

Year 3 Maths - 22.06.20

LO: Add two 3-digit numbers - crossing 10 or 100

You can watch the Tutorial White Rose video here:

<https://vimeo.com/420240608>

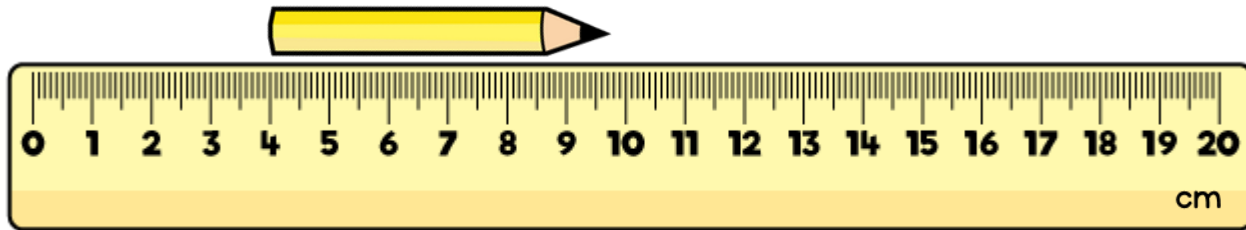
Day 1 Starter:

1) Complete the sequence $\frac{5}{10}$, $\frac{6}{10}$, $\frac{7}{10}$, —

2) What fraction of the shape is shaded?



3) How long is the pencil?



4) What is 8×4 ?

Day 1 Starter

Answers:

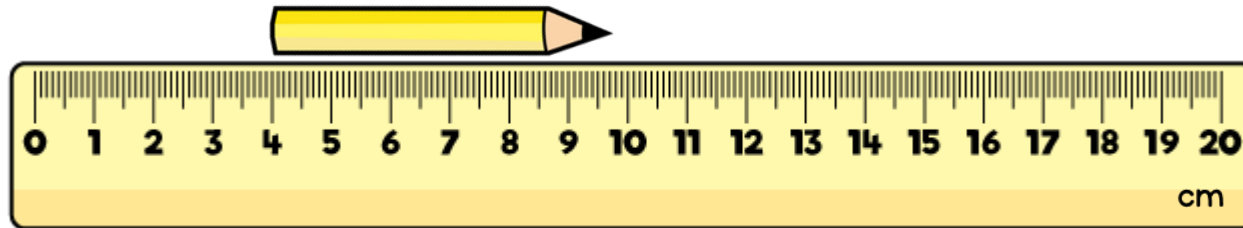
1) Complete the sequence $\frac{5}{10}$, $\frac{6}{10}$, $\frac{7}{10}$, $\frac{8}{10}$

2) What fraction of the shape is shaded?



$\frac{2}{7}$

3) How long is the pencil?



5 cm and 9 mm

4) What is 8×4 ? 32

Add two 3-digit numbers – crossing 10 or 100



1 Complete the column addition.

a) $235 + 157$

Hundreds	Tens	Ones

	H	T	O
	2	3	5
+	1	5	7

Always start by adding the ones, then move onto the next column.

b) $372 + 144$

Hundreds	Tens	Ones

	H	T	O
	3	7	2
+	1	4	4

$70 + 40 = 110$ which means you have an addition 100 to carry into the hundreds column.

2 Tick the additions that need an exchange of ones for a ten.

	H	T	O		H	T	O		H	T	O		
	2	3	8		4	2	7		3	0	8		
+	1	4	1		+	2	6	8		+	1	5	1

How do you know if an addition needs to exchange 10 ones for a ten?

3 Dani uses counters to represent an addition.

H	T	O

a) What addition is Dani trying to work out?

b) Work out the answer to the addition.

c) How many exchanges did you have to do?

MAIN TASK SHEET

EXTENSION SHEET

4 Work out the additions.

a)

	H	T	O
	1	8	7
+	4	7	1
<hr/>			

c) $718 + 108$

b)

	H	T	O	
	5	1	7	m
+	2	3	4	m
<hr/>				

d) $526 + 294$

5 a) Tick the additions with an answer that ends in zero.

$317 + 203$ $192 + 784$ $390 + 177$

$455 + 165$ $386 + 184$ $319 + 501$

b) Did you have to work out all of the additions?

c) Complete the sentences.

