Houston Baptist University

**College of Education and Behavioral Sciences**

**Lesson Plan Format**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Subject:** Math **Grade Level:** Kindergarten

**Time Estimate:** 40 minutes

**Unit:** Comparing Numbers **Topic:** Greater Than and Less Than

**Goal(s):** Students understand why numbers are greater than or less than other numbers.

**Objective(s):** Students can correctly identify and use the greater than and less than symbols. Students can choose the correct answer when asked if a number is greater than or less than another number both orally and in written expression.

**TEKS:** K.2.E, K.2.F, K.2.G, K.2.H

**Materials/Resources/Technology needs:** one small bag of m&m’s for each student, “Sweet Treat Math Sheet”, visual support sheet, chart paper and markers, half-sheet color-coded charts (one for each pair)

**Instructional Procedures:**

**Focusing Event**:

Review counting with the students. Ask them what their favorite things (food, objects, etc.) are. Ask them if they have ever had to count these things. Ask them how they know if they have more or less of something. Allow this discussion to continue for five to ten minutes. Tell the class that today they will learn about “greater than” and “less than.”

**Teaching/ Learning Procedures:**

1. Place the students into small groups no larger than four in a group.
2. Pass out the bags of candy to each student, but be sure to tell them that they are NOT to open it or eat it until directed to do so. Also tell them that they will only get to eat the candy if they are on their best behavior during the lesson.
3. On the chart paper at the front of the room, display the visual support sheet.
4. Explain to the students that “greater than” means more. Point to the first box on the visual support and explain that they will draw a picture to show that something is more. Draw an example on the chart paper and allow for a minute or two for them to draw their own example.
5. Draw the greater than sign on the chart paper and tell them that it is a symbol used to show that something is greater than another thing. Have the students make the symbol with their arms and tell them it is like an alligator. The open part, or the “mouth” always eats the biggest number.
6. Show the students three bags of m&m’s. Ask them, “If I had three bags of candy, but they only had one, who would have the greater amount?” Remind them that “greater than” means the same thing as “more.” After the students answer, ask them to explain why they think that you have more candy.
7. Now ask the students who has the least amount of candy bags. Define “less than” as “a little bit” or “not as much.” Demonstrate the less than symbol with your arms and remind them about the alligator. Tell them that the pointy part of the symbol, or the “tail” always points to the smallest number.
8. Fill in the less than box on the visual support and have the students help you come up with an example to show less than. Draw the less than symbol on the chart.
9. Pass out the half sheet of paper with the color-coded chart on it. Tell them that the less than side is blue and the greater than sign is red. The middle column of boxes will be for the symbol. Divide each group of four students into two groups of two students (pair them up).
10. Tell each student in the pairs that they can now open their candy and count how many m&m’s they have in their package. The student with a greater number of candy will go in the red box and the student with the smaller number of candy’s number will go in the blue box. The students will fill in the middle column with the correct symbol.
11. Collect all of the charts (one for each pair) and go through them with the class as examples. Tell the students the different numbers of candy and ask them who has less and who has more. Write the answers and examples on the chart paper as you go. When they answer, have them use their alligator arms.

**Formative Check (ongoing or specific)**:

Pass out the “Sweet Treat Math Sheets.” Students will work independently to complete the assignment. Collect the worksheets at the end of the math lesson and review them to ensure that the concepts of “greater than” and “less than” were understood and that they used the correct symbols when filling in the worksheets.

**Reteach (alternative used as needed)**:

If the students are struggling to understand greater than or less than, remind them about the alligator arms and show them this video:

<https://www.youtube.com/watch?v=M6Efzu2slaI>

Provide new examples and refer to the video when explaining how you got an answer. When asking students to provide answers, ensure that they explain to you why they chose that answer.

Provide extra practice and make use of manipulatives, such as blocks, game pieces, or pencils so that they can visualize what greater than and less than actually mean.

**Closure**:

1. Provide oral examples and have students use their alligator arms to demonstrate their understanding.
2. Call on three or four students to create their own examples to tell the class.
3. Dismiss the students in rows to their desks and tell them what materials to get out for the next part of the day.

**Assessment/Summative Evaluation**:

The next math test will include problems requiring students to write the proper symbols and show that they understand if someone has less or more of something than someone else.

**Modifications/Notes**:

* Special Education
* During paired work, make sure to pair lower-level students with higher-level students.
* During independent work, instead of the students having to count the candy (drawings), fill in the numbers, and *then* draw the correct symbol, provide them with a sheet in which the numbers are already included so they will only have to focus on writing the correct symbol.
* English Language Learners
  + Really stress the “alligator arms” with ELLs and make sure to be repetitive with vocabulary when demonstrating the symbols.
  + Allow them to use manipulatives during independent work rather than counting the candy in the illustrations. Doing this allows them to visually draw a connection and physically see which is greater or less than.
* Gifted and Talented
  + During independent work, ask them to write out real examples using greater than or less than. Have them illustrate, label, and solve their own problems.
  + You can also give them a worksheet using higher numbers to compare.