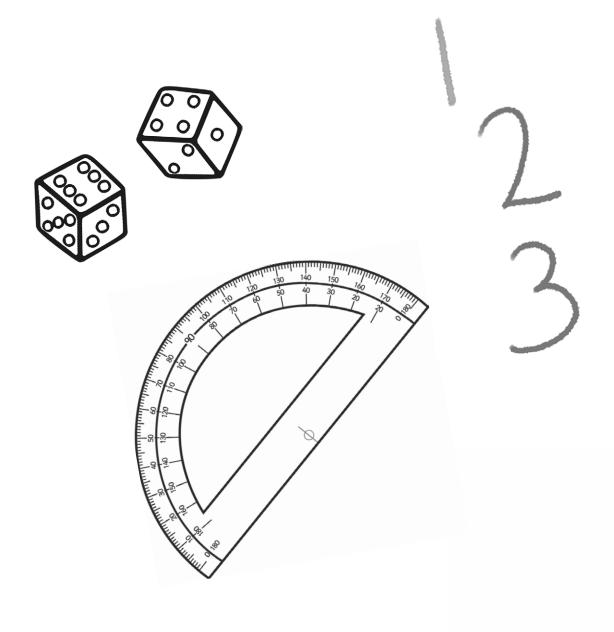
Year 4 Maths Number Place and Value Workbook





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Home Learning Year 4 Maths Workbook Pack

Year 4 Programme of Study - Number and Place Value

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Year 4 Programme of Study – Number and Place Value

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Counting in 1000s

Complete the following sequences:

a) 1000 2000 3000 _____ 5000 ____

b) 9000 8000 ____ 6000 ___ 4000

c) _____ 5000 6000 7000 ____ 9000

d) 8000 _____ 5000 4000 3000

e) 6000 _____ 8000 9000 ____ 11 000

f) _____ 11 000 10 000 ____ 8000 7000

h) 19 000 _____ 22 000 23 000 24 000

i) _____ 27 000 28 000 29 000 30 000

j) 76 000 75 000 _____ 72 000 71 000

Challenge: Can you count on in thousands from these numbers?

0 462 000

Can you complete these?

n) _____ 345 000 ____ __ ___ ____ ____

o) _____ 501 000 ____

p) _____ 970 000

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Counting in 1000s Not From 0

Complete the following sequences:

a) 1013 2013 3013 5013 7472 b) 10 472 9472 5472 c) 5706 6706 7706 9706 9293 8293 d) 12 293 7293 _____ 8038 9038 ____ 11 038 e) 6038 8720 7720 g) 26 671 25 671 _____ 23 671 21 671 _____ 22 337 23 337 24 337 h) 19 337 _____ 47 405 48 405 49 405 50 405 62 049 61 049 i) 66 049 65 049

Challenge: can you count on in thousands from these numbers?

Can you complete these?

n) _____ 290 891 ____ __ ___ ___ ____ _____

o) _____ 601 098 ____

p) _____ 930 660



Counting in 6,7 and 9

Complete the following sequences:

a) _____ 12 18 24 30 _____

f) _____ 126 120 ____ 108 102

b) 49 42 ____ 28 ___ 14

g) 99 108 ____ 126 ___ 144

c) 45 54 63 81

h) 112 ____ 126 133 140

d) 90 72 66 60

i) 180 186 192 198

e) 56 _____ 91

j) 210 203 ____ 189 182

Continue the following sequences:

0 2 11 20 ___ __ __ __ __ ___ ___

o) 99 106 113 ____ ___ ___ ___ ____ ____

p) 300 291 282 ____ ___ ___ ___ ___ ___ ____

q) 172 166 160 ____ __ __ __ __ ___ ___ ___ ___ ___

r) 31 40 49 ____ ___ ___ ___ ___ ___



Choose a starting number and count in 6s, 7s and 9s from that number. What is the difference between each number you end up at? Can you explain why?



Counting in 25s Worksheet

Aim – I can count in 25s from any given number.

Can you complete these sequences by counting in 25s?

1.				
0	25			
2.				
175			250	
3.				
550	575			
4.				
				975
5.				
		725		
6.	_			
725				

Look at these sequences which start from a number other than 0 but still go up in 25s. In each line one of the numbers is wrong. Can you circle it? The first one is done for you.

une	one of th	le mumbers	is wronig.	curr you c	iicie il: iii	ie jii si one i	is done for you.
7.	55	70	105	130	155	180	25
8.	16	41	56	91	116	141	25 2
٩.	115	140	165	190	212	240	
10.	499	524	549	574	594	624	min
11.	879	904	939	954	979	1004	
12.	1042	1076	1101	1126	1151	1176	Lar

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Add 1000 to the following numbers

Challenge

Can you add 1001, 1010 or 1100 to some of the questions? What about 10 000?



