Mathematics Non-Negotiables

Year 4

Non-negotiables are the minimum expectations that all pupils must attain by the end of year.

These prompt sheets have been designed to assist teachers with planning/assessment and as an ideal support tool for parent's evenings/progress meetings etc.

The content identifies basics to ensure children make rapid progress and access learning in other areas, as well as securing success in terms of preparing children for the next stages in their learning.

Written with age appropriate expectations in mind, they:

- · focus on the basics; making a difference to progress for all children
- support teachers in recognising key areas to promote progress
- are based on the average pupil in the cohort, supporting the need for differentiation.

Non-negotiables are in no way intended to cover the entirety of the curriculum — they are an on-going reminder of key objectives for the year group. They are the basics in order to embed and support meaningful learning.

Content:

Mathematics Non-negotiables End of Year Expectations for Year 4 followed by an activity booklet containing example questions.

Did you like this resource? Don't forget to review it here.



Mathematics Non-Negotiables End of Year Expectations for Year 4

- Count backwards through zero to include negative numbers
- Compare and order numbers beyond 1,000
- Compare and order numbers with up to 2 decimal places
- Read Roman numerals to 100
- Find 1,000 more or less than a given number
- Count in multiples of 6, 7, 9, 25 and 1000
- Recall and use multiplication and division facts for all tables to 12x12
- Recognise place value of any 4-digit number
- Round any number to the nearest 10, 100 or 1,000
- Round decimals with 1 decimal-place to nearest whole number
- Add and subtract numbers with up to 4-digits using written columnar method
- Multiply 2-digit and 3-digit numbers by 1-digit numbers
- · Count up and down in hundredths
- · Recognise and write equivalent fractions
- Add and subtract fractions with same denominator
- Read, write and convert time between analogue and digital 12 and 24 hour clocks



Year 4

Count backwards through zero to include negative numbers

count be	five and ackwards nus ten	Start at ten and count backwards to minus three	ount backwards count backwards		ree and kwards twenty		
 Compare and order numbers beyond 1,000 Order the numbers from smallest to largest. 							
8,735	1,021	9,861 5,0	002 4,684	289	2,467		
Compare and order numbers with up to 2 decimal places Order the numbers from smallest to largest.							
6.25	3.97	3.05 6.	29 9.86	2.77	3.64		

Read Roman numerals to 100

Fill in t	Fill in the hundred square using Roman Numerals								
I		III		V			VIII		Х
	XII							XIX	
				XXV					XXX
XXXI						XXXVII			
XLI			XLIV					XLIX	L
									LX
	LXII				LXVI				
		LXXIII				LXXVII			
				LXXXV					хс
			XCIV				XCVIII		



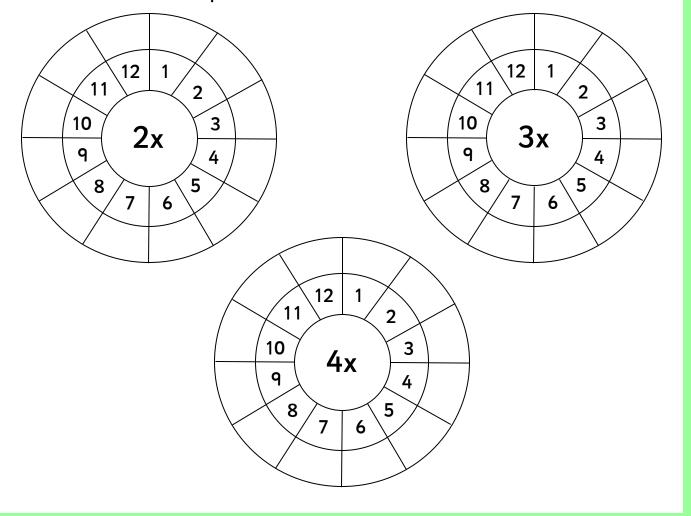
Find 1,000 more or less than a given number
 Fill in the table to show 1,000 less and 1,000 more than the given number.

