Lesson Plan

Lesson: Repeated Addition Groups
Length: 30 minutes
Age or Grade Level Intended: 3rd Mathematics

Academic Standard(s):
Mathematics/Computation:
3.2.2 Represent the concept of multiplication as repeated addition.

Performance Objective(s):
When give a problem, the students will be able to arrange themselves into the appropriate addition groupings to show the multiplication problem presented to them with 95% accuracy.

Assessment:
Give the students a problem and have them arrange themselves into the appropriate groupings to represent repeated addition. By using a checklist, check off the names of the students who are proving that they understand this content by arranging themselves into the appropriate groupings presented to them.

Advance Preparation by Teacher:
- Three prepared multiplication problems
- Definition of repeated addition
- A checklist of the students’ names for the assessment

Procedure:
Introduction/Motivation:
Pass out about 15 counting teddy bears to each student. Ask the students to put three teddy bears in three different groups. Ask all the students to count aloud to see how many are there. Explain by writing on the board that 3+3+3 can also be written as 3x3 that both equal 9 and that is what we called repeated addition. Explain that repeated addition means solving a multiplication problem by adding. Have the student now put four teddy bears in two different groups. Have them count aloud to see how many there are. Again right 4+4 can also be written as 4x2 which both equal 8. Remind the student that this is what we call repeated addition. (Gardner: Logical/Mathematical and Bodily/Kinesthetic)

Step-by-Step Plan:
1. Explain that we are going to need volunteers to do our activity.
2. Ask for twelve volunteers.
3. Ask the students to arrange themselves into three groups of four.
4. Ask the whole class to count the groups of volunteers by adding each group together.
5. Repeat that this is another way of finding the answer to a multiplication problem, called repeated addition.
6. Redefine repeated addition on the board for the students and present it in a picture/model. (Definition: solving a multiplication problem by adding, i.e. $4+4+4=12$)
7. We are now going to try a different example.
8. Ask for eight volunteers. (try to choose different volunteers from first time)
9. Ask this set of volunteers to arrange themselves into two groups of four.
10. Have the whole class count the groups of volunteers by adding each group together.
11. Ask the students to raise their hands if they know what kind of multiplication problem this is. (Bloom’s: Knowledge)
12. We are now going to do one more example.
13. Ask for ten volunteers. (Again make sure you choose different volunteers)
14. Ask the students to raise their hands if they can define what repeated addition means. (Bloom’s Comprehension)

Closure:
Today we covered the math concept of repeated addition. Put the students into two groups and ask them to create their own repeated addition groups. Have both groups share their ideas. Correct and explain to the students what they need to fix if they did not put them into a repeated addition problem. Tell all the students they did a wonderful job and that tomorrow we are going to apply our knowledge by completing a worksheet over repeated addition.

Adaptations/Enrichment:
- For a student with ADHD- Make sure that they are in the first volunteer group and are able to answer the questions from the following groups.
- For a student with an LD in Mathematics- Make sure that they are in the group with their peer friend that will help guide them to help find the appropriate grouping.
- For a student with High Ability- When you have the other students arranging themselves into group have the student with high ability write down the multiplication problem that goes with the repeated addition problem and explain to the whole class that this is this is the problem we are going to reach.

Self-Reflection:
I have not yet taught this lesson but some questions I would ask myself would be:
- Were the students engaged in this lesson?
- Did the students arrange themselves into groups that were correct or did they struggle?
- Were there one or two students individual who seem to understand and arrange the students into the right groups?
- What went well?
• Were there one or two students that were confused and just stood to the side and wait for someone to tell them what to do?
• If there were students standing to the side what can I do to engage them to participate or how can I do this lesson again for those students to understand?
• What did not go so well?
• How could I change this lesson for the future?