

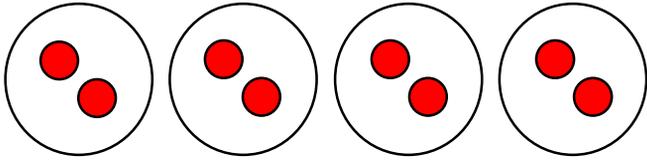
# Make equal groups - sharing



Reasoning and problem solving challenge cards:

Does the number sentence match the shared groups?

$$8 \div 4 = 2$$



Yes or No? Explain your answer.

Which of these numbers can make equal groups?



Explain your answer.

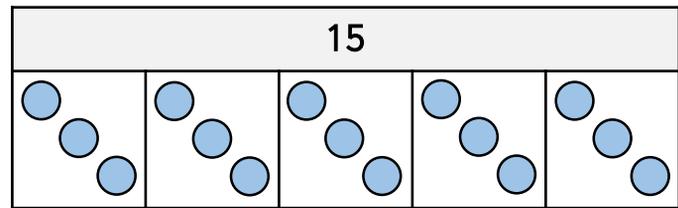
Can John share 24 fish equally between the fish tanks below?



Yes or no? If not, explain why.

Does this bar model represent the number sentence? Yes or No? Explain your answer.

$$15 \div 3 = 5$$



Phil has 20 sweets and shares them equally between 5 friends.

Kim has 20 sweets and shares them equally between 10 friends.

Whose friends will receive the most sweets?  
How do you know?

Mike says you can share the number 12 equally five different ways.

Is Mike correct?  
Explain your answer.

Kelly says you can share 20 equally in 4 different ways.

Is Kelly correct?  
Explain your answer.

Sally has 30 marbles and shares them equally between 6 friends.

Mark has 30 marbles and shares them equally between 5 friends.

Whose friends will receive the most marbles?  
How do you know?

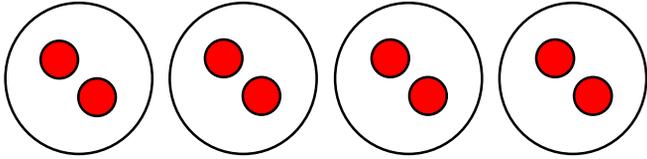
# Make equal groups - sharing



Reasoning and problem solving challenge cards:

Does the number sentence match the shared groups?

$$8 \div 4 = 2$$



Yes or No? Explain your answer.

Yes it is representing 8 shared between 4 groups.

Which of these numbers can make equal groups?



Explain your answer.

12 can make equal groups. 17 can only divide by itself so cannot make equal groups.

Can John share 24 fish equally between the fish tanks below?

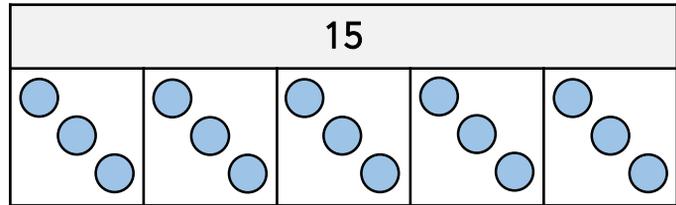


Yes or no? If not, explain why.

No. 24 fish cannot be equally shared between 5 tanks.  $24 \div 5$  will have a remainder.

Does this bar model represent the number sentence? Yes or No? Explain your answer.

$$15 \div 3 = 5$$



No it does not represent  $15 \div 3 = 5$ .

It represents 15 shared between 5 groups.

It should show 15 shared between 3 groups.

Phil has 20 sweets and shares them equally between 5 friends.

Kim has 20 sweets and shares them equally between 10 friends.

Whose friends will receive the most sweets? How do you know?

Phil's friends will receive the most with 4 sweets each. Whereas, Kim's friends will only receive 2 each.

Mike says you can share the number 12 equally five different ways.

Is Mike correct?

Explain your answer.

No, Mike is not correct. You can only share the number 12 equally 4 different ways as follows:  $12 \div 2 = 6$ ,  $12 \div 3 = 4$ ,  $12 \div 4 = 3$  and  $12 \div 6 = 2$ .

Kelly says you can share 20 equally in 4 different ways.

Is Kelly correct?

Explain your answer.

Yes Kelly is correct. You can share the number 20 equally 4 different ways as follows:  $20 \div 2 = 10$ ,  $20 \div 4 = 5$ ,  $20 \div 5 = 4$  and  $20 \div 10 = 2$ .

Sally has 30 marbles and shares them equally between 6 friends.

Mark has 30 marbles and shares them equally between 5 friends.

Whose friends will receive the most marbles? How do you know?

Mark's friends will receive the most with 6 marbles each. Whereas, Sally's friends will only receive 5 each.