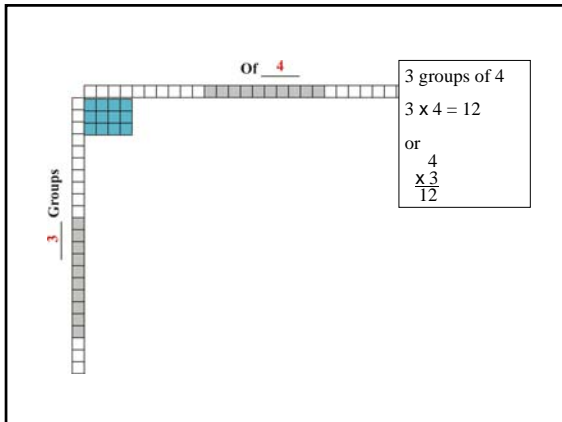


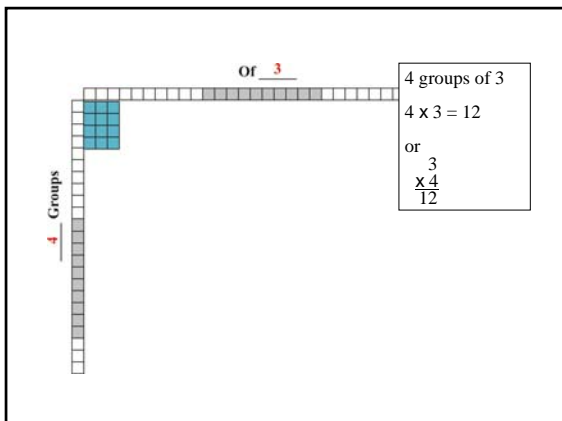
## Multiplication With Base 10 Blocks

Allan, Huellmantel, Scott

**Activity:** Find 3 groups of 4.  
Use the multiplication mat.  
**Build** 3 groups of 4 as an array.  
**How much** is 3 groups of 4?  
**Write the problem** mathematically.



**Activity:** Rotate the 3 by 4 array.  
**Write the new problem** mathematically.



**Activity:** Find 3 groups of 10.  
Use the multiplication mat.  
**Build** 3 groups of 10 as an array.  
**How much** is 3 groups of 10?  
**Write the problem** mathematically.

Complete the multiplication rectangle.  
Write the problem mathematically.

3 groups of 10  
 $3 \times 10 = 30$

or

$$\begin{array}{r} 10 \\ \times 3 \\ \hline 30 \end{array}$$

How much is 3 Groups of 10?

- How many tens?
- How much is that?
- How many ones?
- How much altogether?

Activity: Find 3 groups of 14.  
Use the multiplication mat.  
Build 3 groups of 14 as an array.  
How much is 3 groups of 14?  
Write the problem mathematically.

Complete the multiplication rectangle.  
Write the problem mathematically.

3 groups of 14  
 $3 \times 14 =$

or

$$\begin{array}{r} 14 \\ \times 3 \\ \hline 30 \end{array}$$

How much is 3 groups of 14?  
How many 10s?  
How much is that?

3 groups of 14  
 $3 \times 14 =$

or

$$\begin{array}{r} 14 \\ \times 3 \\ \hline 30 \\ \hline 12 \\ \hline 42 \end{array}$$

How much is 3 groups of 14?  
How many 1s?  
How much is that?  
How much altogether?

**Find 10 groups of 10**

1. Show the 10s
2. Complete the rectangle
3. Remember to regroup

Of 10

10 groups of 10  
 $10 \times 10 = 100$   
 or  

$$\begin{array}{r} 10 \\ \times 10 \\ \hline 100 \end{array}$$

**How much is 10 groups of 10?**

- How many 100s?
- How much is that?
- How many 10s?
- How much so far?
- How many 1s?
- How much altogether?

**13 groups of 14**

1. Show the 13
2. Show the 14
3. Complete the multiplication rectangle, showing 100s, 10s, and 1s

Of 14

13 groups of 14  
 $13 \times 14 =$   
 or  

$$\begin{array}{r} 14 \\ \times 13 \\ \hline 182 \end{array}$$

**How much is 13 groups of 14?**

How many 100s?  
 How much is that?

Of 14

13 groups of 14  
 $13 \times 14 =$   
 or  

$$\begin{array}{r} 14 \\ \times 13 \\ \hline 182 \end{array}$$

**How much is 13 groups of 14?**

How many 10s to the right of the flat?  
 How much is that?  
 How much so far?

Of 14

13 groups of 14  
 $13 \times 14 =$   
 or  

$$\begin{array}{r} 14 \\ \times 13 \\ \hline 182 \end{array}$$

**How much is 13 groups of 14?**

How many 10s below the flat?  
 How much is that?  
 So, how much so far?

13 Groups

Of 14

13 groups of 14

$13 \times 14 =$

or

$$\begin{array}{r} 14 \\ \times 13 \\ \hline 42 \\ 140 \\ \hline 182 \end{array}$$

How much is 13 groups of 14?  
How many 1s?  
How much altogether?

On a sheet of paper draw 12 groups of 15

Let's do 16 groups of 17 visually