  Check students Big 2 work for assessment.  Check students homework answers if understanding the concepts. |
| **Daily Reflection:**  (blank for rough draft of unit) |  |

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| **Date:** | 10-28-13 – Lesson Four |
| **CCSS(s):** | CCSS.Math.Content.4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret 35=5x7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.  [CCSS.Math.Content.4.OA.2](http://www.corestandards.org/Math/Content/4/OA/A/2) Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.  [CCSS.Math.Content.4.NBT.1](http://www.corestandards.org/Math/Content/4/NBT/A/1) Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. *For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division*.  [CCSS.Math.Content.4.NBT.2](http://www.corestandards.org/Math/Content/4/NBT/A/2) Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.  CCSS.Math.Content.4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place.  CCSS.MATH.Content.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. |
| **Learning Target(s)/Objective(s):** | I can use place-value to multiply up to 4-digit numbers by 1-digit numbers with regrouping.  I can use the terms multiplicand and multiplier. |
| **Rationale:** | These skills will help students relate multiplication to division by thinking about place value and making connections between all three. Students will be able to visually see what is being discussed using base-10 blocks, and they will see pictures of what is being modeled in the problem to help provide a different aspect of the problem. Students will begin thinking more about how the place-value charts can be applied when using multiplication, as we have previously used them with addition. |
| **Brief description/overview of lesson:** | We will begin on pg. 77 of the hardcover book, using manipulatives to explain how they move in a problem using the place-value chart as a visual.  -I will build the different problems in front of the class, and talk about what is happening.  -The class will build the problems along with me.  -Homework – pgs 43 and 44 |
| **Materials:** | Math in Focus – Hardcover book  Students math journals  Vocabulary words for the word wall  Smartboard to project lesson  Base 10 blocks  Math in Focus – Softcover book |
| **Plans for Formative Assessment:** | Assess by monitoring if students are correctly using and modeling problems using base 10 blocks.  Assess if students are writing down problems and solving them in journals.  Assess which students participate in answering questions verbally, and the answers that they provide.  Check students Big 2 work for assessment.  Check students homework answers if understanding the concepts. |
| **Daily Reflection:**  (blank for rough draft of unit) |  |

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| **Date:** | 10-29-13 – Lesson Five |
| **CCSS(s):** | CCSS.Math.Content.4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret 35=5x7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.  [CCSS.Math.Content.4.OA.2](http://www.corestandards.org/Math/Content/4/OA/A/2) Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.  [CCSS.Math.Content.4.NBT.1](http://www.corestandards.org/Math/Content/4/NBT/A/1) Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. *For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division*.  [CCSS.Math.Content.4.NBT.2](http://www.corestandards.org/Math/Content/4/NBT/A/2) Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.  CCSS.Math.Content.4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place.  CCSS.MATH.Content.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. |
| **Learning Target(s)/Objective(s):** | I can use place value to multiply and divide multi-digit numbers.  I can use place-value to multiply up to 4-digit numbers by 1-digit numbers with regrouping. |
| **Rationale:** | Students will think of different ways to multiply numbers and come up with different ways of being able to solve a multiplication problem. Students being able to express their ideas will help show if they are understanding the multiplication concept. |
| **Brief description/overview of lesson:** | Beginning on pg. 83 of the hard cover book, students will read quietly to themselves and answer the questions in their math journal about expressing their feelings and understandings about the multiplication procedure and discussing the steps.  -Can discuss different ways to solve and if would use that way themselves?  -Did it sound the way that they would solve the problem?  -Do they have a different way of solving the problem that they would like to share?  -What part was different than how they solve the problem?  Then on pg. 84, students find the errors in the problem (divide problems by groups to each solve one and then share with class)  -Students talk out findings and share how they would solve the problem (Discussion)  -Talk about common mistakes made in multiplication (carrying, aka regrouping adding, etc.)  -Students work on pg 84 #1-3 individually  -Students work on pg. 85 with partner, if finished with Big 2. |
| **Materials:** | Math in Focus – Hardcover book  Students math journals  Vocabulary words for the word wall  Smartboard to project lesson  Base 10 blocks  Math in Focus – Softcover book |
| **Plans for Formative Assessment:** | Assess by monitoring if students are correctly using and modeling problems using base 10 blocks.  Assess if students are writing down problems and solving them in journals.  Assess students by their discussion and answers about how solving multiplication problems, common mistakes, how they solve problems.  Assess which students participate in answering questions verbally, and the answers that they provide.  Check students Big 2 work for assessment. |
| **Daily Reflection:**  (blank for rough draft of unit) |  |