The answer to $175 + 212$ ends with a

The answer to $609 + 175$ ends with a

The answer to $334 + 178$ ends with a

The answer to $716 +$ ends with a 3

6 Find the missing digits.

a)

	H	T	O
	3		2
+	4	5	
<hr/>			
		3	7

c)

	H	T	O
	2	7	8
+	2	5	
<hr/>			
			0

b)

	H	T	O
	1	0	9
+		2	
<hr/>			
	5		5

d)

	Th	H	T	O
		5	7	3
+				
<hr/>				
	1	0	0	0

7 Dexter bakes 148 biscuits on Monday.

On Tuesday he bakes 273 more biscuits than he did on Monday.

a) How many biscuits does Dexter bake on Tuesday?

b) How many biscuits does he bake in total on Monday and Tuesday?

8 Write two addition calculations that have:

- 1 exchange
- 2 exchanges.

Compare answers with a partner.



Answers:

Add two 3-digit numbers – crossing 10 or 100



1 Complete the column addition.

a) $235 + 157$

Hundreds	Tens	Ones

H	T	O
2	3	5
+	1	5
3	9	2

b) $372 + 144$

Hundreds	Tens	Ones

H	T	O
3	7	2
+	1	4
5	1	6

2 Tick the additions that need an exchange of ones for a ten.

H	T	O	H	T	O	H	T	O
2	3	8	4	2	7	3	0	8
+	1	4	+	2	6	+	1	5

How do you know if an addition needs to exchange 10 ones for a ten?

The ones column has a total greater than 9

3 Dani uses counters to represent an addition.

H	T	O

a) What addition is Dani trying to work out?

336 + 276

b) Work out the answer to the addition.

612

c) How many exchanges did you have to do?

2

4 Work out the additions.

a)

H	T	O
1	8	7
+	4	7
6	5	8

c) $718 + 108$

7	1	8
+	1	0
8	2	6

b)

H	T	O
5	1	7
+	2	3
7	5	1

d) $526 + 294$

5	2	6
+	2	9
8	2	0

5 a) Tick the additions with an answer that ends in zero.

$317 + 203$ $192 + 784$ $390 + 177$

$455 + 165$ $386 + 184$ $319 + 501$

b) Did you have to work out all of the additions?

c) Complete the sentences.

The answer to $175 + 212$ ends with a

The answer to $609 + 175$ ends with a

The answer to $334 + 178$ ends with a

The answer to $716 +$ ends with a 3

6 Find the missing digits.

a)

H	T	O
3	6	2
+	4	5
	8	3
		7

c)

H	T	O
	2	7
+	2	5
	5	3
		0

b)

H	T	O
1	0	9
+	4	2
	5	3
		5

d)

Th	H	T	O
		5	7
+	0	4	2
	1	0	0
			0

7 Dexter bakes 148 biscuits on Monday.

On Tuesday he bakes 273 more biscuits than he did on Monday.

a) How many biscuits does Dexter bake on Tuesday?

421

b) How many biscuits does he bake in total on Monday and Tuesday?

569

8 Write two addition calculations that have:

- 1 exchange
- 2 exchanges.

Compare answers with a partner.

Year 3 Maths - 23.06.20

LO: Subtract a 3-digit number from a 3-digit number - no exchange

You can watch the Tutorial White Rose video here:

<https://vimeo.com/420240853>

Day 2 Starter:

1) Write $\frac{3}{10}$ as a decimal.

2) Which fraction is equal to 1 whole?

$$\frac{3}{5} \quad \frac{9}{9} \quad \frac{10}{3} \quad \frac{6}{7}$$

3) How many centimetres are equal to 8 metres?

4) Divide 48 by 2

Day 2 Starter

Answers:

1) Write $\frac{3}{10}$ as a decimal. **0.3**

2) Which fraction is equal to 1 whole?

$\frac{3}{5}$ $\frac{9}{9}$ $\frac{10}{3}$ $\frac{6}{7}$ **$\frac{9}{9}$**

3) How many centimetres are equal to 8 metres? **800**

4) Divide 48 by 2 **24**

Subtract 3-digit numbers from 3-digit numbers – no exchange

Remember today you are subtracting **not** adding.