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Subtract 1000 from the following numbers

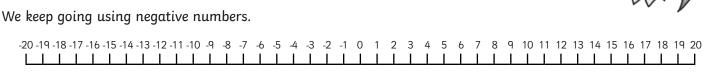
Counting Backwards Through O Using Negative Numbers Worksheet

Aim – I can count backwards through 0 including negative numbers.

Counting backwards can be useful – especially if you want to make a rocket take off!

10, 9, 8, 7, 6, 5, 4, 3, 2, 1 **BLAST OFF!**

BUT what happens when we are counting backwards and we get to '0'?

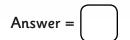


A. Use the number lines to help you count backwards through 0. Start on the number given and draw the right

number of jumps backward	ds until you	. have your ansv	wer.	
1. From 5, count back 7.				
-20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 <i>-</i>	9 -8 -7 -6 -5 	5 -4 -3 -2 -1 0 1 	1 2 3 4 5 6 7 8 9 	10 11 12 13 14 15 16 17 18 19 20
				Answer =
2. From 8, count back 12				
-20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 <i>-</i>	9 -8 -7 -6 -5 	5 -4 -3 -2 -1 0 1 	1 2 3 4 5 6 7 8 9 	10 11 12 13 14 15 16 17 18 19 20
				Answer =
3. From 7, count back 15				
-20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -	9 -8 -7 -6 -5 	5 4 -3 -2 -1 0 1 	1 2 3 4 5 6 7 8 9 	10 11 12 13 14 15 16 17 18 19 20
				Answer =
4. From 2, count back 9.				
-20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -	9 -8 -7 -6 -5 	5 4 -3 -2 -1 0 1 	1 2 3 4 5 6 7 8 9 	10 11 12 13 14 15 16 17 18 19 20
				Answer =

5. From 12, count back 22.

-20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20





Page 10 of 34 twinkl.co.uk **B.** These counting back tasks can be written as sums e.g. 7 - 8. 7 is the number you start on and 8 is the number of jumps you count backwards. 7 - 8 = -1

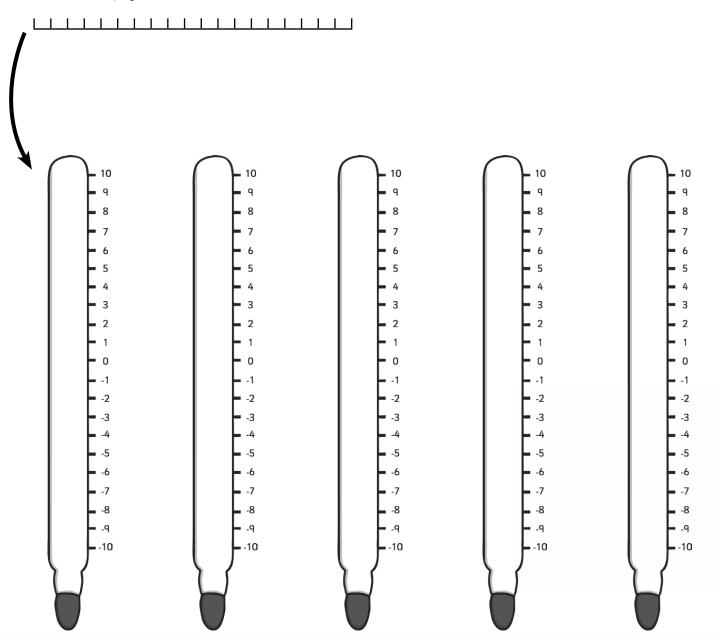
Use the number line below to jump with your finger to count backwards and work out the answers to the sums.

-20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

1.	6 -	12	=

		`	
		1	

C. Being able to count back through 0 can help you understand temperature changes. Imagine a thermometer is a number line on its side. Use these thermometers for drawing jumps on to help you answer the questions on the next page.





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When the temperature drops, you can count backwards on your number line/thermometer and calculate the new temperature.
1. The temperature is 7°C then it falls by 9°C. What is the new temperature?
2. At six o'clock in the evening the temperature is 11°C. It falls by 14°C at night. What is the new temperature?
3. During the day the temperature is 1°C, by the evening it has fallen by 5°C. What is the new temperature?
4. The temperature is 3°C then it falls by 12°C the next day. What is the new temperature?
5. At nine o'clock in the morning the temperature is 5°C. It falls by 9°C at night. What is the new temperature?



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Place Value Worksheet

Circle the numbers that have a 6 in the ones place.

8906 3848 2106 1682 9863 8296 6265 9273

Circle the numbers that have a 5 in the tens place.

7653 7902 5623 7855 6539 7205 9058 1251

Circle the numbers that have a 3 in the hundreds place.

7983 3379 1925 1393 6793 2833 9389 7832

Circle the numbers that have a 7 in the thousands place.

8907 7293 6798 4487 8974 8797 7789 3928

Circle the numbers that have a 1 in the ones place.

