**Gina L. Gullo**

**Lesson Plan**

**1.** **Lesson:** Division 9-2 S**ubject:** Mathematics **Date:** April 1, 2014

**2. Target Grade Level:** 4th grade

**3. PDE 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.

**PA Common Core 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.

**4. Learning Objectives and Aligned Summative Assessments:**

| **Learning Objectives** | **Aligned Summative Assessments** |
| --- | --- |
| Given a three large division problems (3 digit ÷ 1 digit), the student will use estimation and place value patterns to estimate the answer to each question with 100% accuracy. | 3 large division estimation problems (3 digit ÷ 1 digit) on unit test. |

**5. Materials Needed:**

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| -math text and paper for each student |  |
| -Homework: Reteach 9-1/9-2 worksheet |  |

**6. Expectations for Behavior and Class Activities:**

* The student will follow teacher directions.
* The student will actively engage in all activities to her best ability.
* The student will use respectful language towards others.
* The student will keep hands and feet to him or herself.
* The student will remain quiet and seated during the lesson.
* The student will use a quiet raised hand to respond to or ask questions.

**7. General or Specific Accommodations for Special Needs Learners:**

* Students with attention challenges will be allowed to stand at their desks rather than sit. They will also be given extra attention to help redirect them during the lesson and allowed to take verbally requested breaks as needed throughout the lesson.
* Students with learning challenges will be conferenced with during independent work to double check for thorough understanding of all concepts introduced or revisited in this lesson.

**8. Description of Learning Activities**

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| **Lesson Implementation** |
| Introductory Activity:  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.  Modeling/Demonstration:  Go through the visual learning activity in the text book. Use manipulatives to model the same concepts with the class. For example, hand out 26 popsicle sticks 5 at a time until you can any longer. While you are handing them out, model estimating that 26 is close to 25 and that 5 divides evenly into 25 on the board. Finally, count to see if five people got the popsicle sticks. Now repeat this on the board combining it with yesterday’s place value concept to the tens. For example, if you have 261 sticks you can round to 260 and then find that 260 is almost 250 to reach 50.  Guided Practice and Feedback:  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.  Independent Practice:  Break kids into a different 5 groups and have each work together to do a column of problems from the book. Have students share their answers and use any teachable moments to explain errors or thinking. If students finish early, the will work on a help activity of the 9-1 and 9-2 reteach worksheets. They may circle problems they are struggling with to note that they need more help in those areas.  Closing/Review/Preview:  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.  Formative Assessment:  Students will be formatively assessed during guided practice, independent practice in cooperative learning groups, and as needed on the help activity.  Accommodations:  Students who are struggling with division and division concepts will be grouped with students showing strong skills during the cooperative learning group portion of the lesson. |

**9. Potential Areas of Difficulty with the Content and Correction Procedures:**

Students are at different levels of division mastery. Students struggling with these skills may use a multiplication chart if needed to facilitate skill acquisition of concepts during instruction, but will be encouraged to work on these skills at home.

**10. Summative Assessments:**

Estimate to solve the following problems.

1. 179 ÷ 9
2. 241 ÷ 6
3. 352 ÷ 5

**11. Reflections**: I thought this lesson went well, but after checking a review sheet, it seems it did not. The students did not really understand this. I believe I over complicated it using the book’s techniques. I retaught the lesson telling students to underline the first two digits in the larger number and see what times the divisor equaled the first two digits of the dividend. Then, they wrote that number on the answer line. The counted how many digits in the divisor were not underlined (after underlining the first two) and added that number of zeros. This worked much better and they understood it well.

**12. Sources:**

Charles, A., *et. al.* (2010). *Scott Foresman-Addison Wesley* *enVisionMATH: Common Core.* Upper Saddle River, NJ: Pearson Education, Inc.