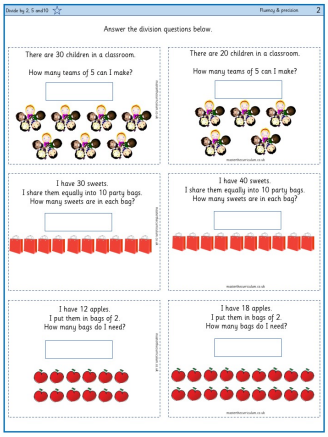
Lesson 10 – Multiplication & Division – Divide by 2, 5 and 10

NC Objective:	Resources needed:	Vocabulary:
Solve problems involving division by 2, 5 and 10, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts	Differentiated Sheets Teaching Slides	Divide, sharing, grouping, equal groups, calculation

Children consolidate their knowledge and now divide by 2, 5 and 10. Children look at sharing and grouping.

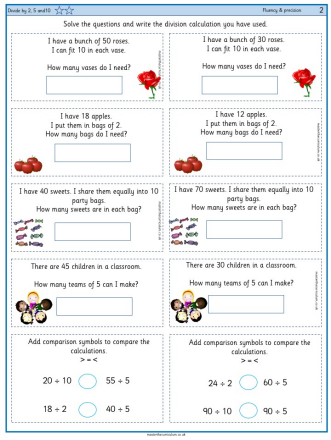
Key Questions:
What can we use to represent the problem?

★ Working Towards



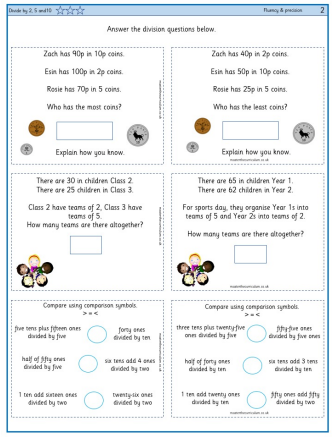
Children write the calculation they have used to solve the problem and have visuals to help them.

★★ Working Within



Children write the calculation they have used to solve the problem. If needed, children can cut the questions out and show their working out in their books. They solve comparison calculations.

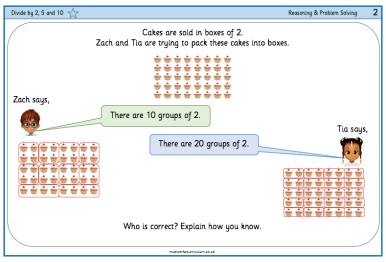
★★★ Greater Depth

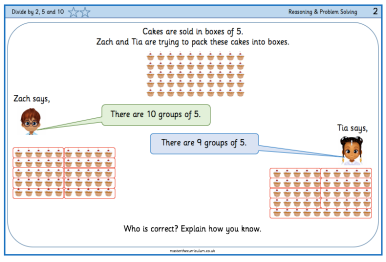


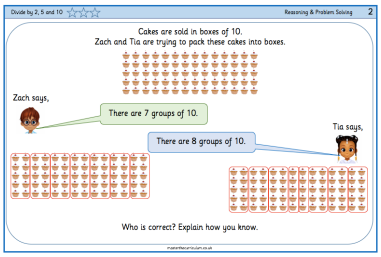
Children write the calculation they have used to solve the problem. If needed, children can cut the questions out and show their working out in their books. They solve comparison calculations.

The children who are efficient in dividing by 2, 5 and 10 solve more complex and comparison questions.

Reasoning & Problem Solving







Thu 21st Jan
Maths

Answer the division questions below.

There are 30 children in a classroom.

How many teams of 5 can I make?

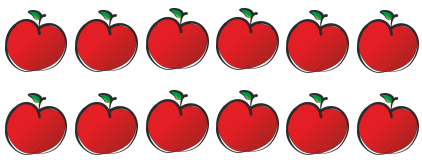
There are 20 children in a classroom.

How many teams of 5 can I make?