6451 9803 7751 6512 7631 1728 3183 8911

Circle the numbers that have an 8 in the tens place.

3893 9800 1280 2378 1189 3465 4829 7381

Circle the numbers that have a 7 in the hundreds place.

1787 4578 9927 3703 7289 3799 2097 7770

Circle the numbers that have a 1 in the thousands place.

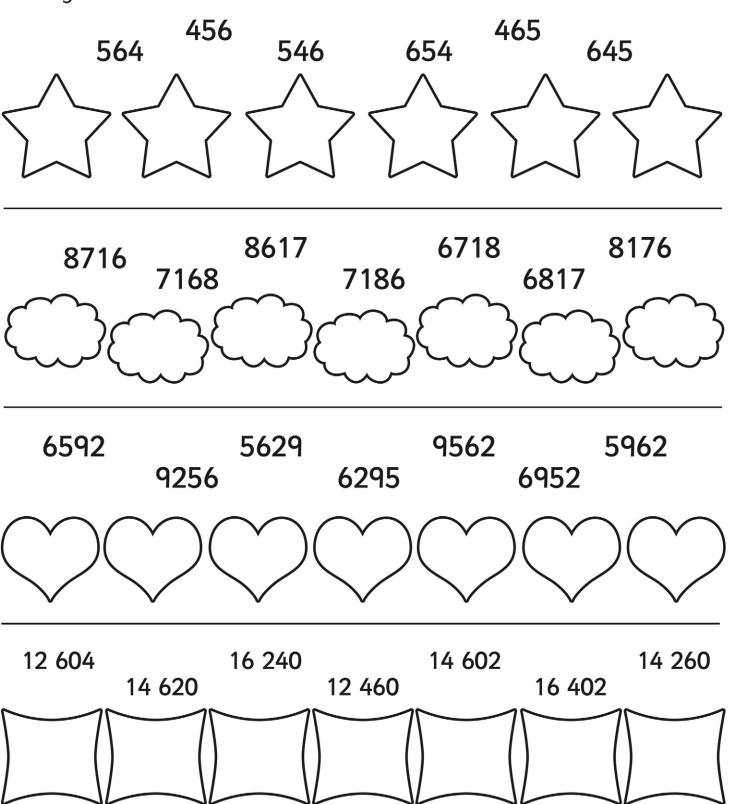
8719 1287 3144 5861 7612 4122 1920 1123



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Place Value Number Sorting Worksheet

Fill in the spaces below with the numbers in order from smallest to largest.





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Comparing and Ordering Numbers Beyond 1000

I can compare and order numbers beyond 1000.

Comparing numbers to decide which are bigger and which are smaller requires a close look at the value of each digit. The best way to compare the size of numbers directly is to use a place value chart to inspect them. Consider the following set of numbers – 999, 1001, 1099, 9001, 10001

It could be possible to get mixed up when ordering these but with a place value chart there is no confusion – let's put the numbers into this place value chart:

Т	Ten Thousands	Thousands	Hundreds	Tens	Ones		
			9	9	9	999	999
		1	0	0	1	1001	~ ~ ~
		1	0	9	9	1099	10000
		9	0	0	1	9001	100
	1	0	0	0	1	10 001	1000

As a digit is placed further to the left on the place value chart, its value increases. So when comparing how big numbers are, it is always worth starting at the left (largest) and moving to the right (smallest).

So when comparing, if a number has digits further to the left of the grid than the others, (10 001) then it is obviously the largest. However, if more than one number has a digit in the same column, then check to see which has the greatest value (this will be the bigger number).

If both numbers have same value digit in the same column, then you keep looking to the right until you find a difference (1099 is bigger than 1001). Using this system will help to accurately order numbers from largest to smallest.



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Ten Thousands	Thousands	Hundreds	Tens	Ones		Order from	
						high to low	\dashv
							_
							1
							_
2. 35 3	375	7357	735		5735	5!	573
Ten Thousands	Thousands	Hundreds	Tens	Ones		Order from	7
						high to low	_
							1
						_	\dashv
							4
	1						
		bers in order fro need it.	om highest to l	owest? Sket	ch a place v	alue chart on	a whiteboa
	lp you if you		om highest to lo		ch a place v 999		a whiteboa 1001
on paper to he	lp you if you	need it.					
n pαper to he	lp you if you	need it.	633	2	999		1001
on paper to he	lp you if you	need it.		2			

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A. Write each of these numbers into the place value charts and then order them from highest to lowest. Cross them

4999

949

4959

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out when you have written them in to make your task easier!

5001

1.

856

8228	2882	20 820	8802
		1	1
46 001	64 001	4600	6040

C. Compare the size of the following numbers and insert one of these symbols < > to make the number statement read correctly. Sketching a mini place value chart may help you with these. The first one has been done for you.

