**Lesson Title:** Exploring Three Dimensional Shapes

**Content Area and Grade Level:** First Grade

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**Brief Description of the Lesson/Unit:**
Students will identify 3-dimensional figures and their faces.

**South Dakota Content Standards:**

- **Standard numbers and exact wording**
  1.G.1.2 Students are able to sort basic three-dimensional figures.

- **Unpacked standards (in student-friendly wording)**
  I can name and describe a sphere.
  I can name and describe a cone.
  I can name and describe a cube.
  I can name and describe a cylinder.
  I can name and describe a pyramid.
  I can name and describe a rectangular prism.
Stage 1 : Identify Desired Results

1. What enduring understandings are desired?

   Students should be able to compare the attribute of 3-dimensional figures using the vocabulary from the lesson.

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

   Which 3-dimensional figure looks most like a ball?
   Which 3-dimensional figures look most like a box?
   Can you name something that looks like a cylinder?

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

   Students will identify 3-dimensional figures and their faces.

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

   Students will develop new vocabulary for three dimensional figures. Students will know the difference between shapes and be able to explain the difference for example between a square and a triangle but they might not be able to tell the difference between a rectangular prism or a pyramid.
Stage 2: Determine Acceptable Evidence

What evidence will show that students understand?

1. Pre-Assessment (pre-tests, concept maps, KWL, surveys, etc.):
   Students will take a pretest for prerequisite skills for the math chapter.

2. Performance Tasks:
   Students are going to name and describe each three-dimensional figures using a cube format.

3. Summative Assessment (Quizzes, Tests, Prompts, Projects, etc.):
   The end of the chapter test.

4. Formative Assessment (Dialogues, Observations, Work Samples, etc.):
   Examples and pictures of 3-dimensional objects on their cube

   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.

   Students who were successful will be able to go on with the next lesson. Students who exhibit difficulty will be retaught the next day.

5. Student Self-Assessment:
   Students will write in their math journal. The topic will be: 1. Find a small object in the classroom that is a rectangular prism. Draw a picture of it. Draw a square above the picture. Draw a triangle below the picture. 2. Trace around a flat face of your object.

6. Attach or include specific rubrics being used for this lesson/unit:
   3 points for correctly following the directions for both questions. Correctly draws the picture and shapes and figures.
2 points for correctly following the directions for both questions. Correctly draws the pictures, missing only one shape.
1 point incorrectly follows directions in questions. Incorrectly draws the pictures, missing or incorrectly drawing multiple shapes or figures.
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:

   Introduction of lesson:
   Display a cone, cube, cylinder, pyramid, rectangular prism, and sphere. Pass around each figure and ask students to describe how they feel and look. Does the figure have edges? Does it have corners? Is it curved, flat, or both? How many flat faces does it have? Can you roll it or slide it? Can you stack it?

   Small group activities:
   Group one will make a large cube draw each 3-dimensional figure and it's flat faces.
   Group two will make a large cube draw each 3-dimensional figure, flat faces, and how many corners on each figure.
   Group three will make a large cube draw each 3-dimensional figure, flat faces, tell how many corners, and identify if the figure can roll, slide or stack.

2. Materials, Supplies, & Resources (technology & print):

   3 dimensional objects from various items brought in from home
   Large cardboard cubes for each group

3. Classroom Management:

   Whole class and small group activities.

4. Support Services and Special Teacher Notes:

   Title 1 math instructor
Stage 4: Differentiated Instruction Strategies

What specific differentiated instruction strategies will be used in the lesson/unit? Fill in each section that applies.

1. **Differentiated Process:**

   Gathering the various objects and describing the attributes of each 3-dimensional figure will be done in small groups, depending on the ability of the student. The amount of time spent on making the cubes will be adjusted. Journal writing

2. **Differentiated Content:**

   Peer assistance
   Illustrating each figure
   Teacher circulate around the room to help re-teach

3. **Differentiated Product:**

   Various 3-dimensional cubes describing each figure from each group. Each group will present their cube to the class. Encouraging students to create their own group project to understand the lesson focus.