WALT: Compare and order numbers to 1 million Fluency

Which is the smaller number in each pair?

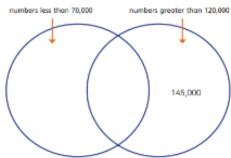
- a) 15,200 10,000 b) 174,000 300,000 c) 50,000 49,995 d) 80,000 8,000
- e) 365,008 1 million

Write < or > to compare the pairs of numbers.



Whitney is sorting some numbers.

She puts the numbers into a sorting diagram.



a) Write the numbers on the diagram.

The first one has been done for you.

145,000	three hundred tho	usand 799
85.400	62,000	620,000

b) Are there any numbers in the overlapping section? Explain why.

4. Here is a table showing the population in areas of Yorkshire.

Halifax	88,134
Brighouse	32,360
Leeds	720,492
Huddersfield	146,234
Wakefield	76,886
Bradford	531,200

Use <, > or = to make the statements correct.

The population of Halifax () the population of Wakefield.

Double the population of Brighouse () the population of Halifax.

Reasoning/ Problem solving

Here are two numbers made on a place value chart.

٨	HTh	TTh	Th	Н	T	0
		••		•		

В	HTh	TTh	Th	Н	T	0
		••				

Dani says A is bigger than B because A uses more counters. Explain why Dani is wrong.

6. a) Which digits can replace the missing digit?

b) The same digit is missing in each number.

What could the missing digit be?

The missing number is an odd number.

When rounded to the nearest 10,000 it is 440,000

The sum of the digits is 23

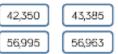


What could the number be?

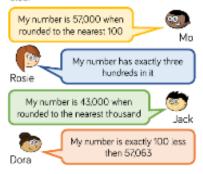
Can you find three possibilities?



Here are four number cards.



Four children take one each and say a clue.



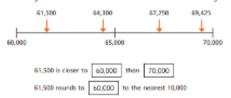
Which card did each child have?

Fluency

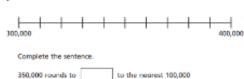
Round the numbers to the correct values.

a)	432,442	b)	878,675
to the nearest 10 is		to the nearest 10 is	
to the nearest 100 is		to the nearest 100 is	
to the nearest 1,000 is		to the nearest 1,000 is	
to the nearest 10,000 is		to the nearest 10,000 is	
to the nearest 100,000 is		to the nearest 100,000 is	

- Round 450,985 to the nearest
 - 10
 - 100
 - 1,000
 - 10,000
 - 100,000
- Nee these numbers closer to 60,000 or 70,000?
 Use the number line to help you round each number to the nearest 10,000.
 Write your provers in sentences. The first one has been done for you.



4. Draw on arrow and label 350,000 on the number line



5. Round these populations to the nearest 100,000

City	Population	Rounded to the nearest 100,000
Leeds	720,492	
Durham	87,559	
Sheffield	512,827	
Birmingham	992,000	

WALT: Round numbers to 1 million

Reasoning/ Boblem solving

The table shows the price of 4 different homes.

Round each price to the nearest £10,000 and nearest £100,000.

Type of house	Price	Rounded to the nearest £10,000	Rounded to the nearest £100,000
terroced house	£194,167		
semi-detached house	£225,674		
detached house	£365,697		
flot	698,099		

When comparing house prices, is it more useful to round to the necrest £10,000 or £100,000? Explain why.

Tiles are sold in boxes of 10

Teddy needs 84 tiles.



I need 8 boxes because 84 rounded to the nearest 10 is 80

Explain why Teddy is wrong.

Dora needs 103 tiles.

How many boxes of tiles does she need?

 The difference between two 3-digit numbers is two.

When each number is rounded to the nearest 1,000 the difference between them is 1,000

What could the two numbers be?

- q. Rosie rounds a number to the nearest 100,000 Her answer is 700,000
 - a) What is the smallest number she could have started with?



The greatest integer that rounds to 700,000 is 750,000

b) Is Amir correct? How do you know?

 When the difference between A and B is rounded to the nearest 100, the answer is 700

When the difference between B and C is rounded to the nearest 100, the answer is 400

A, B and C are not multiples of 10

What could A. B and C be?

II. True

950,000 is exactly half way between 900,000 and 1,000,000 By convention, we round up.

Explain why this statement is correct.

Reasoning/ Broblem solving

 The children from West Pool Junior School all go on a whole school trip to a museum.

There are 30 children in each year group and all 4 year groups go. The cost for each child is as follows:

Cost of ticket	29.96
Cost of coach	27.53
Cost of lunch	23.32

What is the approximate cost for each individual child?

Here are the total costs for the whole school trip:

Total cost of tickets	£1,194
Total cost of coach	£915.60
Total cost of lunches	£398.49

What is the approximate total cost of the trip?

2. Write each calculation in the correct column.

712 + 394	1,312 + 2,527	2,350 + 3,760
1,995 + 712	3,044 + 2,372	17 + 953

No exchange needed	One exchange	More than one exchange

Write one more calculation of your own in each column.

Dexter is playing a computer game.

The table shows the number of points he gets in each round.

Round	1	2	3
Number of points	3,550	2,175	1,895

- a) How many points does Dexter have at the end of Round 2?
- b) He needs 8,000 by the end of Round 3 to win the game.
 Does Dexter win the game?

Show your workings.

4- What is the missing 4-digit number?

	Th	Н	Т	0
+	6	3	9	5
	8	9	4	9

Work out the missing numbers.

	?	4	?	3	?
+	2	?	5	?	2
	7	8	5	2	9

Work out the missing digits.

1)		Th	Н	т	0	b)	
		3	7		9		
	+			8			
		6	9	2	5		Γ



c) Find two possible answers.

	Th	Н	т	О	
	2		1		
+	3		6		
	6	1	8	2	

	Th	н	т	0
	2		1	
+	3		6	
	6	1	8	2

How did you work this out? Talk about it with a partner. Are there any more answers? Gina makes a 5-digit number.

Mike makes a 4-digit number.

The difference between their numbers is 3.465

What could their numbers be?

8- A milkman has 250 bottles of milk.

He collects another 160 from the dairy, and delivers 375 during the day.

How many does he have left?



Do you agree with Tommy? Explain why.

9. On Monday, Dupree was paid £114

On Tuesday, he was paid £27 more than on Monday.

On Wednesday, he was paid £27 less than on Monday.

How much was Dupree paid in total?

How many calculations did you do?

Is there a more efficient method?