1.	817	>	781
3.	6205		6208
5.	8574		7548
7.	4274		7442
٩.	7891		7198
11.	9999		10 000

2.	1026	6021
4.	1099	9011
6.	3991	3919
8.	1056	10 065
10.	10 001	10 010
12.	80 102	29 999



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Representing Numbers Using Base 10

	4216		6725
	9827		2381
	5015		4691
	2100		5107
	3001		7119
	7617		1045
	8101		3243
ng Base 10	lmbers Usin	Representing Numbers Using	



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Estimate Addition Calculations worksheet

7892 + 2114	3748 + 5330	96 + 4267	908 + 2268	1705 + 87
4463 + 5531	1520 + 5063	1355 + 3810	1004 + 2016	261 + 2731
1039 + 7836	2305 + 5280	4301 + 189	2900 + 598	1183 + 1335
9001 + 1056	4562 + 2120	2290 + 3265	2137 + 1124	1243 + 2217
15. Which of these calculations give an answer of about 10000?	14. Which of these calculations give an answer of about 7500?		11. Which of these calculations 12. Which of these calculations 13. Which of these calculations give an answer of about 2500? Give an answer of about 4500?	11. Which of these calculations give an answer of about 2500?
2345 + 3160	2410 + 1056	750 + 2200	1500 + 1500	925 + 403
2085 + 1800	3011 + 1012	1025 + 1750	1300 + 700	1225 + 261
1350 + 3450	1294 + 3213	2050 + 960	400 + 1900	623 + 576
2345 + 2675	2314 + 1219	1500 + 1075	1600 + 200	756 + 747
10. Which of these calculations give an answer of about 5000?	9. Which of these calculations give an answer of about 4000? give an answer of about 5000?		7. Which of these calculations 8. Which of these calculations give an answer of about 3000?	6. Which of these calculations give an answer of about 1500?
523 + 596	405 + 597	435 + 357	131 + 317	465 + 182
978 + 312	82 + 1007	297 + 325	117 + 593	278 + 131
446 + 756	143 + 978	427 + 231	319 + 229	103 + 415
814 + 253	807 + 296	712 + 235	372 + 231	314 + 278
5. Which of these calculations give an answer of about 1200?	4. Which of these calculations 5. Which of these calculations give an answer of about 1200?	3. Which of these calculations give an answer of about 800?	2. Which of these calculations give an answer of about 600?	1. Which of these calculations give an answer of about 500?



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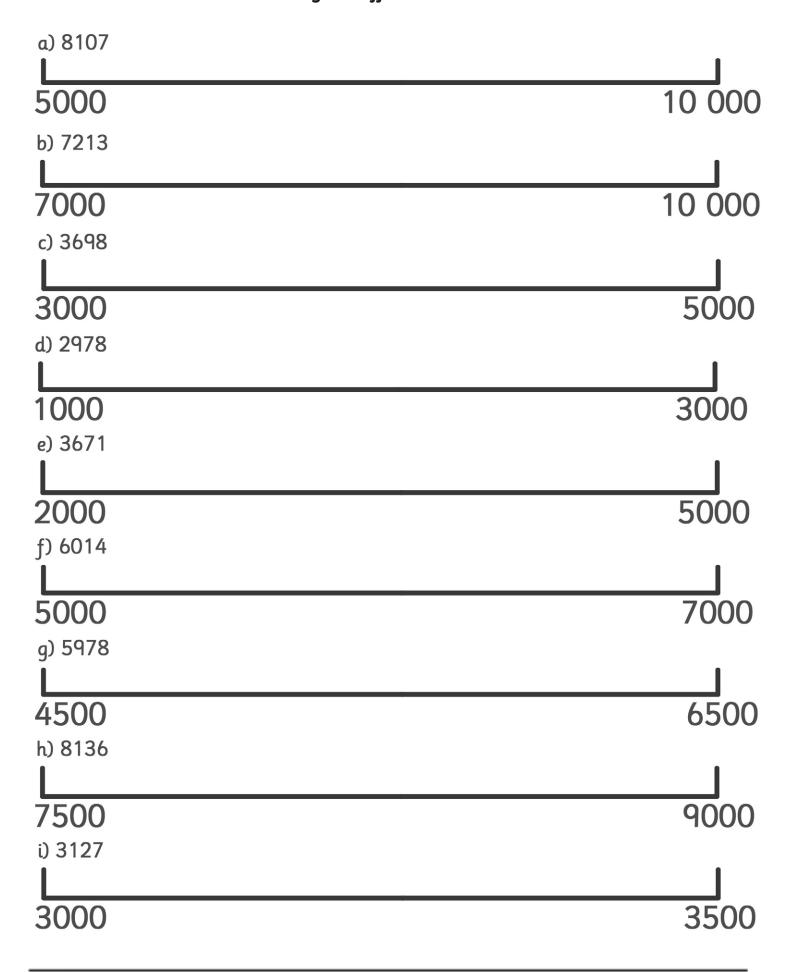
Estimate Subtraction Calculations worksheet

