

Dividing Evenly into Groups

Equal sharing is another way to think about division.

Sally's:



Joe's:



If we divide 12 bananas evenly between Joe and Sally, how many does each one get?

Both Joe and Sally each get 6 bananas.

We can write the division $12 \div 2 = 6$.

This time, the divisor (2) shows the number of groups, and the answer shows the size of the group.

1. Two children are sharing. Divide the things into **two** equal groups. Write a division.

a.



$$\underline{\quad} \div \underline{2} = \underline{\quad}$$

Each child gets .

b.



$$\underline{\quad} \div \underline{2} = \underline{\quad}$$

Each child gets .

c.



$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

Each child gets .

2. Three children are sharing. Divide the things into **three** equal groups. Write a division.

a.



$$\underline{\quad} \div \underline{3} = \underline{\quad}$$

Each child gets .

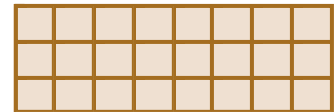
b.



$$\underline{\quad} \div \underline{3} = \underline{\quad}$$

Each child gets .

c.



$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

Each child gets .

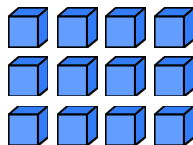
3. Divide the things into **four** equal groups. Write a division.

a.



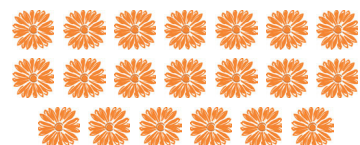
$$\underline{\quad} \div \underline{4} = \underline{\quad}$$

b.



$$\underline{\quad} \div \underline{4} = \underline{\quad}$$

c.

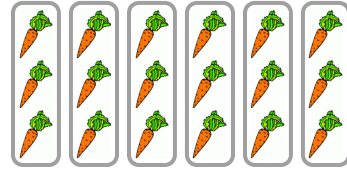


$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

There are **two** different ways to think about division.

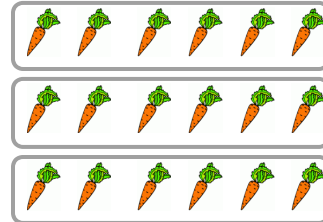
- 1) We have 18 carrots, and we will make groups of 3.
How many groups do we get?

Six groups. So, $18 \div 3 = 6$.



- 2) We divide the 18 carrots evenly into three groups,
like sharing them among three people. How many
are there in each group?

Six. So, $18 \div 3 = 6$.



The multiplication $6 \times 3 = 18$ matches either of the two divisions above.

If the number 6 is the number of the groups, then 3 is the size of each group.

If the number 3 is the number of the groups, then 6 is the size of each group.

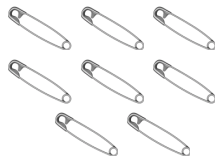
These are the TWO ways to think about division:

- 1) You make groups of a certain size. How many groups do you get?
(The divisor is the size of each group, and the answer is the number of groups.)
- 2) You divide things equally into groups. How many are there in each group?
(The divisor is the number of groups, and the answer is the size of each group.)

4. Divide things evenly into groups.

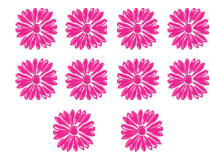
- a. Divide into
two groups.

$$8 \div 2 = \underline{\quad}$$

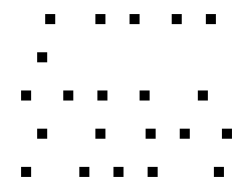


- b. Divide into
five groups.

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

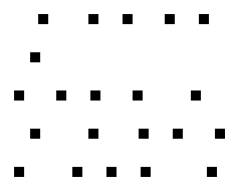


- c. Make 3 groups



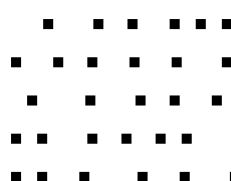
$$21 \div 3 = \underline{\quad}$$

- d. Make 1 group



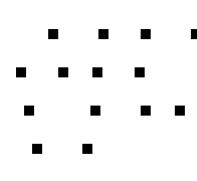
$$\underline{\quad} \div 1 = \underline{\quad}$$

- e. Make 10 groups



$$\underline{\quad} \div 10 = \underline{\quad}$$

- f. Make 2 groups



$$\underline{\quad} \div 2 = \underline{\quad}$$

5. Divide. Think about the matching multiplication problem.

<p>a. $40 \div 8 = \underline{\hspace{2cm}}$</p> <p>$6 \div 3 = \underline{\hspace{2cm}}$</p> <p>$16 \div 2 = \underline{\hspace{2cm}}$</p>	<p>b. $48 \div 12 = \underline{\hspace{2cm}}$</p> <p>$60 \div 6 = \underline{\hspace{2cm}}$</p> <p>$25 \div 5 = \underline{\hspace{2cm}}$</p>	<p>c. $36 \div 9 = \underline{\hspace{2cm}}$</p> <p>$36 \div 6 = \underline{\hspace{2cm}}$</p> <p>$56 \div 7 = \underline{\hspace{2cm}}$</p>
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6. Play the game Go Fish! Division or Parrot Divisions (see the chapter introduction).

7. Solve. Write an equation for each problem. The box is for the \times or \div symbol.

<p>a. Amanda, Jill, and Bill shared evenly 18 marbles in a game. How many marbles did each one get?</p> <p>$\underline{\hspace{2cm}} \square \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$</p>	<p>b. Four children played marbles. Each one had 7 marbles. How many marbles were there in total?</p> <p>$\underline{\hspace{2cm}} \square \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$</p>
<p>c. Ashley cut a 24-inch long string into 6 equal pieces. How long was each piece of string?</p> <p>$\underline{\hspace{2cm}} \square \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$</p>	<p>d. Mom bought 24 hairpins and divided them evenly among her 3 daughters. How many hairpins did each girl get?</p> <p>$\underline{\hspace{2cm}} \square \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$</p>

8. a. Make a *division* story problem about 20 apples and some horses.
(You choose the number of horses.)

b. Make a division story problem about 24 toy cars and some children.
(You choose the number of children.)