Division is the DIVIDING of something into groups or parts. This is related to because multiplication is the repeated addition of groups or parts. Division and multiplication are the inverse of each other.

Let’s take a look at what 3 x 4 looks like

It can either look like 3 groups of 4:

Billy had 3 boxes of candy. Each box had 4 chocolates in it. How many chocolates did he have total?

OR it could be 4 groups of 3:

Mandy had 4 bags of apples. Each bag had 3 apples in it. How many apples did she have total?

The answer to a multiplication problem is called the product. The product of 3 and 4 is 12. The answer to both 3 groups of 4, or 4 groups of 3, is 12.

Division asks us to divide something up into groups or groups of a certain size

Let’s take a look at what 12 ÷ 4 looks like.

It can either ask us how many groups of size 4 are inside of 12:

Billy had 12 chocolates that he put into boxes. He put 4 chocolates in each box. How many boxes did he fill?

**In this case, our answer is how many groups we can make (How many boxes)**

It can also ask us how many will be in each group (the size of each group) if we divide 12 into 4 even groups.

Billy had 12 chocolates. He split them evenly among 4 boxes. How many chocolates are in each box?

**In this case, our answer is the size of each group (how many chocolates are in each box)**

Do these division problems. In each case, first identify whether we are making groups of a given size, OR if we are dividing into a certain number of equal groups.

1. Mr. Potter had 30 white board markers. He wanted to divide the markers among the class groups. If there are 5 groups, how many markers does each group get?

Which will occur?

Divide 30 into \_\_\_\_\_ equal groups OR Divide 30 into groups of size \_\_\_\_\_\_

2. Each cup can hold 6 ounces of juice. If you had 48 ounces of juice, how many cups could you fill?

Which will occur?

Divide \_\_\_\_\_ into \_\_\_\_\_\_ equal groups OR Divide \_\_\_\_ into groups of size \_\_\_\_\_

3. Each bus can hold 35 people. If 70 students are going on the field trip, how many buses will be needed?

Which will occur?

Divide \_\_\_\_\_ into \_\_\_\_\_\_ equal groups OR Divide \_\_\_\_ into groups of size \_\_\_\_\_

4. Tanya has 36 pencils. She can fit 12 pencils in a pencil case. How many pencil cases will Tanya need?

Which will occur?

Divide \_\_\_\_\_ into \_\_\_\_\_\_ equal groups OR Divide \_\_\_\_ into groups of size \_\_\_\_\_

5. 16 people are going to the movies. They have 4 cars. If the same number of people ride in each car, how many people are in each car?

Which will occur?

Divide \_\_\_\_\_ into \_\_\_\_\_\_ equal groups OR Divide \_\_\_\_ into groups of size \_\_\_\_\_