1 Complete the column subtractions.

a) $358 - 226$

Hundreds	Tens	Ones		H	T	O
				3	5	8
			-	2	2	6

b) $726 - 303$

H	T	O		H	T	O
				7	2	6
			-	3	0	3

2 Complete the subtractions.

a)

	H	T	O
	6	7	2
-	4	7	1

b)

	H	T	O
	5	6	3
-	1	5	1

3 Ron is working out $785 - 257$

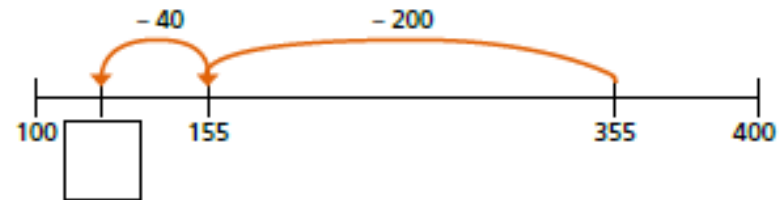
	H	T	O
	7	8	5
-	2	5	7

Do you agree with the way Ron has set out the subtraction?

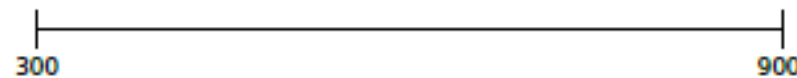
Why?

4 Use the number line to work out the subtraction.

a) $355 - 240 = \square$



b) $835 - 501 = \square$



MAIN TASK SHEET

EXTENSION SHEET

- 5 A TV costs £120 less than this computer.
How much does the TV cost?



- 6 There are 849 people at a concert.
There are 625 adults at the concert.

a) How many children are at the concert?

- b) How many more adults than children are at the concert?

- 7 What are the values of each of the shapes?

a)

	6	★	8
—	★	▲	▲
	●	1	5

★ =

● =

▲ =

b)

	9	+	◆
—	+	4	⬠
	◆	⬠	◆

+ =

◆ =

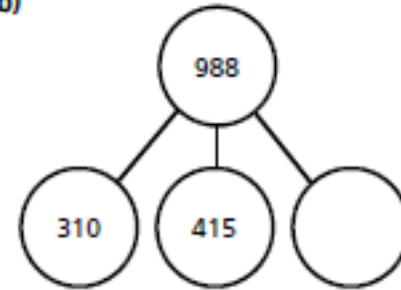
⬠ =

- 8 Complete the part-whole models.

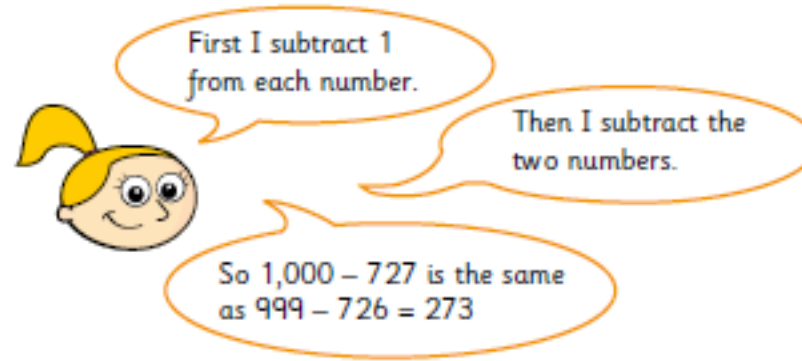
a)



b)



- 9 Eva is subtracting 727 from 1,000



Why does Eva's method work?

Talk about it with a partner.

Use Eva's method to complete the subtractions.

$1,000 - 285 =$

$1,000 - 188 =$

$800 - 636 =$

Answers

Subtract 3-digit numbers from 3-digit numbers – no exchange



1 Complete the column subtractions.

a) $358 - 226$

Hundreds	Tens	Ones	H	T	O
			3	5	8
			-	2	2
				3	2

b) $726 - 303$

H	T	O	H	T	O
			7	2	6
			-	3	0
				4	3

2 Complete the subtractions.

a)

H	T	O
6	7	2
-	4	7
	2	0
		1

b)

H	T	O
5	6	3
-	1	5
	4	1
		2

3 Ron is working out $785 - 257$

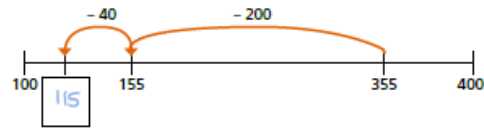
	H	T	O
	7	8	5
-	2	5	7

Do you agree with the way Ron has set out the subtraction? Why?

