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| Date | 3/31 | 4/1 | 4/3 | 4/4 |
| Topic/Theme | 9-1: Using Mental Math to Divide | 9-2: Estimating Quotients | 9-3: Estimating Quotients for Greater Dividends | 9-4: Dividing with Remainders |
| CC Standards | CC.2.1.4.B.2 Use place‐value understanding and properties of operations to perform multi‐digit arithmetic. CC.2.2.4.A.1 Represent and solve problems involving the four operations.CC.2.2.4.A.4 Generate and analyze patterns using one rule. | CC.2.2.4.A.1 Represent and solve problems involving the four operations.CC.2.2.4.A.4 Generate and analyze patterns using one rule. | CC.2.1.4.B.2 Use place‐value understanding and properties of operations to perform multi‐digit arithmetic. CC.2.2.4.A.1 Represent and solve problems involving the four operations. | CC.2.1.4.B.2 Use place‐value understanding and properties of operations to perform multi‐digit arithmetic. CC.2.2.4.A.1 Represent and solve problems involving the four operations. |
| PA Standards | 2.1.4.F. Understand the concepts of addition and subtraction and their inverse relationships; understand the concepts of multiplication and division; use the four basic operations to solve problems, including word problems and equations. 2.2.4.A. Develop fluency in the use of basic facts for the four operations.2.2.4.B. Multiply single- and double-digit numbers and divide by single digit numbers, add and subtract fractions with like denominators, and add and subtract decimals.2.2.4.D. Estimate sums and differences, products, and quotients, and conclude the reasonableness of those estimates.  | 2.1.4.F. Understand the concepts of addition and subtraction and their inverse relationships; understand the concepts of multiplication and division; use the four basic operations to solve problems, including word problems and equations. 2.2.4.A. Develop fluency in the use of basic facts for the four operations.2.2.4.B. Multiply single- and double-digit numbers and divide by single digit numbers, add and subtract fractions with like denominators, and add and subtract decimals.2.2.4.D. Estimate sums and differences, products, and quotients, and conclude the reasonableness of those estimates.  | 2.1.4.F. Understand the concepts of addition and subtraction and their inverse relationships; understand the concepts of multiplication and division; use the four basic operations to solve problems, including word problems and equations. 2.2.4.A. Develop fluency in the use of basic facts for the four operations.2.2.4.B. Multiply single- and double-digit numbers and divide by single digit numbers, add and subtract fractions with like denominators, and add and subtract decimals.2.2.4.D. Estimate sums and differences, products, and quotients, and conclude the reasonableness of those estimates.  | 2.1.4.F. Understand the concepts of addition and subtraction and their inverse relationships; understand the concepts of multiplication and division; use the four basic operations to solve problems, including word problems and equations. 2.2.4.A. Develop fluency in the use of basic facts for the four operations.2.2.4.B. Multiply single- and double-digit numbers and divide by single digit numbers, add and subtract fractions with like denominators, and add and subtract decimals. |
| Plan | Intro: Go over a couple division facts and discuss what they mean.Model: Think aloud a series of division problems from basic fact to basic in hundred, and then basic in thousands. Then apply this to a word problem.GP: Go through the same based on the problems in the text book with the students (2 progression problems, 1 reasoning of why this works, and one word problem).IP: Have students try some problems on their own. Do the 4 progression problems independently and then discuss as a group. Then break the class into 5 groups and have each do a column of problems from the text and share.Closing: Bring the group back together and put a huge problem on the board that follows this pattern into the millions. Perhaps equate it to winning the lottery. Help the students figure out how to solve it.(Text PG 206) | Intro: Review from yesterday by doing the modeling problem on pg 207 (#28). Then ask the students what they could do if there were 352 people sitting in 7 ‘almost equal’ rows to introduce today’s topic.Model: Go through the visual learning activity in the text book. Bring in a bag of rubber bands (or box of paper clips to make a chain) to do the same with the class. Have the students do the work to make sure it is accurate. GP: Go through problems 1-6 in the text with students. Reteach as needed. Talk through problems 7 and 8 to help clarify when this method is appropriate.IP: Break kids into a different 5 groups hand have each work together to do a column of problems from the book. Have students share their answers and use any teachable moments.Closing: Bring the group back together. Review that estimating division is just like estimating