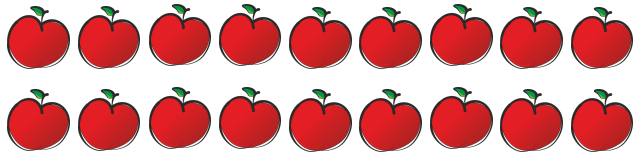
I have 30 sweets.
I share them equally into 10 party bags.
How many sweets are in each bag?

I have 40 sweets.
I share them equally into 10 party bags.
How many sweets are in each bag?

I have 12 apples.
I put them in bags of 2.
How many bags do I need?



I have 18 apples.
I put them in bags of 2.
How many bags do I need?



Answer the division questions below.

There are 30 children in a classroom.

How many teams of 5 can I make?

30 ÷ 5 = 6

There are 20 children in a classroom.

How many teams of 5 can I make?

20 ÷ 5 = 4

I have 30 sweets.
I share them equally into 10 party bags.
How many sweets are in each bag?

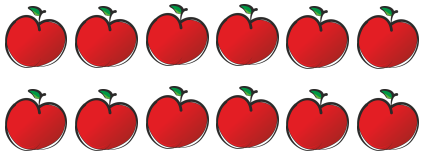
30 ÷ 10 = 3

I have 40 sweets.
I share them equally into 10 party bags.
How many sweets are in each bag?

40 ÷ 10 = 4

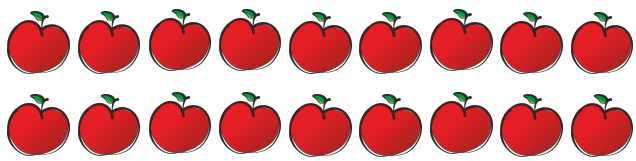
I have 12 apples.
I put them in bags of 2.
How many bags do I need?

12 ÷ 2 = 6



I have 18 apples.
I put them in bags of 2.
How many bags do I need?

18 ÷ 2 = 9



Solve the questions and write the division calculation you have used.

I have a bunch of 50 roses.
I can fit 10 in each vase.

How many vases do I need?

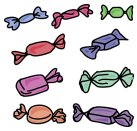
I have a bunch of 30 roses.
I can fit 10 in each vase.

How many vases do I need?

I have 18 apples.
I put them in bags of 2.
How many bags do I need?

I have 12 apples.
I put them in bags of 2.
How many bags do I need?

I have 40 sweets. I share them equally into 10 party bags.
How many sweets are in each bag?



I have 70 sweets. I share them equally into 10 party bags.
How many sweets are in each bag?

There are 45 children in a classroom.

How many teams of 5 can I make?

There are 30 children in a classroom.

How many teams of 5 can I make?

Add comparison symbols to compare the calculations.

> = <

20 ÷ 10 ◯ 55 ÷ 5

18 ÷ 2 ◯ 40 ÷ 5

Add comparison symbols to compare the calculations.

> = <

24 ÷ 2 ◯ 60 ÷ 5

90 ÷ 10 ◯ 90 ÷ 5

Solve the questions and write the division calculation you have used.

I have a bunch of 50 roses.
I can fit 10 in each vase.

How many vases do I need?

50 ÷ 10 = 5

I have a bunch of 30 roses.
I can fit 10 in each vase.

How many vases do I need?

30 ÷ 10 = 3

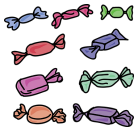
I have 18 apples.
I put them in bags of 2.
How many bags do I need?

18 ÷ 2 = 9

I have 12 apples.
I put them in bags of 2.
How many bags do I need?

12 ÷ 2 = 6

I have 40 sweets. I share them equally into 10 party bags.
How many sweets are in each bag?



40 ÷ 10 = 4

I have 70 sweets. I share them equally into 10 party bags.
How many sweets are in each bag?

70 ÷ 10 = 7

There are 45 children in a classroom.

How many teams of 5 can I make?