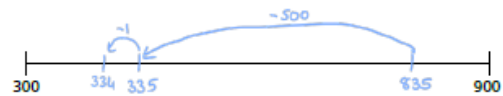
No - we are subtracting 257 from 785 so 785 should be on top.

4 Use the number line to work out the subtraction.

a) $355 - 240 = 115$



b) $835 - 501 = 334$



5 A TV costs £120 less than this computer. How much does the TV cost?



£379

6 There are 849 people at a concert. There are 625 adults at the concert.

a) How many children are at the concert?

224

b) How many more adults than children are at the concert?

601

7 What are the values of each of the shapes?

a)

	6	★	8
-	★	▲	▲
	●	1	5

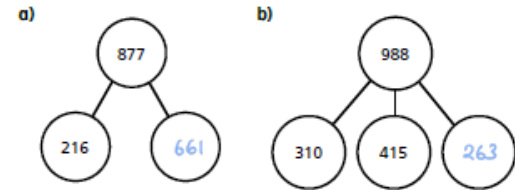
★ = 4
● = 2
▲ = 3

b)

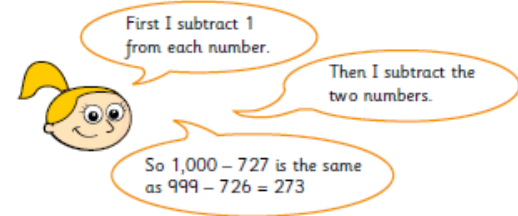
	9	+	◆
-	+	4	⬠
	◆	⬠	◆

+ = 4
◆ = 5
⬠ = 0

8 Complete the part-whole models.



9 Eva is subtracting 727 from 1,000



Why does Eva's method work?

Talk about it with a partner.

Use Eva's method to complete the subtractions.

$1,000 - 285 = 715$

$1,000 - 188 = 812$

$800 - 636 = 364$

Year 3 Maths - 24.06.20

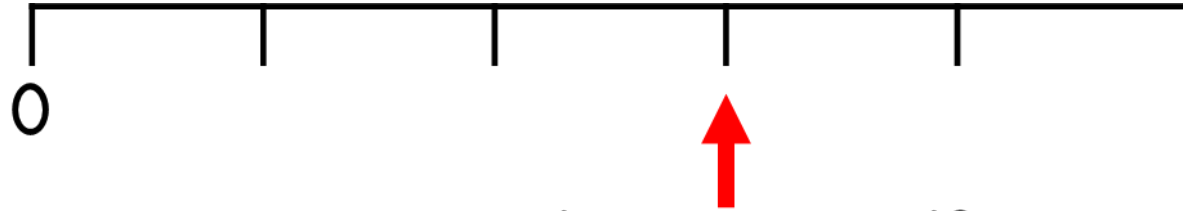
LO: Subtract a 3-digit number from a 3-digit number – exchange

You can watch the Tutorial White Rose video here:

<https://vimeo.com/420240964>

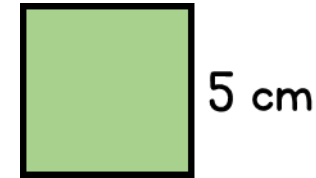
Day 3 Starter:

1) What fraction is the arrow pointing to?



2) What fraction is $\frac{1}{10}$ more than $\frac{10}{10}$?

3) Find the perimeter of the square.

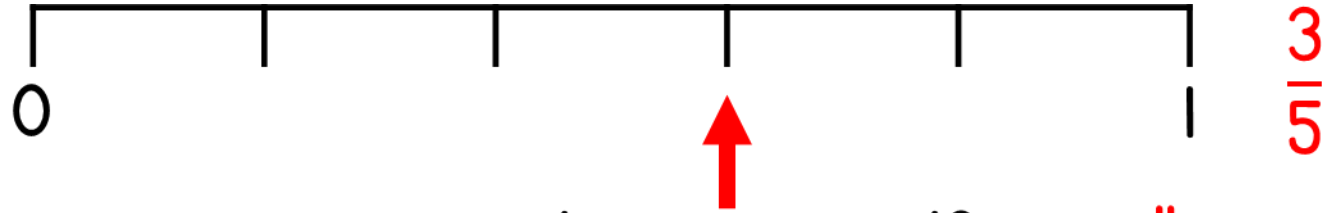


4) Subtract £1 and 40p from £5

Day 3 Starter

Answers:

1) What fraction is the arrow pointing to?



