Multiply by Adding

Wow! Look at all of those balloons! I saw balloons like that at Funland!

Today, we are going to multiply to find out how many balloons there are.

Multiply? Is that when we put groups together to make a big number?

That's right! When we multiply, we put groups with the same number together. A multiplication sentence has a number to show how many groups there are, an x to show we are multiplying, and a number to show how many are in each group. Then there's an equal sign and an answer.

I remember now! Multiplying is like adding over and over.

Great job! We can use addition sentences to help us multiply. Ready to try it out?

Yes!

Let's start with this addition sentence. I will put it on the board. You are going to write the numbers to make a multiplication sentence. Then you will draw a picture to help you find the answer!

How can I use the addition sentence to write a multiplication sentence?

We need to know the number of groups and how many are in each group. The number of addends is the number of groups. The repeated addend is the number in each group! What number goes on the first line of this multiplication sentence?

Well, I see 3 addends. That means there are 3 groups. 3 goes on the first line!

Excellent! Now try the second line.

Hmm, 3 is the repeated addend. That means there are 3 in each group. 3 goes on the second line! That's 3 times 3!

You got it! Now we need a picture to help us find the answer. That will go on the last line of the multiplication sentence. Draw circles under the addition sentence to show the number of groups. You can use your pencil.

There are 3 groups, so 3 circles. Like this?

Yes! Now put dots in each circle to show the number in each group. Let's use a red crayon!

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There are 3 in each group. I am going to draw 3 dots in each circle. How do I find the answer with this picture?

We need to add the groups of 3. Try it out!

3 and 3 make 6. Then another 3 makes 9! That must be the answer to the multiplication sentence. Is this also the answer to the addition sentence?

Yes, 9 is the answer to both. That is because 3 times 3 is also 3 plus 3 plus 3. Multiplication and repeated addition are the same. Let's try the next problem.

Wow! More balloons! Okay. I see 3s again! That must mean there are 3 groups. Is this 3 times 3 again?

I can see why you would think that! This is very similar to the last problem. Remember, the number of groups is the number of addends. Let's count the addends together. 1, 2, 3, 4.

Oh! There are 4 addends. That means there are 4 groups. But there are still 3 in each group, right? That's 4 times 3?

That is right! Can you draw a picture to show 4 times 3?

Yes! I think it looks like this. 4 circles and 3 dots in each!

Great job! What is the answer to both 4 times 3 and 3 plus 3 plus 3 plus 3?

3 plus 3 is 6. Another 3 makes 9. Then there's one more 3. 9 plus 3 is 12. 12 is the answer to both!

You got it! You did a great job multiplying with addition today!

Now I can multiply to count the balloons at Funland!