$\underline{\textit{Complete work in the exercise books provided}}$

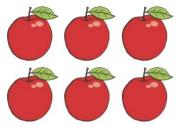
Make equal groups.

Challenge 1:

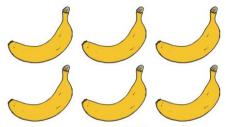
EQUAL GROUPS
Each group has the same number of objects.

There are two groups, and each group has four turtles.

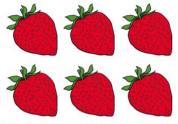
Can you put a circle round the right amount of things to make each group?



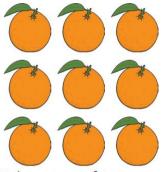
Make a group of 3 apples.



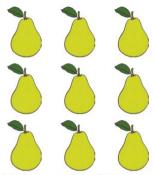
Make a group of 4 bananas.



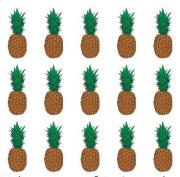
Make a group of 5 strawberries.



Make a group of 6 oranges.



Make a group of 7 pears.



Make a group of 8 pineapples.

Recognising equal groups game

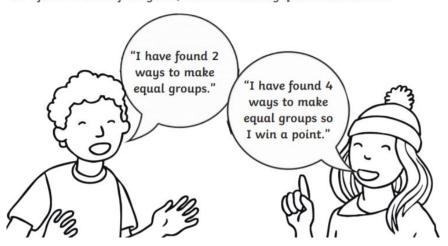
Recognising Equal Groups Game

Equipment:

- · Counters or similar small objects
- · Whiteboards and pens

Instructions

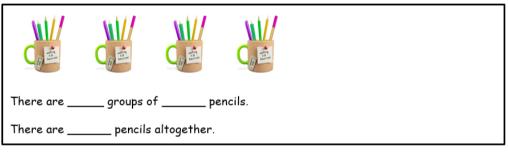
- 1. Play in pairs.
- 2. Grab a handful of counters each and count them.
- 3. Make equal groups with your counters and record the amount of groups you have made, on your whiteboard.
- 4. Make as many equal groups as you can.
- When you have finished, compare what you have recorded on your whiteboard with the other player. The person with the most equal groups wins the game.
- 6. After 3 rounds of the game, choose a mastery question to discuss.

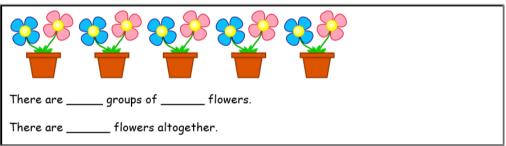


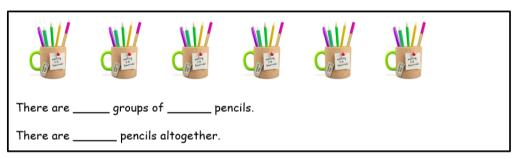
Mastery Questions

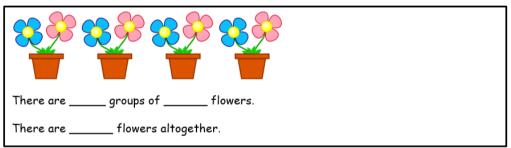
- Can you make a prediction about the number of groups you will be able to make when you have counted your counters?
- 2. What do you notice about the number of counters that will make a greater amount of equal groups?
- 3. If you could choose the number of counters you take, what number would you choose? Give a reason for your choice.

