



BRONZE

School name: _____ **MATHS PLANNING YEAR A**



Teacher: _____

Class: _____

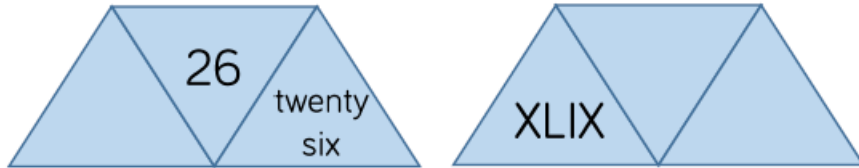
Year: 3-4

Term: Autumn 1

Week Commencing: Week 1

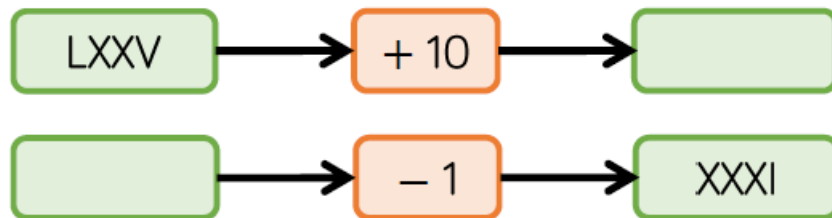
Topic		NC Links: Pupils should be taught to: Place Value						
Day	Mental/Oral Starter		Main Lesson				Plenary	Assessment
	Objectives	Activity	Objectives	Teaching	Activities	Key Vocabulary	Activity	
Mon	<u>L.O. Recall 2x table</u> <u>L.O. fluency</u> <u>Y3</u> 24÷2= 11x2= 58-22= 45+12= <u>Y4</u> 96 ÷ 2 = 78 x 2 = 662 - 451 = 871 + 304 =	TMM <u>L.O. Greater than, less than or equal to</u>	<u>L.O. To Understand Roman Numerals</u> <u>Must:</u> know Roman Numerals to 12 <u>Should:</u> know Roman Numerals to 100 <u>Could:</u> do simple calculations	Teach chn Roman Numerals to 12 on a clockface, before moving onto numbers to 100. Explore what is the same and what is different between the number systems, including the fact that there is no zero in the Roman system and so no place holders. Show chn the Roman Numerals and what they represent: I = 1, V = 5, X = 10, L = 50, C = 100 Rules: Repeated letters are added. V and L are never repeated. C, I and X can only be repeated 3 times. Larger value first means add. Smaller value first means subtract.	Chn convert Roman Numerals to XII to Arabic numbers we use today. Y3: Complete a blank clockface with Roman Numerals and task sheet of simple arithmetic to 12. Y4: XIV + XXXVI = How many other calculations can you find using Roman Numerals that have the same answer? Target Your Maths 4 p12,13 Challenge A	Roman Numerals Arabic Numerals Smaller Larger Add Subtract Zero I V X L C	Why is there no zero in Roman Numerals?	Exceeding ARE: At ARE: Below ARE: SEND PPG EAL

Each diagram shows a number in numerals, words and Roman Numerals.



Complete the diagrams.

Complete the function machines.

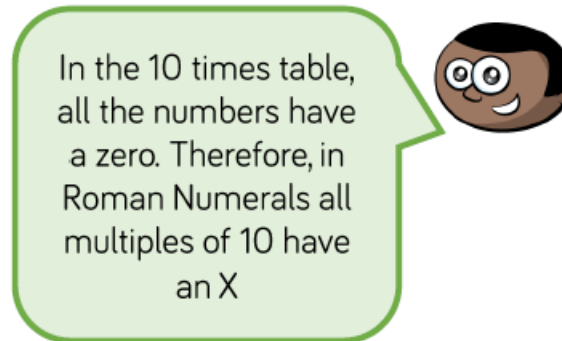


Solve the following calculation:

$$XIV + XXXVI = \underline{\quad}$$

How many other calculations, using Roman Numerals, can you write to get the same total?

Mo says:



Research and give examples to prove whether or not Mo is correct.