45 ÷ 5 = 9

There are 30 children in a classroom.

How many teams of 5 can I make?

30 ÷ 5 = 6

Add comparison symbols to compare the calculations.

> = <

20 ÷ 10 (2) < 55 ÷ 5 (11)

18 ÷ 2 (9) > 40 ÷ 5 (8)

Add comparison symbols to compare the calculations.

> = <

24 ÷ 2 (12) = 60 ÷ 5 (12)

90 ÷ 10 (9) < 90 ÷ 5 (18)

Thu 21st Jan
Maths

Answer the division questions below.

Zach has 90p in 10p coins.

Esin has 100p in 2p coins.

Rosie has 70p in 5 coins.

Who has the most coins?



Explain how you know.

Zach has 40p in 2p coins.

Esin has 50p in 10p coins.

Rosie has 25p in 5 coins.

Who has the least coins?



Explain how you know.

There are 30 in children Class 2.
There are 25 children in Class 3.

Class 2 have teams of 2, Class 3 have teams of 5.
How many teams are there altogether?

There are 65 in children Year 1.
There are 62 children in Year 2.

For sports day, they organise Year 1s into teams of 5 and Year 2s into teams of 2.

How many teams are there altogether?

Compare using comparison symbols.
> = <

five tens plus fifteen ones divided by five ◯ forty ones divided by ten

half of fifty ones divided by five ◯ six tens add 4 ones divided by two

1 ten add sixteen ones divided by two ◯ twenty-six ones divided by two

Compare using comparison symbols.
> = <

three tens plus twenty-five ones divided by five ◯ fifty-five ones divided by five ones

half of forty ones divided by ten ◯ six tens add 3 tens divided by ten

1 ten add twenty ones divided by ten ◯ fifty ones add fifty divided by two

Answer the division questions below.

Zach has 90p in 10p coins. 9 coins

Esin has 100p in 2p coins. 50 coins

Rosie has 70p in 5 coins. 14 coins

Who has the most coins?

Esin

Explain how you know.

Zach has 40p in 2p coins. 20 coins

Esin has 50p in 10p coins. 5 coins

Rosie has 25p in 5 coins. 5 coins

Who has the least coins?

Esin and Rosie

Explain how you know.

There are 30 in children Class 2. 15 teams
There are 25 children in Class 3. 5 teams

Class 2 have teams of 2, Class 3 have teams of 5.
How many teams are there altogether?

20

There are 65 in children Year 1. 13 teams
There are 62 children in Year 2. 31 teams

For sports day, they organise Year 1s into teams of 5 and Year 2s into teams of 2.

How many teams are there altogether?

44

Compare using comparison symbols.
> = <

five tens plus fifteen ones divided by five
65 ÷ 5 = 13

>

forty ones divided by ten
40 ÷ 10 = 4

half of fifty ones divided by five
25 ÷ 5 = 5

<

six tens add 4 ones divided by two
64 ÷ 2 = 32

1 ten add sixteen ones divided by two
26 ÷ 2 = 13

=

twenty-six ones divided by two
26 ÷ 2 = 13

Compare using comparison symbols.
> = <

three tens plus twenty-five ones divided by five
55 ÷ 5 = 11

=

fifty-five ones divided by five ones
55 ÷ 5 = 11

half of forty ones divided by ten
20 ÷ 10 = 2

<

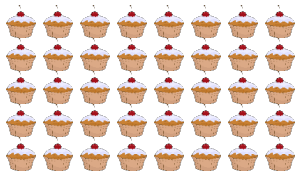
six tens add 3 tens divided by ten
90 ÷ 10 = 9

1 ten add twenty ones divided by ten
30 ÷ 10 = 3

<

fifty ones add fifty divided by two
100 ÷ 2 = 50

Cakes are sold in boxes of 2.
Zach and Tia are trying to pack these cakes into boxes.