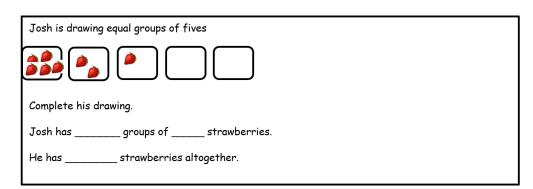
Challenge 2: Complete the following

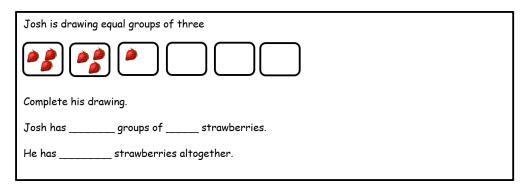




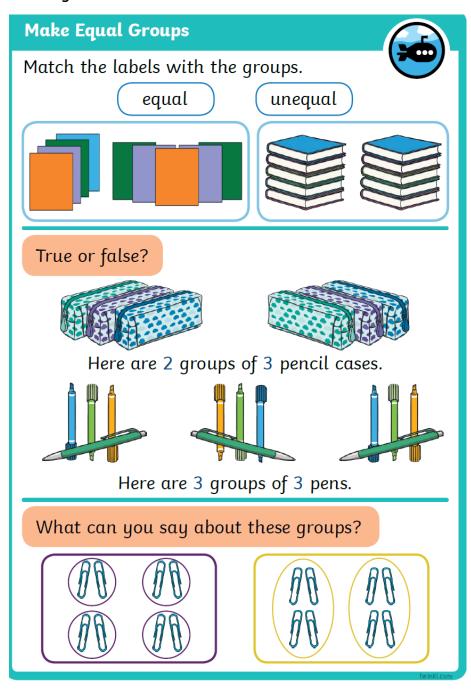








Challenge 3:



Make Equal Groups

Adult Guidance with Question Prompts



Children use pictures and objects to investigate equal groups. They understand that groups of the same number are still equal even if they have been arranged in different ways. Formal multiplication is not introduced at this point. Here, children identify equal and unequal groups. They use stem sentences 'Here are ____ groups of ____.' Then, they investigate different ways to arrange eight objects into equal groups.

What do the words 'equal' and 'unequal' mean?

Count the sheets in each pile of paper.

Count the books in each pile.

Which group is equal/unequal?

Can you explain how you know?

Read each sentence and check the pictures.

Which one is true/false?

What should the incorrect sentence say?

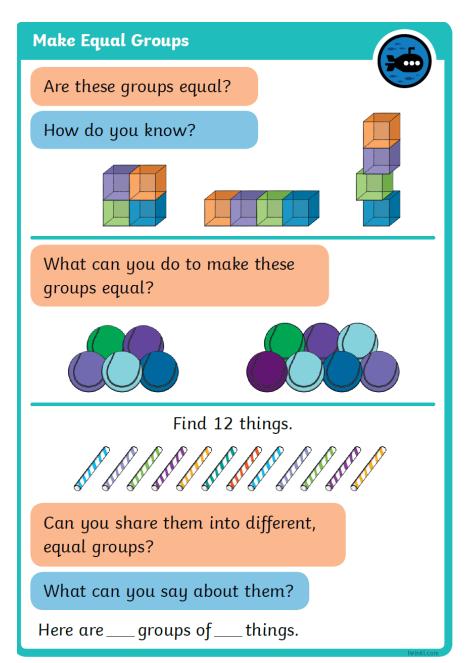
What can you say about these groups?

What is the same?

What is different?

Can you use stem sentences to describe them?

'Here are ____ groups of ____ paper clips.'



Make Equal Groups



Adult Guidance with Question Prompts

Children use pictures and objects to investigate equal groups. They understand that groups of the same number are still equal even if they have been arranged in different ways. Formal multiplication is not introduced at this point. Here, children examine different arrangements of equal groups. They consider ways to change unequal groups to make them equal. Then, they investigate different ways to arrange 12 objects into equal groups.

What do the words 'equal' and 'unequal' mean?

What do you notice about the groups of cubes?

Are the groups equal? How do you know?

Can you finish the stem sentence? 'Here are ____ groups of ____.'

Does it matter how they have been arranged?

Count the number of balls in each group.

Are the groups equal?

What can you do to make them equal?

Can you show me how we could make them equal?

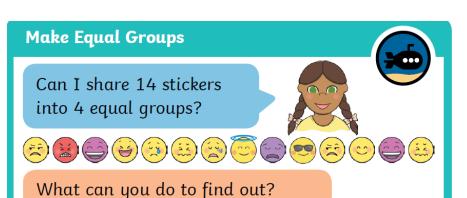
Can you describe them? 'Here are ____ groups of ____.

How many ways can you share 12 things into equal groups?

Can you show me?