Day	Mental/Oral Starter		Main Lesson				Plenary	Assessment
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Tues	<p><u>L.O. Recall 2x table</u></p> <p><u>L.O. fluency</u></p> <p><u>Y3</u></p> <p>20x 2= 18÷2= 55 +18= 45 -10=</p> <p><u>Y4</u></p> <p>420 ÷ 2 = 309 x 2 = 709 - 311= 871 + 174 =</p>	<p>TMM</p> <p><u>L.O. Greater than, less than or equal to.</u></p>	<p><u>L.O. To Understand Roman Numerals</u></p> <p><u>Must:</u> know Roman Numerals to 12</p> <p><u>Should:</u> know Roman Numerals to 100</p> <p><u>Could:</u> do simple calculations</p>	<p>Teach chn Roman Numerals to 12 on a clockface, before moving onto numbers to 100.</p> <p>Explore what is the same and what is different between the number systems, including the fact that there is no zero in the Roman system and so no place holders.</p> <p>Show chn the Roman Numerals and what they represent: I = 1, V = 5, X = 10, L = 50, C = 100</p> <p>Rules: Repeated letters are added. V and L are never repeated. C, I and X can only be repeated 3 times. Larger value first means add. Smaller value first means subtract.</p>	<p>Task sheet of simple arithmetic to 12.</p> <p>Target Your Maths 4 p12,13 Challenge A, B</p>	<p>Roman Numerals Arabic Numerals Smaller Larger Add Subtract Zero I V X L C</p>	<p>My answer is X. Can you think of calculations involving multiplication, division, addition and subtraction that create the answer X.</p>	<p>Exceeding ARE:</p> <p>At ARE:</p> <p>Below ARE:</p> <p>SEND</p> <p>PPG</p> <p>EAL</p>

Day	Mental/Oral Starter		Main Lesson				Plenary	Assessment
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Wed	<p><u>L.O. Recall 2x table</u></p> <p><u>L.O. fluency</u></p> <p><u>Y3</u> $17 \times 2 =$ $26 \div 2 =$ $77 - 26 =$ $52 + 18 =$</p> <p><u>Y4</u> $336 \div 2 =$ $478 \times 2 =$ $603 - 451 =$ $471 + 304 =$</p>	<p>TMM</p> <p><u>L.O. To fill in a web</u></p>	<p><u>L.O. To count in 100s</u></p> <p><u>Must:</u> know 10 tens make 100 <u>Should:</u> count forwards in 100s <u>Could:</u> count backwards in 100s</p>	<p>Build on chn's knowledge of 10s and link this to 100s. This is the first time Y3s explore 100 explicitly. It's crucial that chn know that 10 tens make 100. They use a variety of concrete equipment to see this relationship. Once chn understand the concept of 100, they count in 100s to 1000.</p>	<p>Chn solve problems involving counting up to 1000 in hundreds.</p> <p>Chn count backwards from 1000</p> <p>Are all multiples of 100 even? Convince me.</p> <p>Chn have 8 counters on a place value grid to identify and correct errors.</p> <p>Maths No Problem 3A Worksheet 1 p1 - 2</p>	<p>Tens Hundreds Thousand Count Forwards Backwards Multiples Place value</p>	<p>How many 10s have you made? How else can we say this? What do these digits represent? If we continue to count in 10s, what do we say after 100?</p>	<p>Exceeding ARE:</p> <p>At ARE:</p> <p>Below ARE:</p> <p>SEND</p> <p>PPG</p> <p>EAL</p>

Use bundles of straws in tens, bead strings and Base 10 to explore how many tens make a hundred. Children use the equipment to count up and down in tens to make 100

There are 3 tens this is thirty.

There are _____ this is _____.

There are _____ tens in one hundred.

There are 100 sweets in each jar.



How many sweets are there altogether?

Write your answer in numerals and words.

Complete the number tracks.

200	300		500			800	
-----	-----	--	-----	--	--	-----	--

	900	800			500		
--	-----	-----	--	--	-----	--	--

True or False?

If I count in 100s from zero, all of the numbers will be even.

Convince me.

Sort these statements into always, sometimes or never.

- When counting in hundreds, the ones column changes.
- When counting in hundreds, the hundreds column changes.
- To count in hundreds we use 3-digit numbers.

Whitney thinks the place value grid is showing the number eight.

Hundreds	Tens	Ones

Do you agree? Explain why.

Using all of the counters, what is the smallest number you can make?

What other numbers could you make?