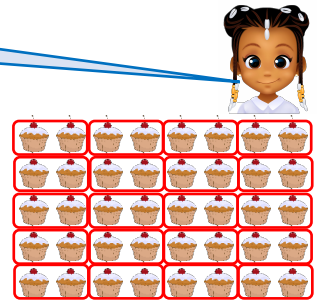


Zach says,

There are 10 groups of 2.

Tia says,

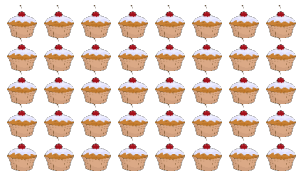
There are 20 groups of 2.



Who is correct? Explain how you know.

Divide by 2, 5 and 10 ☆ Reasoning & Problem Solving 2

Cakes are sold in boxes of 2.
Zach and Tia are trying to pack these cakes into boxes.

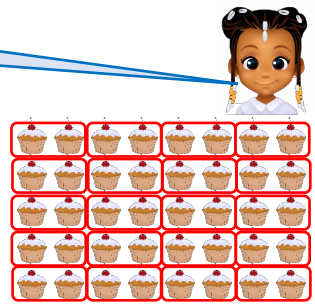


Zach says,

There are 10 groups of 2.

Tia says,

There are 20 groups of 2.



Who is correct? Explain how you know.

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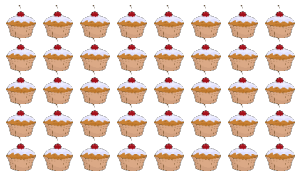
Cakes are sold in boxes of 2.
Zach and Tia are trying to pack these cakes into boxes.



Zach says,

There are 10 groups of 2.

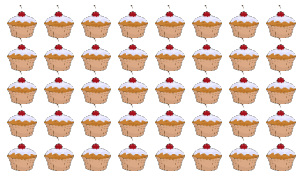
Tia says,

There are 20 groups of 2.

Tia is correct because there are 40 cakes and 40 divided by 2 is 20.
Zach has incorrectly grouped the cakes, he might have counted the rows incorrectly.

Divide by 2, 5 and 10 ☆ Answers Reasoning & Problem Solving 2

Cakes are sold in boxes of 2.
Zach and Tia are trying to pack these cakes into boxes.

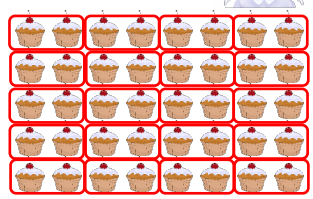


Zach says,

There are 10 groups of 2.

Tia says,

There are 20 groups of 2.



Tia is correct because there are 40 cakes and 40 divided by 2 is 20.
Zach has incorrectly grouped the cakes, he might have counted the rows incorrectly.

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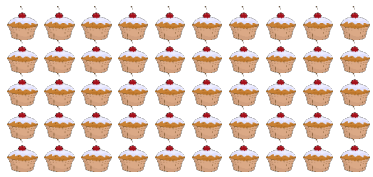
Cakes are sold in boxes of 5.
Zach and Tia are trying to pack these cakes into boxes.

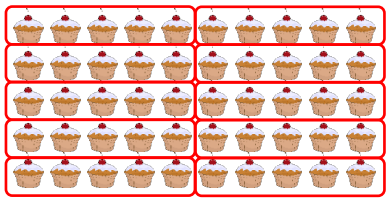


Zach says,

There are 10 groups of 5.

Tia says,

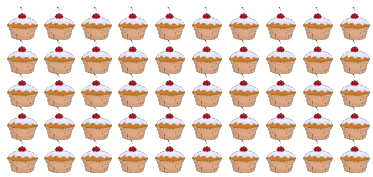
There are 9 groups of 5.



Who is correct? Explain how you know.

Divide by 2, 5 and 10 ☆☆ Reasoning & Problem Solving 2

Cakes are sold in boxes of 5.
Zach and Tia are trying to pack these cakes into boxes.