10045 - 5018	4635 - 1142	4509 - 1871	4906 - 2617	3800 - 2308
7288 - 2351	4298 - 2314	2638 - 134	8335 - 640	4004 - 2516
6135 - 1645	5143 - 1635	5103 - 2345	4301 - 2319	5290 - 378
9349 - 4270	9304 - 6270	3454 - 981	4950 - 2655	4237 - 4114
15. Which of these calculations give an answer of about 5000?	14. Which of these calculations 15. Which of these calculations give an answer of about 3500?	12. Which of these calculations 13. Which of these calculations give an answer of about 2500?	11. Which of these calculations 12. Which of these calculations 13. Which of these calculations give an answer of about 1500? 12. Which of these calculations 13. Which of the calculations 13. Which of t	11. Which of these calculations give an answer of about 1500?
1750 - 550	2471 - 1353	3050 - 2200	2000 - 1160	945 - 343
6226 - 521	3061 - 1042	2230 - 1250	1310 - 720	1250 - 540
5113 - 4035	4294 - 3213	2015 - 1320	2550 - 1840	623 - 121
3242 - 2215	2334 - 1429	1520 - 775	1220 - 600	796 - 127
10. Which of these calculations give an answer of about 1000?	9. Which of these calculations give an answer of about 900?	8. Which of these calculations give an answer of about 750?	7. Which of these calculations give an answer of about 700?	6. Which of these calculations give an answer of about 600?
543 - 131	425 - 179	776 - 467	311 - 174	928 - 727
968 - 362	837 - 426	1145 - 746	347 - 146	237 - 132
1224 - 756	1154 - 982	321 - 152	339 - 219	654 - 425
834 - 323	737 - 246	912 - 554	415 - 178	314 - 238
5. Which of these calculations give an answer of about 500?	4. Which of these calculations give an answer of about 400?	3. Which of these calculations give an answer of about 300?	2. Which of these calculations give an answer of about 200?	1. Which of these calculations give an answer of about 100?



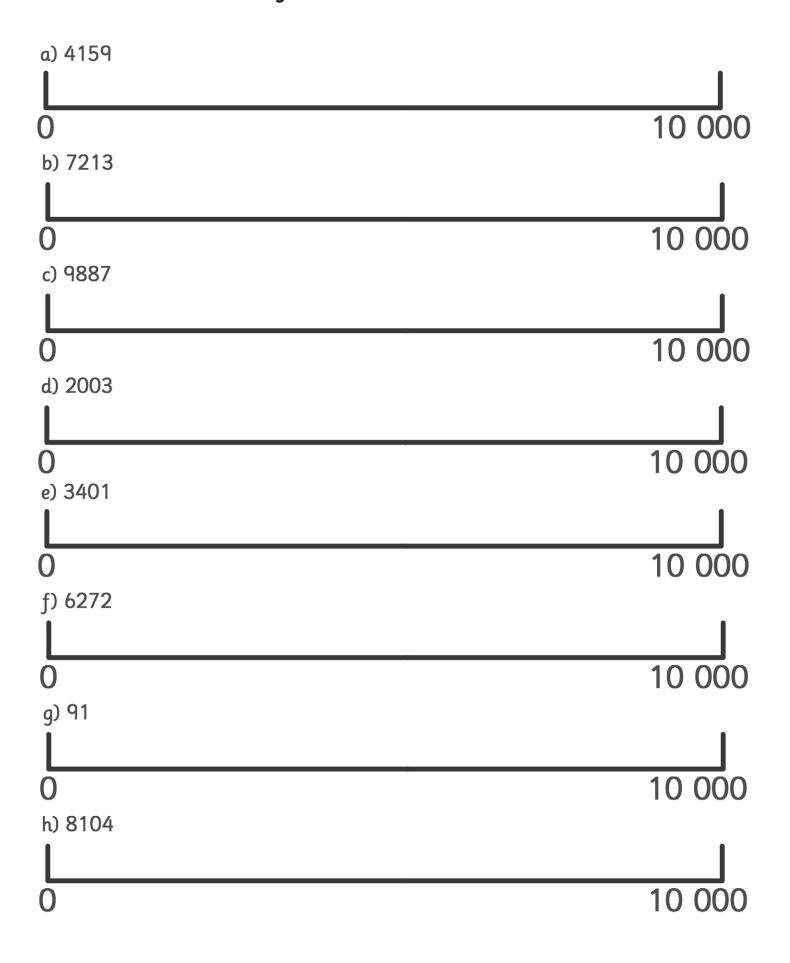
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Estimating on Different Number Lines





Estimating numbers on a 0-10000 Number Line





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How to Round a Number Worksheet

