



1. Counting in 2s

· count in multiples of twos, fives and tens

Fluency

How many socks are there?



There are ____ socks in total.

How many gloves are there?



There are ____ gloves in total.

Represent how many gloves there are using ten frames.

Problem solving:

Rosie counts back from 50 in 2s.
Amir counts up from 12 in 2s.

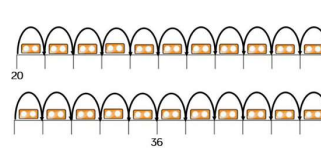


They say their numbers together. Who will say 30 first?

Continue colouring in 2s on the grid.
What do you notice?

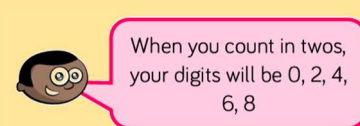
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

Complete the number lines by counting in 2s:



Reasoning:

Always, sometimes, never...



Prove it!

2. Counting in 5s

· count in multiples of twos, fives and tens

Fluency

How many fish are there?



There are ____ fish in each tank.

There are ____ tanks.

There are ____ fish altogether.

How many grapes are there?



There are ____ grapes in each bunch.

There are ____ bunches.

There are ____ grapes altogether.

Continue colouring in 5s on the grid.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

Complete the number lines by counting in 5s



Problem solving:

Work in groups. Make a circle with your hands. You can choose to put in one hand or both hands.

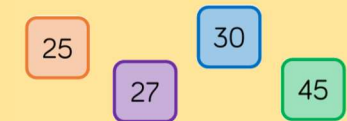


Count how many fingers and thumbs you can see altogether.

Can you predict how many? Count to check.

Reasoning:

Odd One Out



Which is the odd one out? Explain your answer.

I think _____
because _____

3. Counting in 10s

· count in multiples of twos, fives and tens

Fluency

How many birds are there altogether?



There are ____ birds in each tree.

There are ____ trees.

There are ____ birds altogether.

How many flowers are there altogether?



There are ____ flowers in each bunch.

There are ____ bunches.

There are ____ flowers altogether.

Use a bead string to count in tens.
Can you count forwards and backwards in tens?



Can you count in tens on a number track as well?
How does this match counting on a bead string?

Reasoning:

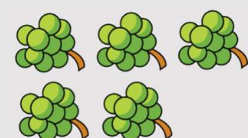
Gemma is counting in 10s on part of a hundred square.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

Colour in all the numbers Gemma says.
What is the same about her numbers? What is different?

Problem solving:

Grapes come in bunches of 10 in the shop.



Max wants 40 grapes. Are there enough grapes?

4. Making Equal Groups

· solve one-step problems involving multiplication & division by calculating the answer using concrete objects, pictorial representations & arrays

Fluency

Are the groups equal or unequal?

Write a label for each.



Complete the sentences



There are ____ groups of ____ pencils



There are ____ groups of ____ flowers.

Josh is drawing equal groups of 3



Complete his drawing

Problem solving:

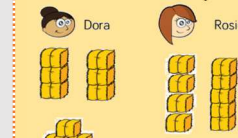
Use cubes or counters to complete the questions.

Alex has 4 equal groups. Show what Alex's groups could look like.

Whitney has 3 unequal groups. Show what Whitney's groups could look like.

Reasoning:

Dora and Rosie make hay bundles. Who has made equal groups?



Explain how you know.

5. Adding Equal Groups

· solve one-step problems involving multiplication & division by calculating the answer using concrete objects, pictorial representations & arrays

Fluency

How many Wheels are there altogether?



$$2 + 2 + 2 + 2 + 2 =$$

How many fingers are there altogether?



$$5 + 5 + 5 =$$

Problem solving:

Rosie and Eva have equal groups of either 2, 5 or 10. Each of their totals is less than 40.



Rosie has 5 equal groups.
Eva has 3 equal groups.

Eva's total is more than Rosie's total.
What could they be counting in?
Use cubes or counters to help you.

How many apples are there?



$$5 + 5 + 5 + 5 =$$

There are ___ apples.

There are ___ groups of ___ apples which is equal to

How many fish are there?

Can you show this using ten frames?



$$+ + =$$

There are ___ fish.

Reasoning:

Eva and Whitney are making equal groups of bread rolls.



We need one more group to make 40

We need 10 more rolls to make 40



Who do you agree with? Why?

6. Making Arrays

· solve one-step problems involving multiplication & division by calculating the answer using concrete objects, pictorial representations & arrays

Fluency

Make an array with counters to show the apples. Complete the sentences:



There are ___ apples in each row.

There are ___ rows.

+ + =

There are ___ apples altogether.

Complete the table:

Array	Description - columns	Description - rows	Totals
	5 columns 2 cookies in each column	2 rows 5 cookies in each row	$2 \times 2 = 2 + 2 = 4$ $5 \times 2 = 10$
	___ columns ___ donuts in each column	___ rows ___ donuts in each row	
	___ columns ___ fish in each column	___ rows ___ fish in each row	
	3 columns 5 cupcakes in each column	5 rows 3 cupcakes in each row	

Reasoning:

Amir and Whitney are making arrays.



Who has made a mistake? Explain why.

7. Making Doubles

· solve one-step problems involving multiplication & division by calculating the answer using concrete objects, pictorial representations & arrays

Fluency

Circle the pictures that have been doubled



Take a number and double it:

Double ___ is ___



Double ___ is ___



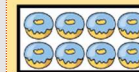
Complete the table:

Build	Represent	Add	Double
		$1 + 1 = 2$	Double 1 is 2
		$2 + 2 =$	Double 2 is
		$3 + 3 =$	Double 3 is
		$+ + =$	Double 4 is

Problem solving:
Complete the table by doubling each number. What patterns do you notice?

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Reasoning:



Louise started with 4 and ended with 8 donuts.



Louise started with 8 and ended with 16 donuts.



Louise started with 2 and ended with 4 donuts.

Who do you agree with? Explain Why.

8. Grouping

· solve one-step problems involving multiplication & division by calculating the answer using concrete objects, pictorial representations & arrays

Fluency

How many equal groups of 2 can you make with these mittens?



There are ___ groups of 2 mittens.
If you had 10 mittens, how many equal groups of 2 mittens could you make?

Complete the table. Use equipment to help you.

Representation	Description
	There are ___ altogether. There are ___ equal groups of ___
	There are ___ altogether. There are ___ equal groups of ___
	15 has been sorted into 3 equal groups of 5
	___ has been sorted into ___ equal groups of ___

Problem solving:

I am thinking of a number between 20 and 30.

I can only make equal groups of 5.

What must my number be?

What happens when I try to make groups of 2 with it?

What happens when I try to make groups of 10 with it?

Reasoning:

Tommy and Jack each have the same number of sweets.

Tommy has 5 equal groups of 2.
Jack has 1 equal group.
How many sweets are in Jack's group?



9. Sharing

· solve one-step problems involving multiplication & division by calculating the answer using concrete objects, pictorial representations & arrays

Fluency

Share the muffins equally between two plates



Problem solving:

Dora has 10 biscuits.



She wants to share them equally at her party.

How many people could be at the party?

Reasoning:

There are 10 cakes and 2 boxes.
An equal amount needs to be put into each box.



Put them into groups of 2



Share them into 2 groups.

Who is correct? Explain your answer.

I think
because



Vocabulary

multiplication

division

equal groups

double

array

grouping

sharing