**Gina L. Gullo**

**Lesson Plan**

**1.** **Lesson:** Division 9-1 S**ubject:** Mathematics **Date:** March 31, 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 five division problems with basic facts in multiples of 10 and 100, the student will use place value patterns and division basic facts to find the answer with 100% accuracy. | Five division problems with basic facts in multiples of 10 and 100 on summative assessment |

**5. Materials Needed:**

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| -math text and paper for each student |  |

**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:  The teacher will review a couple division basic facts and discuss what they mean using pictures or manipulatives.  Modeling/Demonstration:  Think aloud a series of division problems from basic fact to multiple of ten to multiple of hundred (i.e. 9 ÷3, 90 ÷ 3, 900 ÷ 3). First, use pictures of circles to show the basic fact. Then write a “10” in each circle and review how the problem will work and write the matching division sentence. Finally, add another zero to do this for the 100 level. Repeat this using only the division sentences and show how the students may ignore the zeros in the divisor, an then add them to the quotient.  Guided Practice and Feedback:  Go through the same based on the problems in the guided practice section of text book with the students (2 progression problems, 1 reasoning of why this works, and one word problem).  Independent Practice:  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/Review/Preview:  Bring the group back together and put a huge problem on the board that follows this pattern into the millions or further. Perhaps equate it to winning the lottery. Help the students figure out how to solve it. Finally, allow students to make their own problems in this form on a piece of paper. Then, have them trade journals to solve each other’s problems.  Formative Assessment:  Students will be formatively assessed during guided practice, independent practice in cooperative learning groups, and through the closing share 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:**

Use place value patterns to solve the following problems.

1. 900 ÷ 3 = \_\_\_\_\_\_\_\_
2. 6400 ÷ 8 = \_\_\_\_\_\_\_\_
3. 120 ÷ 4 = \_\_\_\_\_\_\_\_
4. 72 ÷ 9 = \_\_\_\_\_\_\_\_\_
5. 5400 ÷ 6 = \_\_\_\_\_\_\_\_\_

**11. Reflections**: The students did well with this lesson. Place value seems to be a strength for them.

**12. Sources:**

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