39	nearest 1000]	3400
65	nearest 10		70
74	nearest 100		100
145	nearest 10		700
736	nearest 10		40
1902	nearest 100		1900
3419	nearest 100		10 000
9567	nearest 100		150

Challenge

Make your own for a friend to check. Some boxes have been completed or partly completed already. You need to include the arrows.

	neare	st	
89	neare	st	
	neare	est 10	
	neare	st	
492	neares	t 100	
	neare	st	
	neares	t 1000	



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Nearest 10, 100, 1000 Word Problems

1. A supermarket sells 187 cartons of yoghurt a week. How many cartons is this to the nearest 10 and nearest 100?



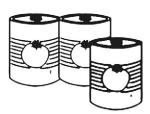
2. There are 35 245 spectators at a football match. How many is this to the nearest 10, nearest 100 and nearest 1000?



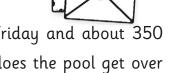
- 3. A newspaper reports that about 12 400 people attended a parade. How is this rounded and what is the range of the precise attendance?
- 4. There are 12 876 adult tickets and 5621 child tickets sold for a concert. To the nearest 10 and nearest 100, how many tickets are sold altogether?



5. A shop has 2349 tins of tomatoes in stock. It sells 782 in a week. To the nearest 10, how many will be left?



- 6. An office receives about 35 letters per day.
- To the nearest 10, how many letters does it receive in a working week (5 days)?



- 7. A swimming pool gets about 120 swimmers between Monday and Friday and about 350 swimmers over the weekend. To the nearest 100, how many swimmers does the pool get over the whole week?
- 8. A lorry driver travels about 370 miles per day for 6 days per week. To the nearest 100 and 1000, how many miles does the driver travel each week?





Challenge





What happens if you round the numbers in the questions, then calculate the answers?

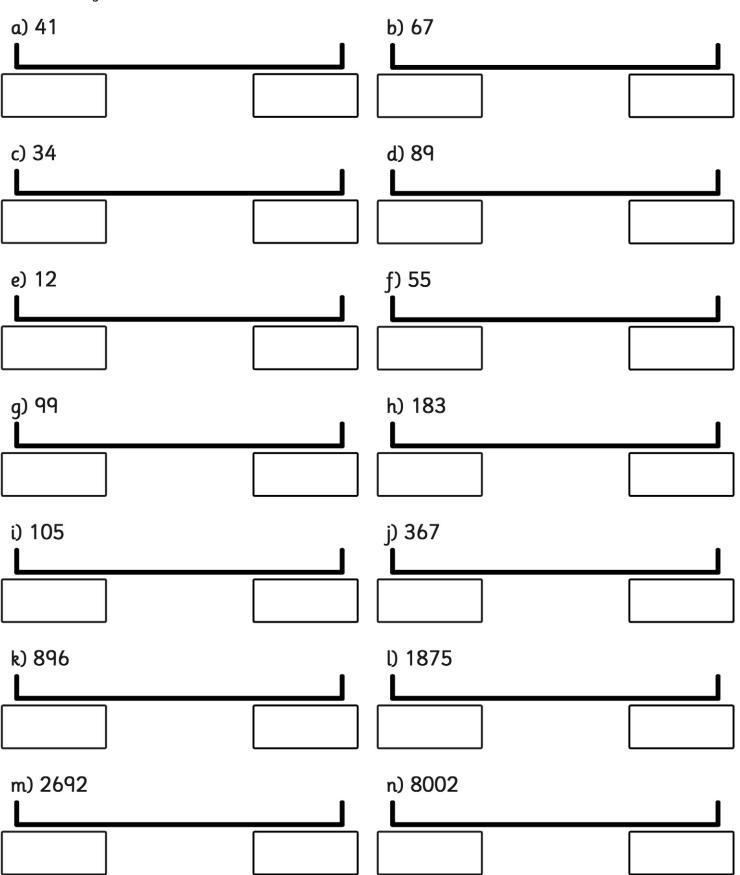






Rounding to the Nearest 10 Worksheet 1

Write the tens either side of the given number and mark it approximately on the number line. Then circle the 10 to which the given number is closer.





Rounding to the Nearest 10 Worksheet 2

Round the following numbers to the nearest 10.