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| **Date:** | 10-30-13 – Lesson Six |
| **CCSS(s):** | CCSS.Math.Content.4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret 35=5x7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.  [CCSS.Math.Content.4.OA.2](http://www.corestandards.org/Math/Content/4/OA/A/2) Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.  [CCSS.Math.Content.4.NBT.1](http://www.corestandards.org/Math/Content/4/NBT/A/1) Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. *For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division*.  [CCSS.Math.Content.4.NBT.2](http://www.corestandards.org/Math/Content/4/NBT/A/2) Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.  CCSS.Math.Content.4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place.  CCSS.MATH.Content.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. |
| **Learning Target(s)/Objective(s):** | I can use place value to multiply and divide multi-digit numbers.  I can learn to multiply by 2-digit numbers in the form of tens. |
| **Rationale:** | Students will think of different ways to multiply numbers and come up with different ways of being able to solve a multiplication problem. Students being able to express their ideas will help show if they are understanding the multiplication concept. |
| **Brief description/overview of lesson:** | I will start with an example of my own, for instance 245 x 43, and have the students work on solving it and then sharing how they came about with their answers. (Review)  -Then I will have the students look at pg. 86 and discuss the example listed on the page. Work on some other examples of my own for the students to try.  -Then students can work on #1-5 on pg. 87 in their hardcover book.  -Students can perform three practice problems on pgs. 88 and 89 and on pg. 90 they are working on the same idea just adding in one more number.  -Students can solve problems 19-21  -HW softcover book pg. 43 and 44 |
| **Materials:** | Math in Focus – Hardcover book  Students math journals  Vocabulary words for the word wall  Smartboard to project lesson  Base 10 blocks  Math in Focus – Softcover book |
| **Plans for Formative Assessment:** | Assess by monitoring if students are correctly using and modeling problems using base 10 blocks.  Assess if students are writing down problems and solving them in journals.  Assess students by their discussion and answers about how solving multiplication problems, common mistakes, how they solve problems.  Assess which students participate in answering questions verbally, and the answers that they provide.  Check students Big 2 work for assessment. |
| **Daily Reflection:**  (blank for rough draft of unit) |  |
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| **Date:** | 11-1-13 – Lesson Seven |
| **CCSS(s):** | CCSS.Math.Content.4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret 35=5x7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.  CCSS.Math.Content.4.OA.2 Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.  CCSS.Math.Content.4.NBT.1 Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division.  CCSS.Math.Content.4.NBT.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.  CCSS.Math.Content.4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place.  CCSS.MATH.Content.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. |
| **Learning Target(s)/Objective(s):** | I can estimate products using a number line. |
| **Rationale:** | Students will use a number line to estimate products and see if it is a reasonable estimation and useful to checking their multiplication problems. It will help give the students a general idea if they have the correct answer for their multiplication problems. |
| **Brief description/overview of lesson:** | I will start with checking over the homework as a class and having students participate.  -Then I will have students look at pg. 92 and use the number line to help them estimate products.  -Students will practice rounding to the nearest two-digit numbers with a zero in the ones place. EX: 23 is between 20 and 30.  -Students work on pg. 93, #22, 23, 24,  -On pg. 93, students do the “Let’s Explore” and each group will work together on #1-4. (Finding errors in the problem and showing a way to solve it correctly). |
| **Materials:** | Math in Focus – Hardcover book  Students math journals  Vocabulary words for the word wall  Smartboard to project lesson  Base 10 blocks  Math in Focus – Softcover book |
| **Plans for Formative Assessment:** | Assess by monitoring if students are correctly using and modeling problems using base 10 blocks.  Assess if students are writing down problems and solving them in journals.  Assess students by their discussion and answers about how solving multiplication problems, common mistakes, how they solve problems.  Assess which students participate in answering questions verbally, and the answers that they provide.  Check students Big 2 work for assessment. |
| **Daily Reflection:**  **(blank for rough draft of unit)** |  |

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| **Date:** | 11-4-13 – Lesson Eight |
| **CCSS(s):** | CCSS.Math.Content.4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret 35=5x7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.  [CCSS.Math.Content.4.OA.2](http://www.corestandards.org/Math/Content/4/OA/A/2) Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.  [CCSS.Math.Content.4.NBT.1](http://www.corestandards.org/Math/Content/4/NBT/A/1) Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. *For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division*.  [CCSS.Math.Content.4.NBT.2](http://www.corestandards.org/Math/Content/4/NBT/A/2) Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.  CCSS.Math.Content.4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place.  CCSS.MATH.Content.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. |
| **Learning Target(s)/Objective(s):** | I can use place value to multiply and divide multi-digit numbers.  I can use place-value to multiply up to 4-digit numbers by 1-digit numbers with regrouping. |
| **Rationale:** | Students will think of different ways to multiply numbers and come up with different ways of being able to solve a multiplication problem. Students being able to express their ideas will help show if they are understanding the concept using multiplication. |
| **Brief description/overview of lesson:** | -Students will come in and begin working on some multiplication problems that are 2-digit x 2-digit numbers and 2-digit x 3-digit numbers.  -They will check with a partner if they solved correctly and share how they came up with the answer.  -We will discuss our answers as a class.  -On pg. 94 in the hardcover, students will work on it with a partner (requires different strategies to multiply and solve)  -Will discuss and check pg.94 as a class when finished.  -Homework will be just pg. 45 in softcover book. |
| **Materials:** | Math in Focus – Hardcover book  Students math journals  Vocabulary words for the word wall  Smartboard to project lesson  Base 10 blocks  Math in Focus – Softcover book |
| **Plans for Formative Assessment:** | Assess by monitoring if students are correctly using and modeling problems using base 10 blocks.  Assess if students are writing down problems and solving them in journals.  Assess students by their discussion and answers about how solving multiplication problems, common mistakes, how they solve problems.  Assess which students participate in answering questions verbally, and the answers that they provide.  Check students Big 2 work for assessment. |
| **Daily Reflection:**  (blank for rough draft of unit) |  |