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Thurs	<p><u>L.O. Recall 2x table</u></p> <p><u>L.O. fluency</u></p> <p>Y3 $42 \div 2 =$ $39 \times 2 =$ $72 - 50 =$ $87 + 13 =$</p> <p>Y4 $783 \div 2 =$ $399 \times 2 =$ $1548 + 1345 =$ $500 - 189 =$</p>	<p>TMM</p> <p><u>L.O. To join the 2x facts</u></p>	<p><u>L.O. To count from 0 in 50s.</u></p> <p>Success Criteria:</p> <p><u>Must:</u> Count from 0 in 50s <u>Should:</u> Count from any multiple of 50 in 50s <u>Could:</u> Count backwards in 50s</p>	<p>Teach chn to use their knowledge of the 5x table to count in steps of 50. They start from any given multiple of 50 and count forwards and backwards. What is the same and what is different in counting in 5s and 50s? If I count on in 50s from 0, all of the numbers will be even. Convince me.</p>	<p>Look at two sequences of multiples of 5 and 50 and see if children can spot the pattern. They then spot and correct errors in sequences.</p> <p>Maths – No problem Year 3A worksheet 5 p14</p>	<p>Sequences Multiples Count Forwards Backwards</p>	<p>What is the same and what is different in counting in 5s and 50s?</p>	<p>Exceeding ARE:</p> <p>At ARE:</p> <p>Below ARE:</p> <p>SEND</p> <p>PPG</p> <p>EAL</p>

Look at the number patterns.
What do you notice?

5	10	15	20	25	30
50	100	150	200	250	300

Complete the number tracks.

50		150	200			350		450	
----	--	-----	-----	--	--	-----	--	-----	--

	750	700	650			500			350
--	-----	-----	-----	--	--	-----	--	--	-----

Circle and explain the mistake in each sequence.

50, 100, 105, 200, 250, 300 ...

990, 950, 900, 850, 800 ...

Odd One Out

100, 150, 200, 215, 300

Circle the odd one out. Explain how you know.

Which is quicker: counting to 50 in 10s or counting to 150 in 50s?

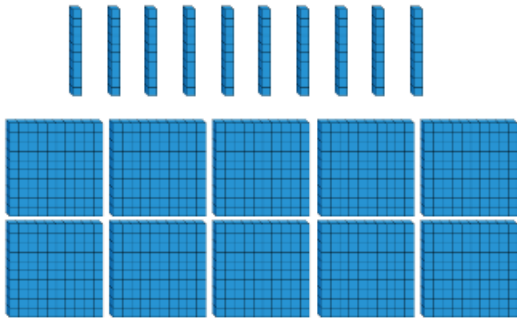
Explain your answer.

Always, Sometimes, Never

Sort the statements into always, sometimes or never.

- When counting in 50s starting from 0, the numbers are all even.
- There are only two digits in a multiple of 50
- Only the hundreds and tens column changes when counting in 50s.

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Fri	<u>L.O. Recall 2x table</u> <u>L.O. fluency</u> Y3 $32 \div 2 =$ $40 \times 2 =$ $49 - 21 =$ $48 + 13 =$ Y4 $741 + 1587 =$ $300 - 48 =$ $405 \times 2 =$ $316 \div 2 =$	TMM L.O. Solve a multiplication pyramid problem	<u>L.O. To count in 1000s</u> Must: know that 1000 is 10 hundreds. Should: Count up in multiples of 1000 Could: Count back in multiples of 1000	Chn look at 4 digit numbers. They explore 1000 using concrete and pictorial representations. Show that 1000 is made from 10 hundreds. Teach chn to count in 1000s. They record findings in numerals and words.	Chn demonstrate understanding by making 1000 from hundreds using equipment. Solve problems with answers in both 100s and 1000s Always, sometimes, never exercise. Maths – No Problem4A p2 Worksheet 2	Sequences Multiples Count Forwards Backwards	When counting in 1000s, which is the only digit to change?	Exceeding ARE: At ARE: Below ARE: SEND PPG EAL



___ tens make ___ hundred.

___ hundreds make ___ thousand.

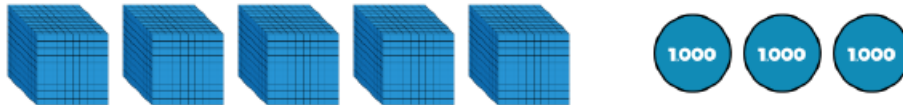
How many sweets are there altogether?



1,000 1,000 1,000

There are three jars of ___ sweets.
There are ___ sweets altogether.

What numbers are represented below?



Always, Sometimes, Never

- When counting in hundreds, the ones digit changes.
- The thousands column changes every time you count in thousands.
- To count in thousands, we use 4-digit numbers.

Rosie says,



If I count in thousands from zero, I will always have an even answer.

True or false?
Explain how you know.