44	95 →	1983	10 783 →
78 →	123	5623	19 878 →
16	176	9012	28 003 →
3 →	299 →	7995 →	37 997 →
89 →	364 →	6003	191 012
32 →	782 →	5786 →	398 908 →

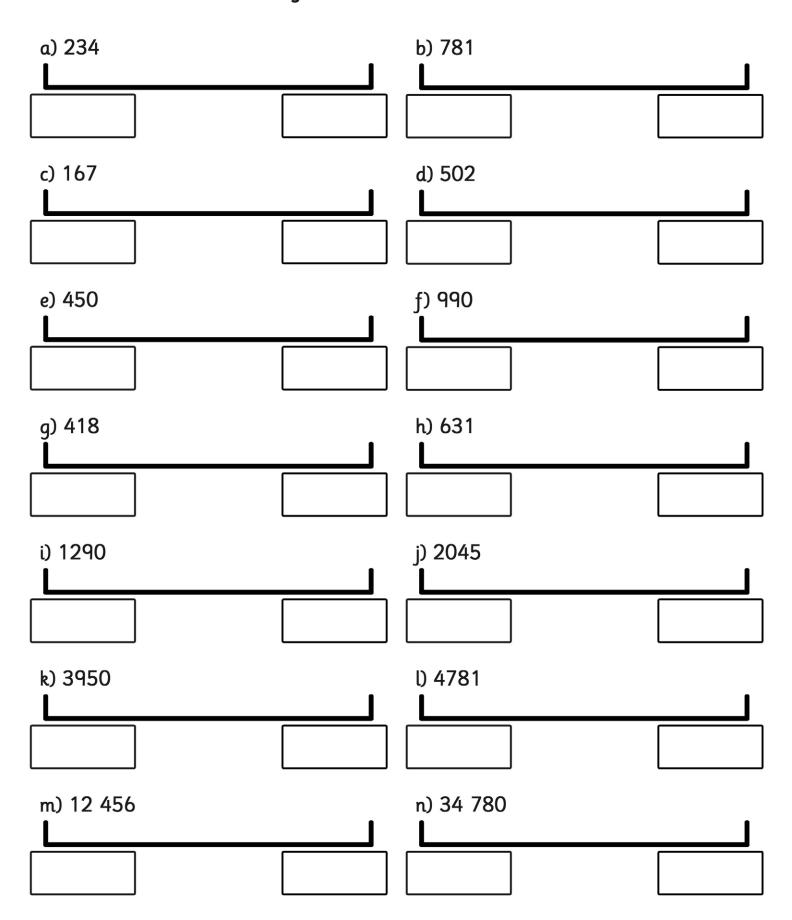
Round the following numbers to the nearest 10 km.

Places	Distance	to the nearest 10km
Sheffield to London	257km	
Liverpool to Birmingham	141km	
Manchester to Bristol	113km	
Norwich to Plymouth	506km	
Leeds to Swansea	339km	
Blackpool to York	144km	
Newcastle to Brighton	528km	
Oxford to Exeter	221km	
Portsmouth to Carlisle	525km	



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Rounding to the Nearest 100 Worksheet 1





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Rounding to the Nearest 100 Worksheet 2

Round the following numbers to the nearest 100.

341 →	83	3009 →	67 430 →
789 →	560 →	4762	109 052 →
145>	932	8420	279 973 →
35 →	895 →	9562 →	300 013 →
676 →	1804 →	12 745 →	413 413 →
423 →	2398 →	34 562 →	399 968 →

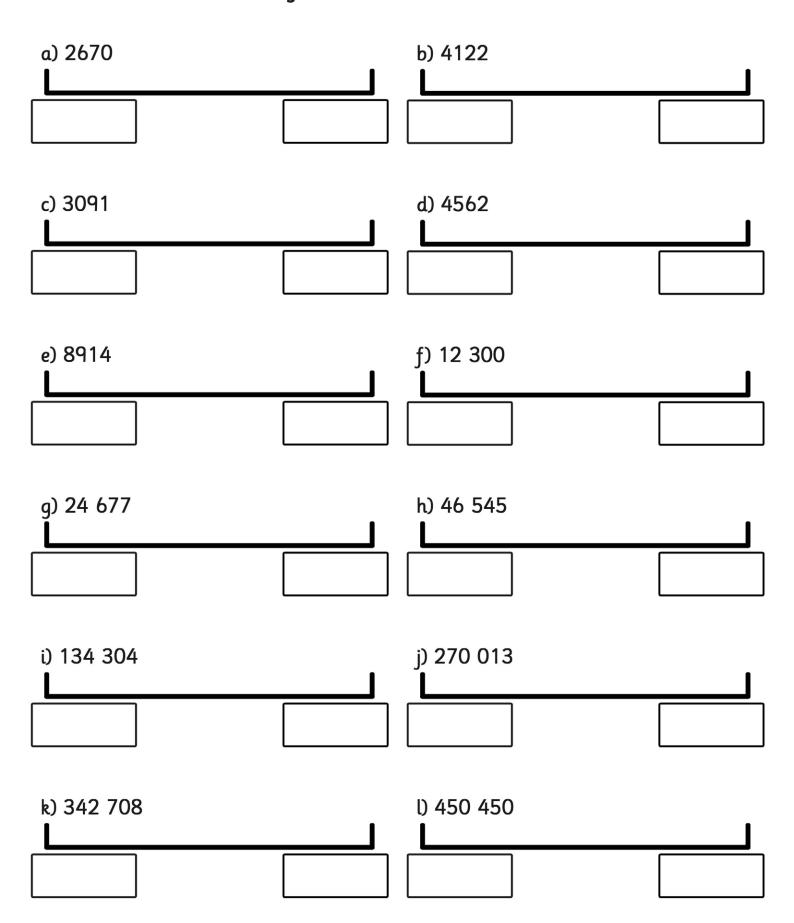
Round the following numbers to the nearest 100km.