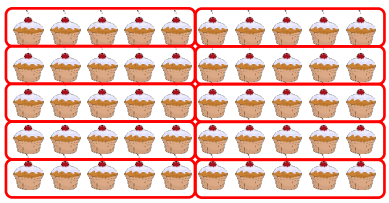


Zach says,

There are 10 groups of 5.

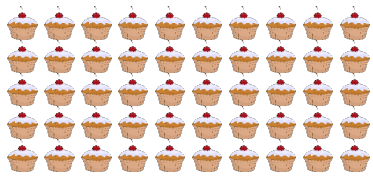
Tia says,

There are 9 groups of 5.



Who is correct? Explain how you know.

Cakes are sold in boxes of 5.
Zach and Tia are trying to pack these cakes into boxes.

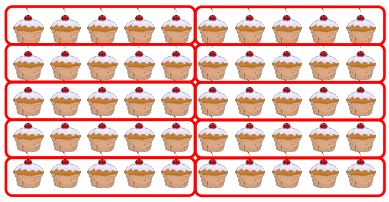


Zach says,

There are 10 groups of 5.

Tia says,

There are 9 groups of 5.

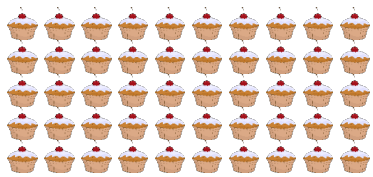


Who is correct? Explain how you know.

Zach is correct because there are 50 cakes and 50 divided by 5 is 10.
Tia has incorrectly grouped the cakes, she might have counted the rows incorrectly.

Divide by 2, 5 and 10 ☆☆ Answers Reasoning & Problem Solving 2

Cakes are sold in boxes of 5.
Zach and Tia are trying to pack these cakes into boxes.

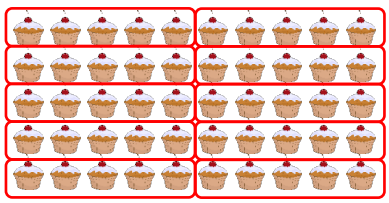


Zach says,

There are 10 groups of 5.

Tia says,

There are 9 groups of 5.



Who is correct? Explain how you know.

Zach is correct because there are 50 cakes and 50 divided by 5 is 10.
Tia has incorrectly grouped the cakes, she might have counted the rows incorrectly.

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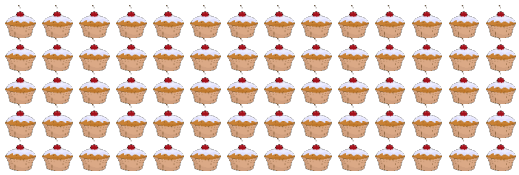
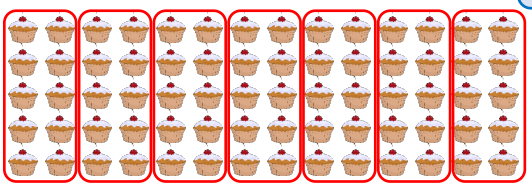
Cakes are sold in boxes of 10.
Zach and Tia are trying to pack these cakes into boxes.



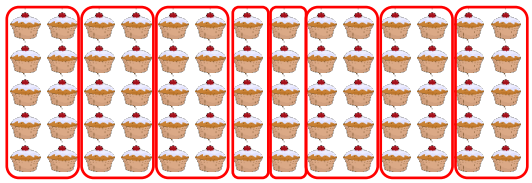
Zach says,

There are 7 groups of 10.



Tia says,

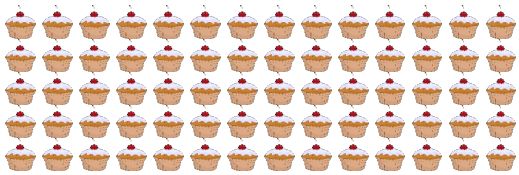
There are 8 groups of 10.



Who is correct? Explain how you know.

