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EECE 350

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### Create a Learning Task Based on Children's Literature

**Description:** I loved this book titled *Amanda Bean's Amazing Dream* by Cindy Neuschwander, which focuses on a girl named Amanda who excels at counting. However on her mathematical journey of counting, she encounters scenarios, in which she realizes that she needs to learn to multiply to count faster, rather than consistently use the repeated addition method. It also explains that multiplication has to do with something in groups, columns, or rows. This is a great book to introduce multiplication after going over repeated addition and even seeing the relationship between the two. It can ease their anxiety surrounding multiplication and make them excited to learn.

#### **Grade 3 Standards:**

- Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities.
- Determine the unknown whole number in a multiplication or division equation relating three whole numbers.
- Identify and extend arithmetic patterns (including patterns in the addition table or multiplication table).

#### **Learning Goals:**

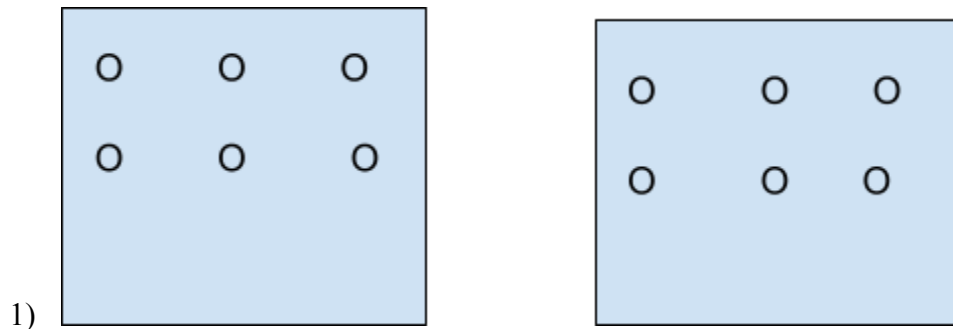
- Students will be able to see the relationship between repeated addition and multiplication.

- Students will use many strategies to complete the task, such as drawing counters or bar diagrams.

**Time Frame:** 1 hour

I chose this task for my students because I was influenced by my third grade class, which I am student teaching in. I saw that they were engaged in these types of questions when the educator was teaching them this topic. Credits to the Envisions 2.0 textbook for inspiration.

**Task:**



a) \_\_\_\_ groups of \_\_\_\_.

b)  $6 + \underline{\hspace{1cm}}$ .

c)  $2 \times \underline{\hspace{1cm}} = \underline{\hspace{2cm}}$ .

For numbers 2 and 3, fill in the blanks to the multiplication problem:

2)  $5+5+5+5= 4 \times \underline{\hspace{1cm}}$ .

3)  $3+3+3+3+3= 5 \times \underline{\hspace{1cm}}$ .

4) Mark has 10 cards. He arranges them in 2 groups of 5. How can you represent this?

Include both the repeated addition method as well as the multiplication method.

5) Mike has 20 cards. He arranges them in 4 groups of 5. How can you represent this?

Include both the repeated addition method as well as the multiplication method.

6) Daniel has 12 cards. He arranges them in 3 groups of 4. How can you represent this? Include both the repeated addition method as well as the multiplication method.

**Completed Task:**

1) 2 groups of 6.

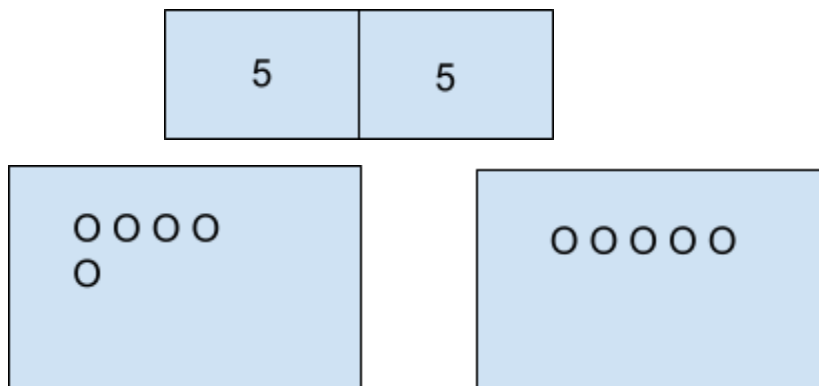
$$6 + 6 = 12$$

$$2 \times 6 = 12.$$

2)  $5+5+5+5= 4 \times 5$ . (4 groups of 5)

