

Different Ways to Solve Multiplication Problems

Caitlin Jeffas

EDTC 635

Video Mini- Project

Target Audience

- 3rd Grade
- Mathematics lesson – multiplication
- Varying abilities
- 20 students

Goals/Objectives/Outcomes

- Students will be able to:
 - Solve multiplication problems using a variety of strategies.
 - Manipulate objects to form equal groups and arrays.
 - Use repeated addition to form equal groups and solve multiplication equations.
- NJSLS Standards:
 - 3.OA.A.1- Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. *For example, describe and/or represent a context in which a total number of objects can be expressed as 5×7 .*
 - 3.OA.A.3 - Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

Brainy Bits-

Sense and Meaning

- In order for students to remember, these strategies must make sense and be meaningful in their lives.
- Students see and use these strategies every day:
 - Counting eggs in an egg carton, buying the same item while grocery shopping, finding how many plants are in a row in a garden, figuring out how many crayons in each box, etc.
- A group discussion will have students thinking about all the times they see equal groups, equal rows of objects, and when they add the same number repeatedly.
- Students will understand that it happens everyday in their lives.

Multiple Intelligences

- Visual – Spatial
 - Addressed through watching videos, making models, and creating their own objects to put into groups.
- Body-Kinesthetic
 - Addressed through the manipulation of objects when making arrays.
- Musical
 - Addressed through the use of music in the repeated addition video.
- Interpersonal
 - Addressed through the ability to work with partners to make equal groups and arrays, and use repeated addition.

Multiple Intelligences – Cont.

- Intrapersonal
 - Addressed through the ability to work at their own pace and watch the videos as many times by themselves as needed.
- Linguistic
 - Addressed through being able to read through the words on the videos, and through discussion with the class and partners about where we see and use multiplication daily.
- Logical-Mathematical
 - Addressed through solving the math equations, looking for patterns, and understanding how all three methods are connected.

Citations

- <http://www.nj.gov/education/cccs/2016/math/g03.pdf>
- https://screencast-o-matic.com/screen_recorder
- <http://www.tecweb.org/styles/gardner.html>