

Lesson Plan #6

0's, 1's and 11's as Factors

Performance Objective: Without assistance, students will be able to solve at least 16 out of 20 multiplication problems correctly with 0, 1, and 11 being factors.

Resources or Materials Needed:

- White board
- Dry erase marker
- Assessment handout

Time: 30 minutes

Step 1: Pre-Instructional Activities:

- As a class, students will be reviewing “groups of” but this time, we will be focusing on 0's, 1's and 11's. On the students whiteboards, students will need to make 4 circles. In each circle, there will be nothing in them equaling to 4 groups of 0 that equals 0.
 - Students will make any number of circles on their whiteboards and write a multiplication sentence that represents their groups. Examples students may come up with could be 8×0 , 4×0 , 2×0 , and many more.
- On the white board, we will be doing the same thing as 0's but besides having our size in each group be 0, it will be 1 and then we will be doing the same thing with 11.

Step 2: Content Presentation:

- Utilizing our knowledge from our pre-instruction activities, we will continue to practice making groups of with factors of 0, 1, and 11.
 - Student will practice making different groups with the size being either 0, 1 or 11 and have partners practice writing multiplication problems using their whiteboards.

- Discuss with students about the facts 0, 1, and 11. Possible questions to ask:
 - What did we notice with our 0 facts?
 - Student comments: “Anything that you multiply by 0 is just going to be zero”
 - What did we notice with our 1 facts?
 - Student comments: “When multiplying anything with 1, you get that number. For example, if you take 8 groups of 1, you’ll still get a product of 8. Even if you do 8×1 or 1×8 , it will still be 8.

Step 3: Learner Participation:

- Students will continue to practice writing multiplication problems with 0, 1 and 11’s as one of the factors.

Step 4: Assessment:

During this time, students will be instructed to do this quiz as an assessment and to try their best at picking the best answer for the equation. They will have 20 questions to work through to which they will need to have 16 out of the 20 correct.

Step 5: Follow-Through Activities:

There will be no follow through activities for this lesson

Lesson Plan Summary: In this lesson, the instructions is a lead by both students and teachers.

Students use whiteboards to solve problems based on the strategy that is being used. Students also access prior knowledge to help them better understand current facts. During this lesson, students will feel more at-ease with figuring out multiplication facts as these facts are focused on either 0’s or groups/groups of 1 and 11. Cognitivism is present in this lesson as students are

constantly building upon what they know from repeated addition to skip counting. (Ertmer, P.A., & Newby, T.J., 2013).

Assessment

Name _____

Date _____

0, 1, 11's

1. $0 \times 2 =$ ____

11. $11 \times 3 =$ ____

2. $1 \times 4 =$ ____

12. $0 \times 1 =$ ____

3. $11 \times 6 =$ ____

13. $1 \times 2 =$ ____

4. $1 \times 7 =$ ____

14. $11 \times 5 =$ ____

5. $11 \times 3 =$ ____

15. $0 \times 7 =$ ____

6. $0 \times 8 =$ ____

16. $0 \times 6 =$ ____

7. $0 \times 9 =$ ____

17. $11 \times 8 =$ ____

8. $11 \times 5 =$ ____

18. $1 \times 9 =$ ____

9. $1 \times 1 =$ ____

19. $0 \times 3 =$ ____

10. $1 \times 4 =$ ____

20. $1 \times 4 =$ ____



Name _____

Date _____

0, 1, 11's

1. $0 \times 2 = 0$

11. $11 \times 3 = 33$

2. $1 \times 4 = 4$

12. $0 \times 1 = 0$

3. $11 \times 6 = 66$

13. $1 \times 2 = 2$

4. $1 \times 7 = 7$

14. $11 \times 5 = 55$

5. $11 \times 3 = 33$

15. $0 \times 7 = 0$

6. $0 \times 8 = 0$

16. $0 \times 6 = 0$

7. $0 \times 9 = 0$

17. $11 \times 8 = 88$

8. $11 \times 5 = 55$

18. $1 \times 9 = 9$

9. $1 \times 1 = 1$

19. $0 \times 3 = 0$

10. $1 \times 4 = 4$

20. $1 \times 4 = 4$