2) What fraction is $\frac{1}{10}$ more than $\frac{10}{10}$? $\frac{11}{10}$ or $1\frac{1}{10}$

3) Find the perimeter of the square.  5 cm 20 cm

4) Subtract £1 and 40p from £5 £3 and 60p

Subtract a 3-digit number from a 3-digit number – exchange

MAIN TASK SHEET

1 Complete the column subtractions.

a) $254 - 126$

Hundreds	Tens	Ones

	H	T	O
	2	5	4
-	1	2	6

If you haven't got enough ones to do the subtraction, you'll have to exchange a TEN for 10 ONES.

What exchange did you have to make?

b) $532 - 281$

Hundreds	Tens	Ones

	H	T	O
	5	3	2
-	2	8	1

What exchange did you have to make?

2 Which of these calculations need an exchange?

Tick your answers.

	H	T	O
	6	5	8
-	1	4	4

	H	T	O
	3	2	3
-	1	1	7

	H	T	O
	4	2	9
-	1	7	2

How do you know?

3 Work out the subtractions.

a) $735 - 218$

	H	T	O
	7	3	5
-	2	1	8

c) $415 - 179$

	H	T	O
	4	1	5
-	1	7	9

b) $428 - 163$

	H	T	O
	4	2	8
-	1	6	3

d) $382 - 194$

	H	T	O
	3	8	2
-	1	9	4

EXTENSION SHEET

4 Talk about the mistake that has been made.

5	4	6
-	2	8
3		
4	3	

5 Complete the subtractions.

a)

		H	T	O
		7	0	0
	-	5	4	6

b)

		H	T	O
		8	0	5
	-	1	7	9

6 Work out the missing digits in these subtractions.

a)

		H	T	O
		7		5
	-	3	4	
			7	3

b)

		H	T	O
			2	0
	-	1		8
		2	9	

7 Two points are marked on a number line.



What is the difference between the two points?

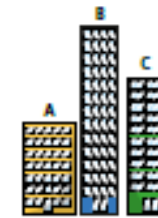
8 Find the missing numbers.

a) $179 + \square = 595$ c) $95 + \square + 138 = 870$

b) $718 - \square = 348$ d) $\square - 446 = 503$

9 Here are 3 buildings.

- A is 150 m tall
- B is 317 m taller than A
- C is 223 m shorter than B



How much taller is C than A?

10 Aisha buys these items.



How much change does she have from £1,000?

Answers

Subtract a 3-digit number from a 3-digit number – exchange

Use Maths

1 Complete the column subtractions.

a) $254 - 126$

Hundreds	Tens	Ones

H	T	O
2	5	4
-	1	2
	1	2
		8

What exchange did you have to make?

1 ten for 10 ones.

b) $532 - 281$

Hundreds	Tens	Ones

H	T	O
5	3	2
-	2	8
	2	5
		1

What exchange did you have to make?

1 hundred for 10 tens.

2 Which of these calculations need an exchange? Tick your answers.

H	T	O
6	5	8
-	1	4

H	T	O
3	2	3
-	1	1

H	T	O
4	2	9
-	1	7

How do you know?

3 Work out the subtractions.

a) $735 - 218$

H	T	O
7	3	5
-	2	1
	5	1
		7

c) $415 - 179$

H	T	O
4	1	5
-	1	7
	2	3
		6

b) $428 - 163$

H	T	O
4	2	8
-	1	6
	2	6
		5

d) $382 - 194$

H	T	O
3	8	2
-	1	9
	1	8
		8

4 Talk about the mistake that has been made.

$$\begin{array}{r} 546 \\ - 283 \\ \hline 343 \end{array}$$

5 Complete the subtractions.

a)

H	T	O
7	0	0
-	5	4
	1	5
		4

b)

H	T	O
8	0	5
-	1	7
	6	2
		6

6 Work out the missing digits in these subtractions.

a)

H	T	O
7	1	5
-	3	4
	3	7
		3

b)

H	T	O
2	2	0
-	1	2
	2	9
		2

7 Two points are marked on a number line.



What is the difference between the two points?