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| **Date:** | 11-5-13 – Lesson Nine |
| **CCSS(s):** | CCSS.Math.Content.4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret 35=5x7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.  [CCSS.Math.Content.4.OA.2](http://www.corestandards.org/Math/Content/4/OA/A/2) Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.  [CCSS.Math.Content.4.NBT.1](http://www.corestandards.org/Math/Content/4/NBT/A/1) Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. *For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division*.  [CCSS.Math.Content.4.NBT.2](http://www.corestandards.org/Math/Content/4/NBT/A/2) Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.  CCSS.Math.Content.4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place.  CCSS.MATH.Content.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. |
| **Learning Target(s)/Objective(s):** | I can multiply by 2-digit numbers, with or without regrouping.  I can estimate products. |
| **Rationale:** | Students will use different strategies to solve problems, some of which they may need to regroup. Students can discuss common errors that students might make when solving these problems. Students can use estimation to help them understand if their answer is on target and help to give them a better idea of how to solve the problem using a specific estimate. |
| **Brief description/overview of lesson:** | Shorter math day, check homework as a class.  -Start working on pg. 46 in the softcover  -Always have to perform calendar math daily as well as Big 2 problems.  -If there is time can also work on Fast Math or multiplication math fact problems as practice |
| **Materials:** | Math in Focus – Hardcover book  Students math journals  Vocabulary words for the word wall  Smartboard to project lesson  Base 10 blocks  Math in Focus – Softcover book |
| **Plans for Formative Assessment:** | Assess by monitoring if students are correctly using and modeling problems using base 10 blocks.  Assess if students are writing down problems and solving them in journals.  Assess students by their discussion and answers about how solving multiplication problems, common mistakes, how they solve problems.  Assess which students participate in answering questions verbally, and the answers that they provide.  Check students Big 2 work for assessment. |
| **Daily Reflection:**  (blank for rough draft of unit) |  |

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| **Date:** | 11-6-13 – Lesson Ten |
| **CCSS(s):** | CCSS.Math.Content.4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret 35=5x7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.  [CCSS.Math.Content.4.OA.2](http://www.corestandards.org/Math/Content/4/OA/A/2) Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.  [CCSS.Math.Content.4.NBT.1](http://www.corestandards.org/Math/Content/4/NBT/A/1) Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. *For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division*.  [CCSS.Math.Content.4.NBT.2](http://www.corestandards.org/Math/Content/4/NBT/A/2) Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.  CCSS.Math.Content.4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place.  CCSS.MATH.Content.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. |
| **Learning Target(s)/Objective(s):** | I can use place value to multiply and divide multi-digit numbers.  I can multiply by 2-digit numbers, with or without regrouping.  I can estimate products. |
| **Rationale:** | Students will think of different ways to multiply numbers and come up with different ways of being able to solve a multiplication problem. Students will come up with their favorite way of thinking of solving problems and show using estimation how close they were to the answer. The students will write the actual answer and estimated answer. |
| **Brief description/overview of lesson:** | Students will work on a worksheet (possibly created) using problems that relate to the lesson to test their knowledge of multiplication and different ways of solving the problems.  -Students will work on pgs. 47 and 48 in softcover book  -Students can work on playing the game on pg. 82 called Roll and Multiply using number cube. |
| **Materials:** | Math in Focus – Hardcover book  Students math journals  Vocabulary words for the word wall  Smartboard to project lesson  Base 10 blocks  Number cube  Math in Focus – Softcover book |
| **Plans for Formative Assessment:** | Assess by monitoring if students are correctly using and modeling problems using base 10 blocks.  Assess if students are writing down problems and solving them in journals.  Assess students by their discussion and answers about how solving multiplication problems, common mistakes, how they solve problems.  Assess which students participate in answering questions verbally, and the answers that they provide.  Collect worksheet to assess students understanding.  Check students Big 2 work for assessment. |
| **Daily Reflection:**  (blank for rough draft of unit) |  |