Lesson Title: The Greedy Triangle by Marilyn Burns

Subject Matter Emphasis and Level: Geometry 2nd grade

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Brief Description of the Lesson/Unit: We will read The Greedy Triangle as an introduction to the chapter on Geometry. With this background knowledge and the activities planned the students will have an increased knowledge of geometric shapes and terms.

SD Content Standards:
2.G.1.1 Use terms side and vertex to identify plane and solid figures
2.G.2.1 Identify geometric figures regardless of orientation in space

Unpacked standards:
- The students will be able to use the words side and vertex to label parts of shapes
- Students will be able to correctly name shape wherever they are on the page
1. What enduring understandings are desired?

   Students will gain a better understanding of shapes and their properties
   They will be able to count the sides and vertices of a shape in both 2D and 3D.

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

   Why is this shape a square? (Triangle, rectangle, trapezoid, etc…)
   - How do you know what shape this is?
   - How are these shapes the same/different?

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

   - The students will gain the terminology of side and vertex.
   - The students will have a better understanding of each shape from different views.

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

   - Most students should be able to name the basic 2D shapes.
   - The connection between 2D and 3D is a hard concept to grasp especially when not a concrete object.
   - The vocabulary of vertex and side might cause a problem for some students.
Stage 2: Determine Acceptable Evidence

What evidence will show that students understand?

1. Pre-Assessment:
   Content response cards with side, vertex, cube, sphere, cone etc...on the cards. The students will use them like flash cards. I will assess from there.

2. Performance Tasks:
   - Daily work
   - Projects
   - Group Collaboration

3. Summative Assessment:
   - Chart shapes according to the number of sides and vertices.
   - Play Scoobee Geometry.
   - The layered projects

4. Formative Assessment:
   - Samples of the layered work
   - Teacher observation
   - Group participation
   - Learning logs

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

I will look at the layered work as well as the learning style profile of each student and I will make sure that I incorporate even more activities that appeal to the learners in my room.

5. Student Self-Assessment:
Students will use a color-coded system to let me know how comfortable they feel with a unit of study.
A red dot on their paper would let me know that they are still unsure.
A yellow dot would mean that they are feeling more confident.
A green dot would mean that they think they understand. I like this system because it gives the students ownership in their learning. When you correct the paper you know if they were unsure if they felt confident.

**Stage 3: Plan 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:**
   - Explore shapes
   - Learn sides and vertices
   - Play Scoobee geometry
   - Complete activities at least 2 of the levels

2. **Materials & Resources (technology & print):**
   - The Greedy Triangle
   - Paper
   - Geometric shapes
   - Scoobee cards
   - Markers/Crayons

3. **Classroom Management:**

   Use the How am I doing behavior chart to record behavior. Layered curriculum, fidgets and flexible work space so that each child can learn in a non-threatening environment.

4. **Support Services and Special Teacher Notes:**
1. What differentiated instruction strategies are being used in this lesson/unit?

**Differentiated Process:**

The students will be given a choice of which activities to complete for their grade. (At this level the number of choices is somewhat limited to keep students from taking too long to choose) These activities appeal to several learning styles.

**Differentiated Content:**

The students will be presented with a layered curriculum attracting multiple intelligences.

**Differentiated Product:**

The students will choose which projects to complete. Students may work together if they have prior approval.
A Layer: Students may choose at least 1
- Pattern Quilt- the students will divide 1 inch squares into different shape. They will then color code the shapes according to the number of sides and vertices.
- How many ways? Is an activity where students will use colored pencils to divide geometric shapes in half as many ways as possible.
- The students will make a shape story incorporating at least six shapes.

B Layer: Students may choose at least 1
- The students will make shapes on geo-boards and record these shapes on paper.
  Including: A shape with 2 parallel lines
  A triangle
  A square-slide 2 units and copy
  A 3-sided figure and the flip of it
  A triangle and a triangle flipped down
  - The students will make a set of flash cards with geometric shapes to reinforce sides and vertices (minimum of 6 shapes).

C Layer: Basic layer all students will complete
- Make My Quilt Square, color code shapes to match sides and vertices.
  4- yellow
  3- blue
  6- red
  - Daily work
  - Class participation
  - Play Scoobee