677

8 Find the missing numbers.

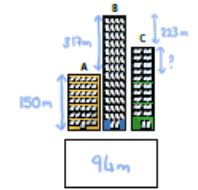
a) $179 + 416 = 595$ c) $95 + 637 + 138 = 870$

b) $718 - 370 = 348$ d) $949 - 446 = 503$

9 Here are 3 buildings.

- A is 150 m tall
- B is 317 m taller than A
- C is 223 m shorter than B

How much taller is C than A?



10 Aisha buys these items.



How much change does she have from £1,000?

£188

Year 3 Maths - 25.06.20

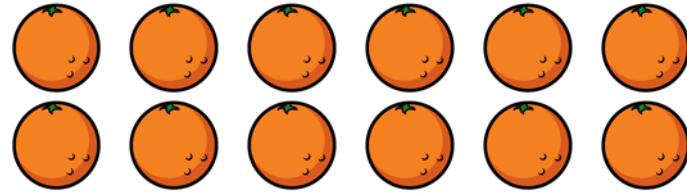
LO: Estimate answers to calculations

You can watch the Tutorial White Rose video here:

<https://vimeo.com/420241173>

Day 4 Starter:

- 1) Find $\frac{1}{3}$ of the number of oranges.

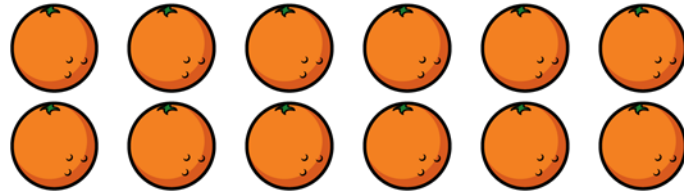


- 2) Write seven tenths as a decimal.
- 3) Add 3 m and 20 cm to 2 m and 55 cm.
- 4) Find the sum of 462 and 229

Day 4 Starter

Answers:

1) Find $\frac{1}{3}$ of the number of oranges.



4

2) Write seven tenths as a decimal.

0.7

3) Add 3 m and 20 cm to 2 m and 55 cm.

5 m and 75 cm

4) Find the sum of 462 and 229

691

MAIN TASK SHEET

Think about which hundred these numbers are closest too...

1 There are 195 people on a train.
There are 308 people on a plane.

a) Complete the sentences to estimate the total number of people.

195 is close to 308 is close to

My estimate for the number of people in total is

+ =

b) Work out the total number of people on the train and plane.

Was it a good estimate? How do you know?



2 Estimate the answer to $395 + 49$

395 is close to 49 is close to

My estimate is

Work out the exact answer.

How close was your estimate? Talk to a partner.

In this case, think about which 10 49 is closest to...



3 For each question work out an estimate and the exact answer.

Question	Estimate	Exact answer
$705 - 194$		
$511 - 97$		
$187 + 203 + 19$		

4 Why is it a good idea to estimate the answer to a calculation? Write one reason.

EXTENSION SHEET

5 Amir is working out $195 + 412$

		H	T	O
		1	9	5
+		4	1	2
		5	1	0
				7

Use an estimate to show how you know Amir is wrong.

6 Mr Jones cycles some kilometres each day.

The table shows the distance he cycles.

Monday	Tuesday	Wednesday	Thursday
189 km	88 km	215 km	53 km

Mr Jones planned to cycle 500 km in total by the end of Thursday.

a) Has Mr Jones cycled as many kilometres as he planned?
Give an estimate.

b) How far has Mr Jones cycled in total?

7 A bottle is full of 813 ml of orange juice.

A glass has a capacity of 495 ml.

Can you pour two full glasses of juice? Give an estimate.

Explain your answer.



8 Whitney is estimating if she has saved enough money to buy a new dress and a new bike.



Whitney has so far saved £220

I have not saved enough. £65 is close to £100 and £153 is close to £200. That means I need about £300



Is Whitney correct? _____

Explain your answer.

Answers

Estimate answers to calculations

- 1 There are 195 people on a train.
There are 308 people on a plane.

a) Complete the sentences to estimate the total number of people.

195 is close to 200 308 is close to 300

My estimate for the number of people in total is

200 + 300 = 500

b) Work out the total number of people on the train and plane.

503

Was it a good estimate? How do you know?