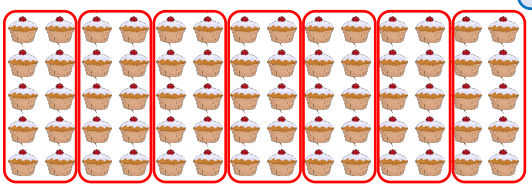
Divide by 2, 5 and 10 ☆☆☆ Reasoning & Problem Solving 2

Cakes are sold in boxes of 10.
Zach and Tia are trying to pack these cakes into boxes.



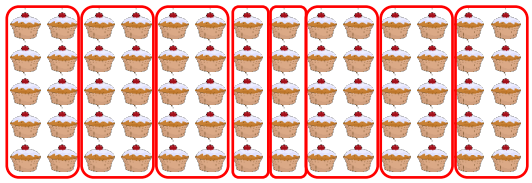
Zach says,

There are 7 groups of 10.



Tia says,

There are 8 groups of 10.



Who is correct? Explain how you know.

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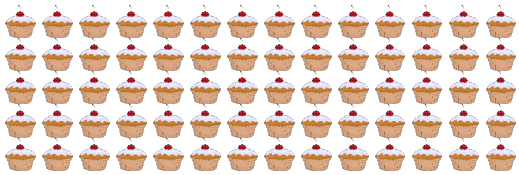
Cakes are sold in boxes of 10.
Zach and Tia are trying to pack these cakes into boxes.

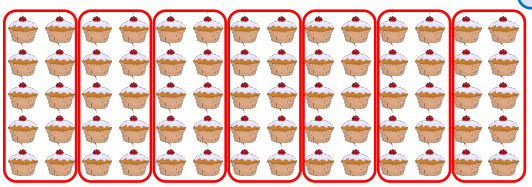


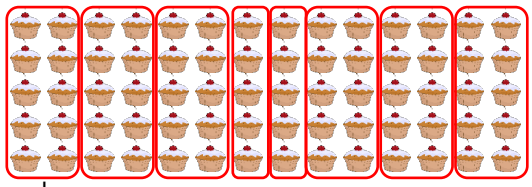
Zach says,

There are 7 groups of 10.

Tia says,

There are 8 groups of 10.



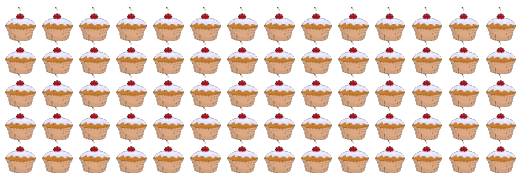


Who is correct? Explain how you know.

Zach is correct because there are 70 cakes and 70 divided by 10 is 7. Tia has incorrectly grouped the cakes, she might have counted the columns wrong. She hasn't put them in 10s. She incorrectly assumed there were 10 in each column.

Divide by 2, 5 and 10 ☆☆☆ Answers Reasoning & Problem Solving 2

Cakes are sold in boxes of 10.
Zach and Tia are trying to pack these cakes into boxes.

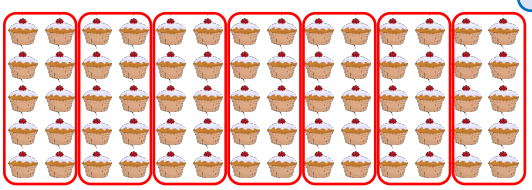


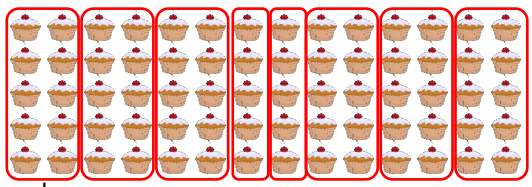
Zach says,

There are 7 groups of 10.

Tia says,

There are 8 groups of 10.





Who is correct? Explain how you know.

Zach is correct because there are 70 cakes and 70 divided by 10 is 7. Tia has incorrectly grouped the cakes, she might have counted the columns wrong. She hasn't put them in 10s. She incorrectly assumed there were 10 in each column.

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