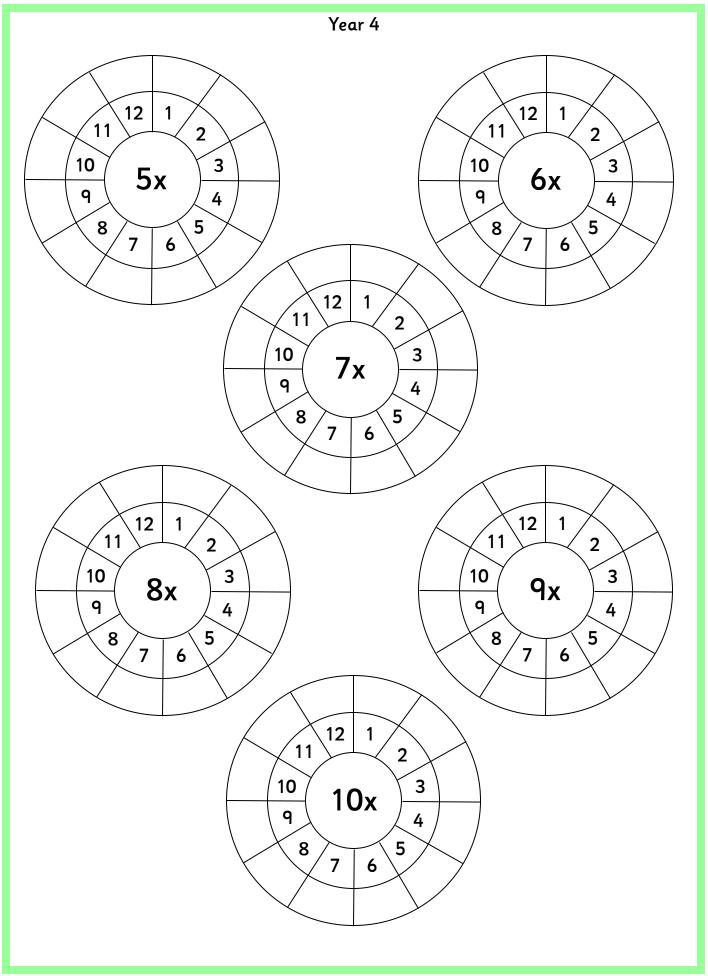
1,000 less than		1,000 more than
	7,341	
	2,972	
	7,559	
	1,383	

• Count in multiples of 6, 7, 9, 25 and 1000

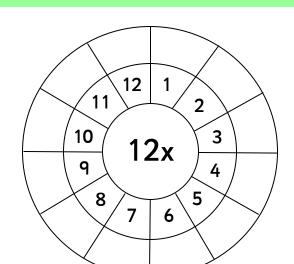
Start at six and count in sixes	start at seven and count in sevens	start at nine and count in nines	start at twenty-five and count in twenty-fives	start at zero and count in thousands
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Recall and use multiplication and division facts for all tables to 12x12





11 12 1 2 1 2 1 4 8 7 6 5



Recognise place value of any 4-digit number
 Write the digits to form the number

words	digits
two thousands, five hundreds, two tens and four ones	
eight thousands, seven hundreds, no tens and five ones	
four thousands, two hundreds, three tens and no ones	
nine thousands, three hundreds, three tens and three ones	
seven thousands, eight hundreds, six tens and one one	

Year 4

Write the place value words that form the given number

words	digits
	5,678
	1,204
	8,631
	6,888
	2,030



• Round any number to the nearest 10, 100 or 1,000

Complete the table:

	nearest 10	nearest 100	nearest 1,000
9,864			
5,237			
4,565			
1,002			

• Round decimals with 1 decimal-place to nearest whole number Round the numbers to the nearest whole number

1.6	_
	Ĭ

9.4	

• Add and subtract numbers with up to 4-digits using written columnar method

Complete the column method addition questions

	5	3	4	1
+	2	4	5	თ

	7	7	6	2
+	1	0	0	4

	1	6	5	2
+	6	2	0	σ

	8	7	7	5
+	1	3	3	4

	2	9	0	2
+	2	2	0	٩

	6	0	4	თ
+	3	1	2	7

Complete the column method subtraction questions

	9	5	6	7
ı	4	2	3	4

	8	6	5	5
	4	4	2	1

	1	8	6	7
_	1	5	4	1

Complete the column method subtraction questions

	7	3	2	4
_	3	1	1	5

	8	1	5	6
_	7	8	1	3

	5	0	0	4
_	1	5	4	3

Multiply 2-digit and 3-digit numbers by 1-digit numbers Complete the column method multiplication questions