- 2 Estimate the answer to $395 + 49$

395 is close to 400 49 is close to 50

My estimate is 450

Work out the exact answer.

How close was your estimate? Talk to a partner.

- 3 For each question work out an estimate and the exact answer.

Question	Estimate	Exact answer
$705 - 194$	$700 - 200 = 500$	511
$511 - 97$	$500 - 100 = 400$	414
$187 + 203 + 19$	$200 + 200 + 20 = 420$	409

- 4 Why is it a good idea to estimate the answer to a calculation?

Write one reason.

To check if the answer makes sense / is

approximately correct.

- 5 Amir is working out $195 + 412$

	H	T	O
	1	9	5
+	4	1	2
	5	1	0

Use an estimate to show how you know Amir is wrong.

$200 + 400 = 600$

Amir's answer is too big.

- 6 Mr Jones cycles some kilometres each day.

The table shows the distance he cycles.

Monday	Tuesday	Wednesday	Thursday
189 km	88 km	215 km	53 km

Mr Jones planned to cycle 500 km in total by the end of Thursday.

- a) Has Mr Jones cycled as many kilometres as he planned?
Give an estimate.

$200 + 100 + 200 + 50 = 550$ Yes

- b) How far has Mr Jones cycled in total?

545 km

- 7 A bottle is full of 813 ml of orange juice.

A glass has a capacity of 495 ml.

Can you pour two full glasses of juice? Give an estimate.

Explain your answer.

No $500\text{ml} + 500\text{ml} = 1,000\text{ml}$

$813\text{ml} < 1,000\text{ml}$



- 8 Whitney is estimating if she has saved enough money to buy a new dress and a new bike.



Whitney has so far saved £220

I have not saved enough.
£65 is close to £100 and £153 is close to £200. That means I need about £300

Is Whitney correct? No

Explain your answer.

$£153$ is closer to $£150$ and $£65$ is closer to $£70$

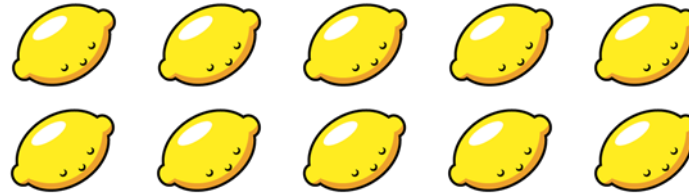
$£150 + £70 = £220$ so she has saved enough

Year 3 Maths Day 5 Starter:

26.06.20

Challenge Day

1) Find $\frac{2}{5}$ of the number of lemons.



2) Write 0.3 as a fraction.

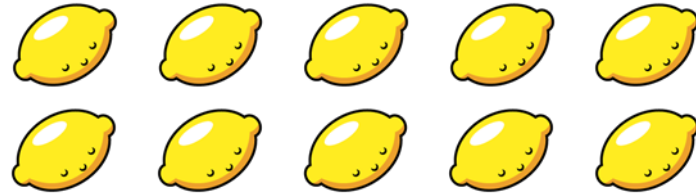
3) Draw a line 65 millimetres long.

4) What is 7 worth in the number 375?

Day 5 Starter

Answers:

1) Find $\frac{2}{5}$ of the number of lemons.



4

2) Write 0.3 as a fraction.

$\frac{3}{10}$

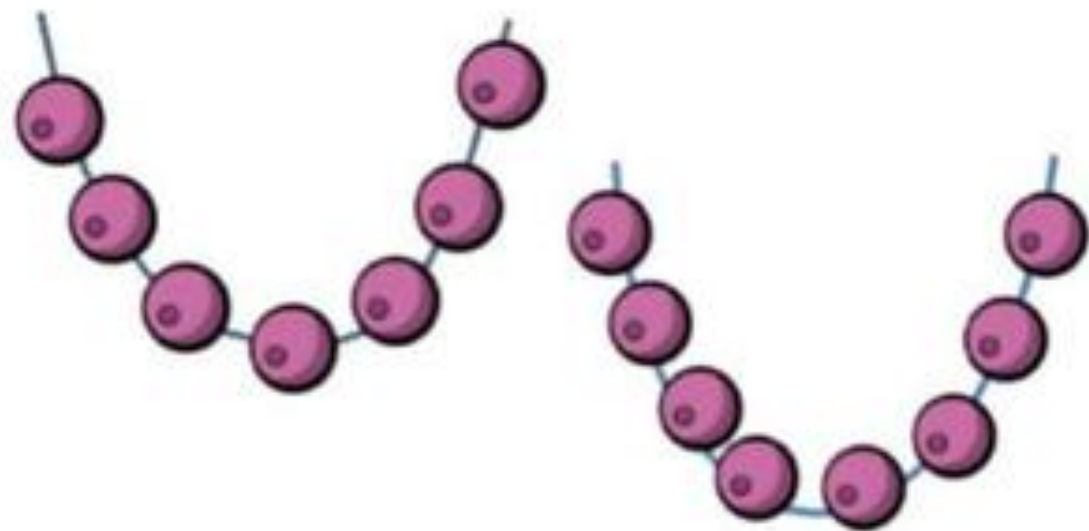
3) Draw a line 65 millimetres long.