Places	Distance	to the nearest 100km
Budapest to Zagreb	345km	
Milan to Barcelona	824km	
Bucharest to Sarajevo	796km	
London to Berlin	1050km	
Vienna to Amsterdam	1069km	
Warsaw to Geneva	1427km	
Munich to Madrid	1759km	
Istanbul to The Haugue	2593km	
Paris to Moscow	2762km	



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Rounding to the Nearest 1000 Worksheet 1





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The Nearest 1000

Round the following numbers to the nearest 1000.

1804	12 532	190 870
2398	24 665	207 207
7804 →	31 500	345 828 →
2398	45 838 →	199 666
2502 →	66 112	451 727 →
2398 →	71 008	999 700>

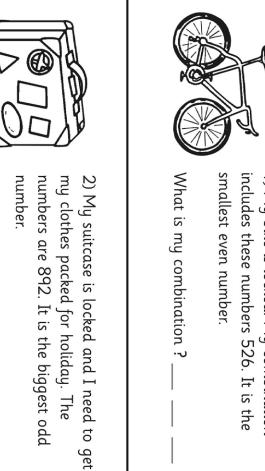
Round the following numbers to the nearest 1000km.

Places	Distance	to the nearest 1000km
London to New York	5540km	
Rio De Janeiro to Madrid	8140km	
Cape Town to Rome	8450km	
Perth to Sydney	3300km	
Beijing to Washington	11 200km	
Boston to Delhi	11 500km	
Buenos Aires to Berlin	11 900km	
Christchurch to Paris	19 100km	
Earth to the Moon	384 403km	



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Oh No! I have Forgotten My Number Worksheet



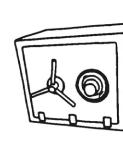
smallest even number. includes these numbers 526. It is the My bike is locked. My combination

What is my combination?



number using 8657. digits and it is the smallest possible 4) My padlock has a combination. It is 4

What is my combination?



money. The numbers are 7431. It is the smallest even number. 5) I need to open my safe for some





order of the numbers. The other numbers begins with a 3, but I can't remember the 3) My gate is locked . I know the number

What is my combination?

are 519. It is the biggest number.

What is my combination? 3

key in my code to turn it off. The numbers are 5860. It is the largest odd number. 6) My alarm has gone off and I need to

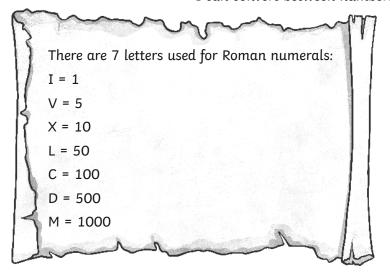
What is my combination?



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Introduction to Roman Numerals and First Activities

I can convert between numbers and Roman numerals.





Numbers other than those above are made by creating simple sums e.g.

Number	Sum	Roman Numeral
12	10 + 2	XII
7	5 + 2	VII

When adding numerals to make a number, the extra digit is placed to the right of the largest number e.g.				
13	10 + 3	XIII		
To stop numerals getting too big, only three of the same value are allowed in a row. To help with this we can show a number by 'subtracting' a numeral e.g.				
9	1 less than 10	IX		
The letter being removed goes before the larger number. There is only ever one letter subtracted.				

Work through these further examples to help you understand more fully;

Number	Sum	Roman Numeral
8	5 + 3	VIII
19	10 + 9	XIX
43	40 + 3	XLIII
90	100 - 10	xc



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1. Can you write the numbers from 1-10 to help you with the questions to follow?

1 =	

2. Try these...

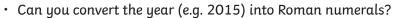
Number	Sum	Roman Numeral
a. 26		
b. 17		
c. 29		
d. 30		

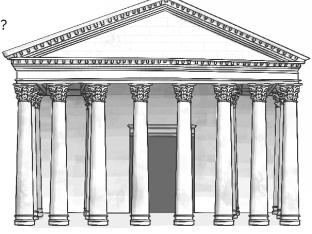
3. Now try these...

4. A little bit harder...

5. Final challenges...

• Can you convert today's date into Roman numerals? ____/___





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Roman Numerals and Numbers To 100 Matching Worksheet

100 LI **XCIX** 29 33 94 **XXVI 75 LXVIII** 26 **XLVIII** 51 **XXIX** 48 **XXXIII** 68 **XCIV** 99 **LXXV**



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