	2	3
х		5

	5	6
х		3

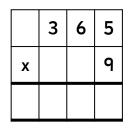
	7	4
х		2

	3	8
X		7

	9	7
х		6

Complete the column method multiplication questions

	2	8	4
х			4



	5	7	2
х			5

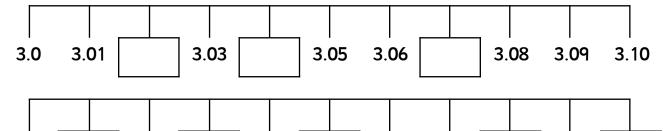
	7	4	3
х			8

	9	5	٩
х			3

6.69

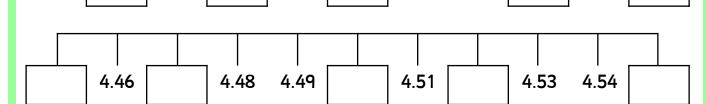
Count up and down in hundredths

6.62



6.66

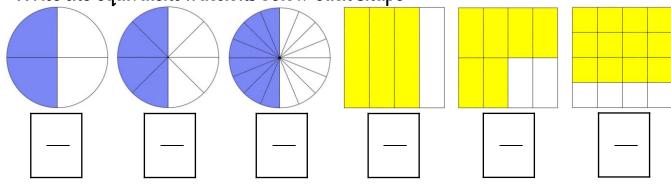
6.67



6.64

6.60

Recognise and write equivalent fractions
 Write the equivalent fractions below each shape



· Add and subtract fractions with same denominator

$$\frac{12}{33} + \frac{27}{33} =$$

$$\frac{17}{12} - \frac{9}{12} =$$

$$\frac{52}{75} + \frac{37}{75} =$$

$$\frac{74}{64} - \frac{37}{64} =$$

$$\frac{6}{24} + \frac{14}{24} =$$

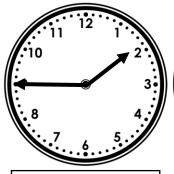
$$\frac{17}{18} - \frac{13}{18} =$$

$$\frac{36}{99} + \frac{36}{99} =$$

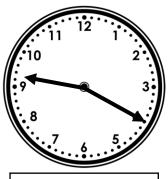
$$\frac{31}{52} - \frac{26}{52} =$$

$$\frac{41}{87} + \frac{42}{87} =$$

Read, write and convert time between analogue and digital 12 and 24 hour clocks









in the afternoon					
12 hour	:				
24 hour	:				

in the morning					
12 hour	:				
24 hour	:				

in the	in the morning						
12 hou	r :						
24 hou	r :						

in the afternoon					
12 hour	:				
24 hour	:				

Year 4

Count backwards through zero to include negative numbers

Start at five and		Start at seven and	
count backwards	count backwards	count backwards	count backwards
to minus ten	to minus three	to minus four	to minus twenty

Compare and order numbers beyond 1,000

Order the numbers from smallest to largest. 8,735 1,021 9,861 5,002

289

1,021

4,684

289

2,467

2,467

4,684

5,002

8,735

9,861

Compare and order numbers with up to 2 decimal places Order the numbers from smallest to largest.

6.25

3.97

3.05

6.29

9.86

2.77

3.64

2.77

3.05

3.64

3.97

6.25

6.29

9.86

Read Roman numerals to 100

Fill in t	Fill in the hundred square using Roman Numerals								
I	II	III	IV	٧	VI	VII	VIII	IX	X
XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX	XX
XXI	XXII	XXIII	XXIV	XXV	XXVI	XXVII	XXVIII	XXIX	XXX
XXXI	XXXII	XXXIII	XXXIV	XXXV	XXXVI	XXXVII	XXXVIII	XXXIX	XL
XLI	XLII	XLIII	XLIV	XLV	XLVI	XLVII	XLVIII	XLIX	L
LI	LII	LIII	LIV	LV	LVI	LVII	LVIII	LIX	LX
LXI	LXII	LXIII	LXIV	LXV	LXVI	LXVII	LXVIII	LXIX	LXX
LXXI	LXXII	LXXIII	LXXIV	LXXV	LXXVI	LXXVII	LXXVIII	LXXIX	LXXX
LXXXI	LXXXII	LXXXIII	LXXXIV	LXXXV	LXXXVI	LXXXVII	LXXXVIII	LXXXIX	хс
XCI	XCII	XCIII	XCIV	XCV	XCVI	XCVII	XCVIII	XCIX	С