4) What is 7 worth in the number 375? 7 tens

Challenge 1

Sal has 20 beads.

She uses some beads to make these two necklaces.



How many beads does she have left?

Challenge 2

George is thinking of a 2 digit number.



**My number is in
the 5 times table.**



**My number is
less than 80**

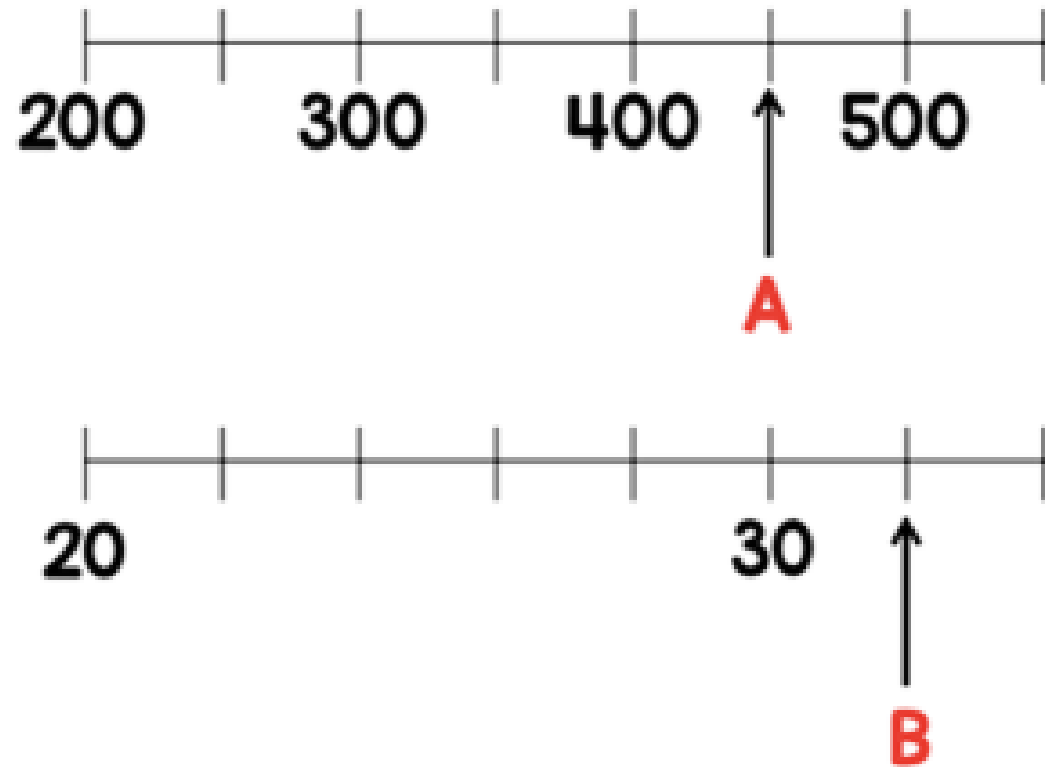


**The sum of the
digits is 9**

What number is George thinking of?

Challenge 3

Two numbers, A and B, are marked on the number lines.



Find the sum of A and B.

Challenge 4

Max buys a shirt and a jacket.



The jacket costs £25 more than the shirt.

The total cost of the shirt and jacket is £87.

How much does each item cost?

Answers

Challenge 1 - 5 beads

Challenge 2 - 45

Challenge 3 - 482

Challenge 4 - Jacket £56 and Shirt £31