Can you use stem sentences to talk about each idea?

'Here are groups of ____'



Who has made equal groups with their star stickers?



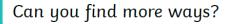


Are there more ways to make equal groups with 16 stickers?

Roll a dice.



Can you make that number of equal groups out of 18 sticks?





Make Equal Groups



Adult Guidance with Question Prompts

Children use pictures and objects to investigate equal groups. They understand that groups of the same number are still equal even if they have been arranged in different ways. Formal multiplication is not introduced at this point. Here, children investigate if it is possible to share fourteen objects into four equal groups. They examine different arrangements to check if they are equal. Then, children explore different ways to present a number of equal groups e.g. 1+1,2+2,3+3 and 4+4 are all examples of two equal groups.

Do you think it's possible to share 14 things into four equal groups? What can you do to find the answer?

Can you explain what you have found out?

What can you tell me about each reward chart?

Who has made equal groups? Can you use a sentence to describe it?

'Here are ____ groups of ____.

Can you think of more ways to make equal groups with 16 stars?

Which number did you roll?

This tells you the number of equal groups to make. Can you tell me about each idea with a sentence?

'Here are ____ groups of ____.'

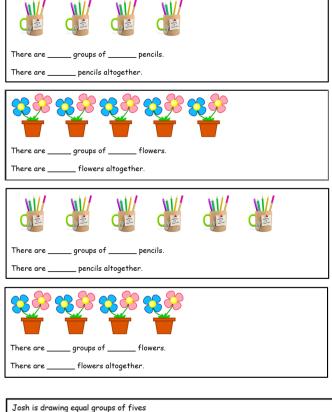
Were there any numbers you couldn't do?

Answers Challenge 1: Recognising equal groups game

- Can you make a prediction about the number of groups you will be able to make when you have counted your counters?
 Answers many vary.
- What do you notice about the number of counters that will make a
 greater amount of equal groups?
 Numbers that make lots of groups will be even and multiples of several
 numbers, such as 12, 18, 20 or 24.
- If you could choose the number of counters you take, what number would you choose? Give a reason for your choice.
 Answers many vary.

Answers

Challenge 2



There are 4 groups of 5 pencils.

There are 20 pencils altogether.

There are 5 groups of 2 flowers.

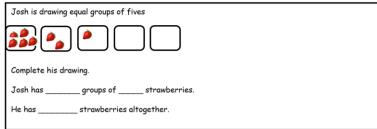
There are 10 flowers altogether.

There are 6 groups of 5 pencils.

There are 30 pencils altogether.

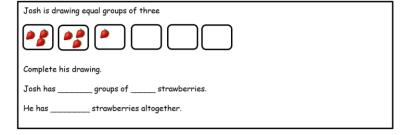
There are 4 groups of 2 flowers.

There are 8 flowers altogether.



Josh has 5 groupds of 5 strawberries.

He has 25 strawberries altogether.



Josh has 6 groupds of 3 strawberries.

He has 18 strawberries altogether.

Unequal: 4 and 6 sheets of paper. Equal: 5 and 5 books.



True: 'Here are 2 groups of 3 pencil cases.'

False: 'Here are 3 groups of 3 pens.' This should read 'Here are 3 groups of 4 pens.'

There are 8 paper clips in the purple set and 8 paper clips in the yellow set.

The purple set has 4 groups of 2 paper clips. The yellow set has 2 groups of 4 paper clips.

The groups of cubes are all equal. 'Here are 3 groups of 4 cubes.'



1 group of 5 balls and 1 group of 7 balls. You can make these equal by moving a ball across to make 2 groups of 6.

4 equal arrangements of 12 sticks: 2 groups of 6, 6 groups of 2, 3 groups of 4 and 4 groups of 3.

14 can't be shared into 4 equal groups.



Pat has made equal groups: 4 groups of 4. Jim has made unequal groups: a 9 and a 7.

More ways to make equal groups with 16 stars: 2 groups of 8, 8 groups of 2 and 4 groups of 4.

Rolled	1	2	3	4	5	6
Groups	1 group of 18	2 groups of 9	3 groups of 6	can't do	can't do	6 groups of 3