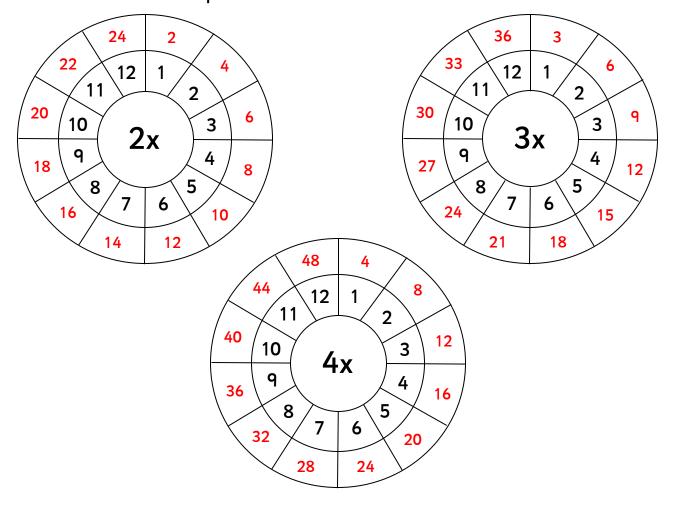
Find 1,000 more or less than a given number
 Fill in the table to show 1,000 less and 1,000 more than the given number.

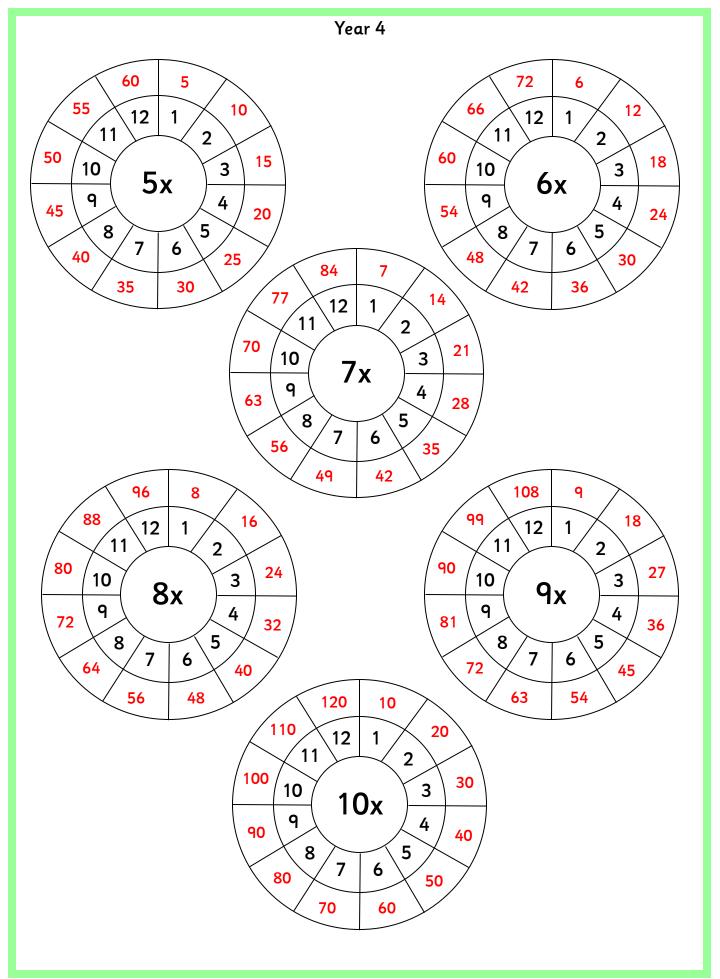
1,000 less than		1,000 more than
6,341	7,341	8,341
1,972	2,972	3,972
6,559	7,559	8,559
383	1,383	2,383

• Count in multiples of 6, 7, 9, 25 and 1000

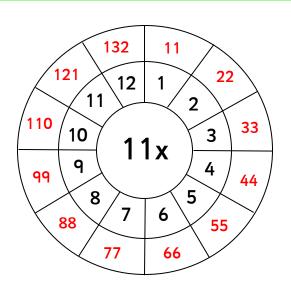
Start at six and count in sixes	start at seven and count in sevens	start at nine and count in nines	start at twenty-five and count in twenty-fives	start at zero and count in thousands
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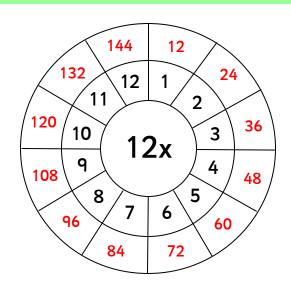
Recall and use multiplication and division facts for all tables to 12x12





Year 4





Recognise place value of any 4-digit number
 Write the digits to form the number

words	digits
two thousands, five hundreds, two tens and four ones	2,524
eight thousands, seven hundreds, no tens and five ones	8,705
four thousands, two hundreds, three tens and no ones	4,230
nine thousands, three hundreds, three tens and three ones	9,333
seven thousands, eight hundreds, six tens and one one	7,861