3)  $3+3+3+3+3= 5 \times 3$ . (5 groups of 3)

4) Mark has 10 cards. He arranges them in 2 groups of 5. How can you represent this? Include both the repeated addition method as well as the multiplication method.



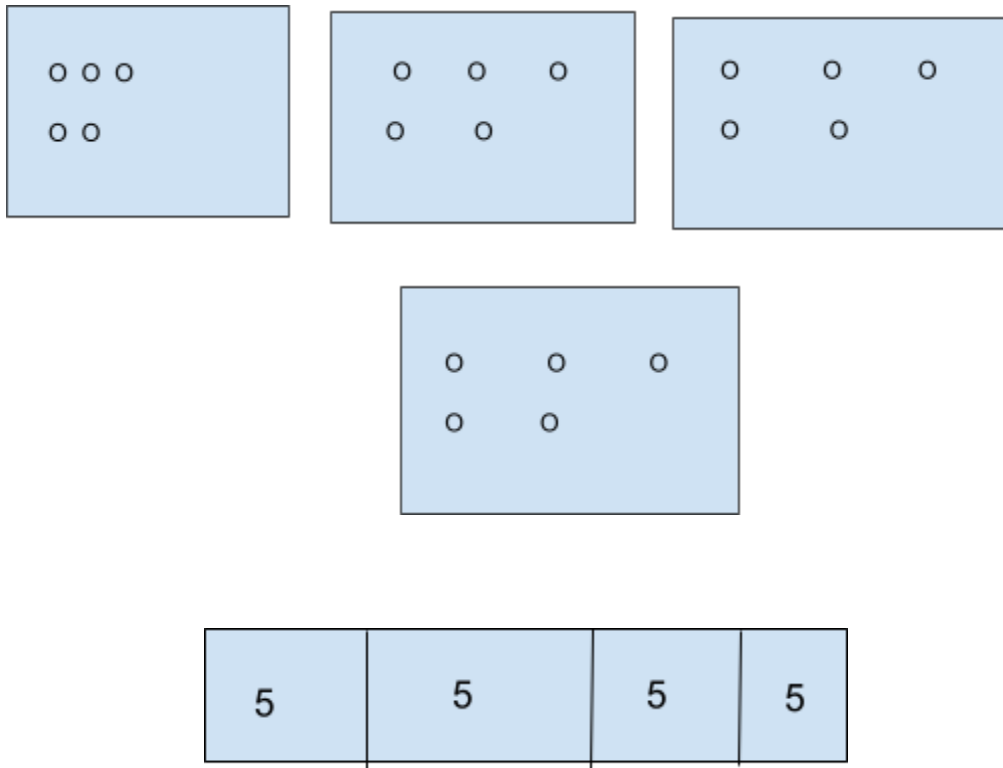
Repeated addition method:  $5+5= 10$

Multiplication method:  $2 \times 5 = 10$

5) Mike has 20 cards. He arranges them in 4 groups of 5. How can you represent this? Include both the repeated addition method as well as the multiplication method.

Repeated addition method:  $5+5+5+5= 20$

Multiplication:  $4 \times 5 = 20$



6) Daniel has 12 cards. He arranges them in 3 groups of 4. How can you represent this? Include both the repeated addition method as well as the multiplication method.

Repeated addition method:  $4+4+4=12$

Multiplication:  $3 \times 4 = 12$

