

Word Problems for Units of 2, 3, 4, 5, 10

In solving multiplication, we already know different strategies to help visually and efficiently get the product of factor pairs. Equal groups illustrate the number of groups and the size of each group. Array models illustrate factors in rows and columns. We also know that multiplication has an inverse relation with division, which can help us adapt to different multiplication and division problems. Now, **we can now solve for word problems by applying the different strategies to solve multiplication and division.**

There are some steps in order to help in solving word problems: **First**, read and **understand the situation** at hand. **Second**, **identify the values** involved. Know what the stated factors are. **Third**, choose **which operation is more appropriate** to use. If there is a factor pair and what you are looking for is the product, then, it is more appropriate to use multiplication. If there is an unknown factor and you already have the total, then, it is more appropriate to use division. **Fourth**, **write the number sentence**. Identify the multiplicand and multiplier, or the dividend and divisor. **Fifth**, **draw the appropriate strategy** to help you solve. **Sixth**, **solve for the unknown and label** your final answer.

Consider this word problem:

Betty is baking strawberry cupcakes. She wants to put exactly 5 strawberry toppings in each cupcake. She made 4 cupcakes. How many strawberry toppings did she use?

First, understand:

Betty baked 4 cupcakes with 5 toppings each.

Second, identify the values:

5 strawberry toppings and 4 cupcakes

Third, choose the operation:

We need to find the total. So, we should multiply.

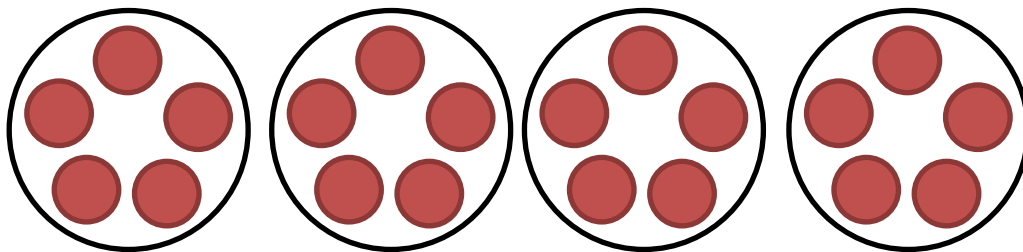
Fourth, write the number sentence:

5 is the multiplicand and 4 is the multiplier: $5 \times 4 = ?$

The product is unknown.

Fifth, illustrate:

We can use the equal groups strategy



Sixth, solve and label your final answer:

$$5 \times 4 = 20$$

Betty used 20 strawberry toppings altogether.

Word Problems

Draw the equal groups for the following word problems.

1. Sylvie has 18 crayons. She wants to put them equally in 3 boxes. How many crayons are there in each box?

2. Bella has four sheets of paper and she wants to stick 3 stickers in each paper. How many stickers are there?

3. Henry wants to put 2 candies each in 8 plastic bags. How many candies will he put all in all?

Draw the arrays for the following word problems.

1. Carlos wants to place 5 books each in his 3 shelves. How many books will Carlos store?

2. Diana has 24 lollipops. She places them in an array with 4 rows. How many lollipops are in each row?

3. The students needed to be in an orderly array with 5 rows and 5 columns. How many students are in the array?

Word Problems

Guided Notes

Math 3

Draw the two tape diagrams for the following word problems.

1. Diana has 24 lollipops. She places them in an array with 4 rows. How many lollipops are in each row?

2. Camille has 28 jellybeans. She gives her four friends an equal amount. How many jellybeans did each friend receive?

3. Henry wants to put 2 candies each in 8 plastic bags. How many candies will he put all in all?

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Word Problems

Guided Notes

Math 3

Time to Think

How can the following techniques help in solving word problems?

Equal Groups?

Array Models?

Commutative Property?

Distributive Property?

Relationship between Multiplication and Division?

Word Problems

Guided Notes

Math 3

Answer the following word problems step-by-step:

1. Tiffany has 30 pebbles. She wants to place an equal number each in 3 containers. How many pebbles are in each container?

First, understand:

Second, identify the values:

Third, choose the operation:

Fourth, write the number sentence:

Fifth, illustrate:

We can use the _____ strategy

Sixth, solve and label your final answer.

2. Troy went to the library and noticed that each shelf had 8 books each. There are 4 shelves. How many books are there?

First, understand:

Second, identify the values:

Third, choose the operation:

Fourth, write the number sentence:

Fifth, illustrate:

We can use the _____ strategy

Sixth, solve and label your final answer.