Lesson Title: It's a Fact!

Content Area and Grade Level: Math, 5th grade

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Brief Description of the Lesson/Unit:
Review of several basic math concepts (basic facts in addition, subtraction, multiplication, division).

South Dakota Content Standards:

- Standard numbers and exact wording
  4.A.1.3. Relate the concepts of addition, subtraction, multiplication, and division to one another.

- Unpacked standards (in student-friendly wording)
  1. The student will be able to show relationships between related math facts.
  2. The student will demonstrate knowledge of various facts.
  3. The student will define vocabulary specific to addition, subtraction, multiplication, and division.
Stage 1: Identify Desired Results

1. What enduring understandings are desired?

Logical and sequential progression of facts are essential for future numerical sense.

2. What essential questions will guide this unit and focus both the teaching and the learning?

How does the understanding of basic math concepts affect daily life?

3. What key knowledge and skills will students acquire as a result of this unit?

Basic operations and skills are the basis for more complex operations and story problems.

4. What prior learning, interests, misconceptions, and conceptual difficulties might be brought to this unit by the students?

The students do not have mastery/memorization of their basic math facts which affects accurate outcomes with their learning.
Stage 2: Determine Acceptable Evidence

What evidence will show that students understand?

1. **Pre-Assessment (pre-tests, concept maps, KWL, surveys, etc.):**
   
   Timed tests that cover the various fact families, informal surveys.

2. **Performance Tasks:**
   
   Writing facts in list form (in notebooks). Define unfamiliar vocabulary.

3. **Summative Assessment (Quizzes, Tests, Prompts, Projects, etc.):**
   
   Periodic timed tests, Flow chart project.

4. **Formative Assessment (Dialogues, Observations, Work Samples, etc.):**
   
   Teacher observations, games (Around the World, Get to a Million)

   **Briefly explain HOW you will use formative assessment and feedback to redirect and focus your instruction for improving student achievement. Provide at least one example.**

   Redirect on the Flow chart project. If it is observed that students have made errors in their calculations, the students will be instructed to correct their errors.

5. **Student Self-Assessment:**
   
   As Flow Chart project is completed and displayed, time will be given for students to attempt to solve each other's flow charts.

6. **Attach or include specific rubrics being used for this lesson/unit:**
   
   * Use of more than one operation
   * Correct calculations at each step on the flow chart
   * Final answer on each completed flow chart should be provided.
Stage 3: Learning Experiences and Instruction

What sequence of teaching and learning experiences will equip students to develop and demonstrate the desired understandings?

1. Major Learning Activities:
   * Completing the listing of basic fact families in their math notebooks
   * Completion of the Flow chart project
   * Completion of an additional project outside of class that illustrates a family of facts that have been mastered.

2. Materials, Supplies, & Resources (technology & print):
   Notebooks, construction paper, yarn.

3. Classroom Management:
   The teacher will pace the lessons so that student interest remains high. Outside projects will be presented in a timely manner, also.

4. Support Services and Special Teacher Notes:
What specific differentiated instruction strategies will be used in the lesson/unit? Fill in each section that applies.

1. Differentiated Process:

2. Differentiated Content:

3. Differentiated Product:

    For this lesson I have chosen to differentiate the product that the students complete. The students complete part of the lesson according to my specific directions; however, the final product that will showcase what has been learned can be presented using a wide variety of modalities. Some students wrote a rap song about a fact family, some students shared their knowledge as they jumped rope, others colorfully illustrated posters that highlighted several fact families. Students were free to choose their method of learning and thinking.