with multiplication. Go over some instances for both where estimation would be ok. | Intro: Go over the previous two lessons and then ask students if they think they can be combined. Ask students that if you had 652 cupcakes and you wanted to share them with your 8 classes how you could figure out about how any to give each class.Model: Solve the cupcake problem for the students and then walk through the visual learning activity from the text book.GP: Work through questions 1, 3, and 5 with the students and also do the others only if needed. Then talk through numbers 7 and 8.IP: Have students independently try the first row of problems. Depending on how they do when they are gone over, reteach or move on. Break students into dyads and triads. Hand out cards with amounts of various materials on them. Have students read the directions on the cards to see how many of that material is needed to make an item and then calculate about how many they can make using estimation. Closing: Have some groups share their findings and preview that tomorrow the students will move on to dividing without estimation.  | Intro: Hand out erasers to students with some left over. Make sure you know how many you began with and write that number on the board. After the erasers are given out. Talk about how many you have left as a remainder. Finally, do that problem on the board as a long division problem. Show how the two relate.Model: Draw a picture of a basic division problem with a remainder. Show how some items do not fit into circled groups. Then go through the visual learning activity in the book.GP: Have students independently use pictures or division to solve problems 1-4 and guide them through each. Then talk through problem 5 and 6 using pictures and division for both.IP: Give students time to do problems 7-10 on their own. Walk around and help as needed. Go over those problems to assess learning. Finally, hand out the tick tac toe boards from Center activity 9-4. Play this game with the class. The first group of students to get a tic tac toe will win one “puzzle piece” each.Closing: Review that the greatest remainder a number can have is one less than that number. Use 9 from the tic tac toe activity to teach this. |
| Homework | None due to PSSA testing, but if there was:Practice Master P 9-1 (lower students may do reteaching master instead (R 9-1) | None due to PSSA testing, but if there was:Practice Master P 9-2 (lower students may do reteaching master instead (R 9-2) | Reteaching and Practice Master handouts (9-3). Students should only do odd numbers on the Practice side. (lower level students may do R9-1 and R9-2 rather than Practice side) | On/above level: 9-4 practiceBelow level: Reteaching 9-4Judge this on formative assessment during lesson. |
| Timed test | Division- 120 s | Division- 120 s | Division- 100 s | Division- 100 s |
| Warm Up | Simple division word problems | 3digit x 2 digit multiplication and text 207 #25 | Division with graphs | 4digit x 1 digit multiplication |

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| Date | 4/7 | 4/8 | 4/9 | *4/10* |
| Topic/Theme | 9-5: Multiplication and Division Stories | 9-6: Draw a Picture and Write and Equation to Problem Solve | Review of Division Unit | *Test* |
| CC Standards | CC.2.1.4.B.2 Use place‐value understanding and properties of operations to perform multi‐digit arithmetic. CC.2.2.4.A.1 Represent and solve problems involving the four operations. | CC.2.1.4.B.2 Use place‐value understanding and properties of operations to perform multi‐digit arithmetic. CC.2.2.4.A.1 Represent and solve problems involving the four operations. | CC.2.1.4.B.2 Use place‐value understanding and properties of operations to perform multi‐digit arithmetic. CC.2.2.4.A.1 Represent and solve problems involving the four operations.CC.2.2.4.A.4 Generate and analyze patterns using one rule. | *CC.2.1.4.B.2* *Use place‐value understanding and properties of operations to perform multi‐digit arithmetic. CC.2.2.4.A.1* *Represent and solve problems involving the four operations.**CC.2.2.4.A.4* *Generate and analyze patterns using one rule.* |
| PA Standards | 2.1.4.F. Understand the concepts of addition and subtraction and their inverse relationships; understand the concepts of multiplication and division; use the four basic operations to solve problems, including word problems and equations. 2.2.4.A. Develop fluency in the use of basic facts for the four operations.2.2.4.B. Multiply single- and double-digit numbers and divide by single digit numbers, add and subtract fractions with like denominators, and add and subtract decimals.2.5.4.A. Develop a plan to analyze a problem, identify the information needed to solve the problem, carry out the plan, check whether an answer makes sense, and explain how the problem was solved in grade appropriate contexts.  | 2.1.4.F. Understand the concepts of addition and subtraction and their inverse relationships; understand the concepts of multiplication and division; use the four basic operations to solve problems, including word problems and equations. 2.2.4.A. Develop fluency in the use of basic facts for the four operations.2.2.4.B. Multiply single- and double-digit numbers and divide by single digit numbers, add and subtract fractions with like denominators, and add and subtract decimals.2.8.4.E. Use concrete objects and combinations of symbols and numbers to create expressions, equations, and inequalities that model mathematical situations.  | 2.1.4.F. Understand the concepts of addition and subtraction and their inverse relationships; understand the concepts of multiplication and division; use the four basic operations to solve problems, including word problems and equations. 2.2.4.A. Develop fluency in the use of basic facts for the four operations.2.2.4.B. Multiply single- and double-digit numbers and divide by single digit numbers, add and subtract fractions with like denominators, and add and subtract decimals.2.2.4.D. Estimate sums and differences, products, and quotients, and conclude the reasonableness of those estimates.2.5.4.A. Develop a plan to analyze a problem, identify the information needed to solve the problem, carry out the plan, check whether an answer makes sense, and explain how the problem was solved in grade appropriate contexts. 2.8.4.E. Use concrete objects and combinations of symbols and numbers to create expressions, equations, and inequalities that model mathematical situations. | *2.1.4.F.* *Understand the concepts of addition and subtraction and their inverse relationships; understand the concepts of multiplication and division; use the four basic operations to solve problems, including word problems and equations. 2.2.4.A.* *Develop fluency in the use of basic facts for the four operations.**2.2.4.B.* *Multiply single- and double-digit numbers and divide by single digit numbers, add and subtract fractions with like denominators, and add and subtract decimals.**2.2.4.D.* *Estimate sums and differences, products, and quotients, and conclude the reasonableness of those estimates.**2.5.4.A.* *Develop a plan to analyze a problem, identify the information needed to solve the problem, carry out the plan, check whether an answer makes sense, and explain how the problem was solved in grade appropriate contexts. 2.8.4.E.* *Use concrete objects and combinations of symbols and numbers to create expressions, equations, and inequalities that model mathematical situations.* |
| Plan | Intro: Hand out warm up activity sheets to the class without having enough. When there is not enough, then talk about the students being the remainder of the division problem. Then hand out another item and have too many and discuss the paper as having the remainder. Talk about how sometimes a remainder is ok because it is ‘extra’ and how other times it is not ok because it means there is not enough.Model: go over the visual learning and “another example” problems in the text book. Talk about which one is an ‘extra’ and which is a ‘not enough’ remainder.GP: Have the students work through problems 1 and 2 and see how they do. Help as needed. Again discuss ‘extra’ versus ‘not enough’ remainders.IP: Break the kids into 4 groups and have each group write a story for problems 6-9. When they finish, have them work on 10 and 11. Closing: Have groups share their problems and other students solve them. | Intro: Review when remainders are and are not ok, and ask when it doesn’t matter. If student have trouble with this, talk about breaking into equal or ‘almost’ equal groups in class.Model: Go through the visual learning item in the book. Then do a problem related to items students might need. Perhaps figure out how many pieces of paper each student could have or snacks.GP: Do problems 1-3 in guided practice together. Go over the number sentence for each. IP: Have students try problems 7, 10, and 11. Play clip and cover bingo using the 9-6 center activity. To cover the square have students write a number sentence on it. Have students play the game in small groups of 4-5 students.Closing: Go over how to write various number sentences as pictures and then make a story problem for them.  | Intro: go over one problem that represents each lesson in the unit.Activity: Students will play Math Jeopardy to review concepts and skills. Students will be given a mix of questions from the text, conceptual questions, and others. Each team will have a different sound maker to help differentiate the buzzing in team. | *Test will be given on this day.* |
| Homework | Give students leveled 9-5 homework with the reteaching for lower level students and the practice for other students. | Practice master 9-6. Review worksheet. | Study for test | *none* |
| Timed test | Division- 90 s | Division- 90 s | Division- 80 s | *Division- 80 s* |
| Warm Up | Division with money | Division problems with remainders | Division word problems with remainders |  |