Write the place value words that form the given number

words	digits
five thousand, six hundred and seventy-eight	5,678
one thousand, two hundred and four	1,204
eight thousand, six hundred and thirty-one	8,631
six thousand, eight hundred and eighty-eight	6,888
two thousand and thirty	2,030



Round any number to the nearest 10, 100 or 1,000

Complete the table:

	nearest 10	nearest 100	nearest 1,000
9,864	9,860	9,900	10,000
5,237	5,240	5,200	5,000
4,565	4,570	4,600	5,000
1,002	1,000	1,000	1,000

Round decimals with 1 decimal-place to nearest whole number
 Round the numbers to the nearest whole number

1.6

9.4

25.1

93.7

0.9

7.5

3.4

2

9

25

94

1

8

3

 Add and subtract numbers with up to 4-digits using written columnar method

Complete the column method addition questions

	5	3	4	1
+	2	4	5	3
	7	7	9	4

	7	7	6	2
+	1	0	0	4
	8	7	6	6

	1	6	5	2
+	6	2	0	9
	7	8	6	1

	8	7	7	5
+	1	3	3	4
1	0	1	0	9

	2	9	0	2
+	2	2	0	σ
	5	1	1	1

	6	0	4	3
+	თ	1	2	7
	9	1	7	0

Complete the column method subtraction questions

	9	5	6	7
_	4	2	თ	4
	5	3	3	3

	8	6	5	5
ı	4	4	2	1
	4	2	3	4

	1	8	6	7
_	1	5	4	1
	0	3	2	6

Complete the column method subtraction questions

	7	3	¹ 2	¹ 4
_	3	1	1	5
	4	2	0	9

	⁷ &	¹ 1	5	6
_	7	8	1	3
	0	3	4	3

	⁴ 5	Ø	¹ 0	4
_	1	5	4	З
	3	4	6	1

Multiply 2-digit and 3-digit numbers by 1-digit numbers Complete the column method multiplication questions

	2	3
х	1	5
1	1	5

	5	6
х	1	3
1	6	8

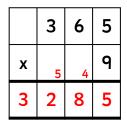
	7	4
х		2
1	4	8

	3	8
х	5	7
2	6	6

	9	7
Х	4	6
5	8	2

Complete the column method multiplication questions

	2	8	4
х	3	1	4
1	1	3	6

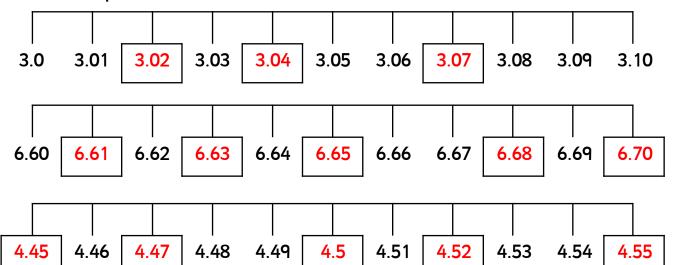


	5	7	2
х	3	1	5
2	8	6	0

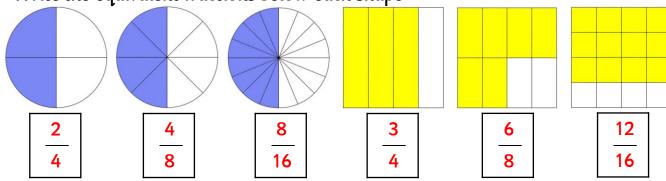
	7	4	3
х	3	2	8
5	9	4	4

	٩	5	٥
х	1	2	3
2	8	7	7

Count up and down in hundredths



Recognise and write equivalent fractions
 Write the equivalent fractions below each shape



Add and subtract fractions with same denominator

$$\frac{12}{33} + \frac{27}{33} = \frac{39}{33} \qquad \frac{17}{12} - \frac{9}{12} = \frac{8}{12} \qquad \frac{52}{75} + \frac{37}{75} = \frac{89}{75}$$

$$\frac{74}{64} - \frac{37}{64} = \frac{37}{64} \qquad \frac{6}{24} + \frac{14}{24} = \frac{20}{24} \qquad \frac{17}{18} - \frac{13}{18} = \frac{4}{18}$$

$$\frac{36}{99} + \frac{36}{99} = \frac{72}{99} \qquad \frac{31}{52} - \frac{26}{52} = \frac{5}{52} \qquad \frac{41}{87} + \frac{42}{87} = \frac{83}{87}$$

Read, write and convert time between analogue and digital 12 and 24 hour clocks

