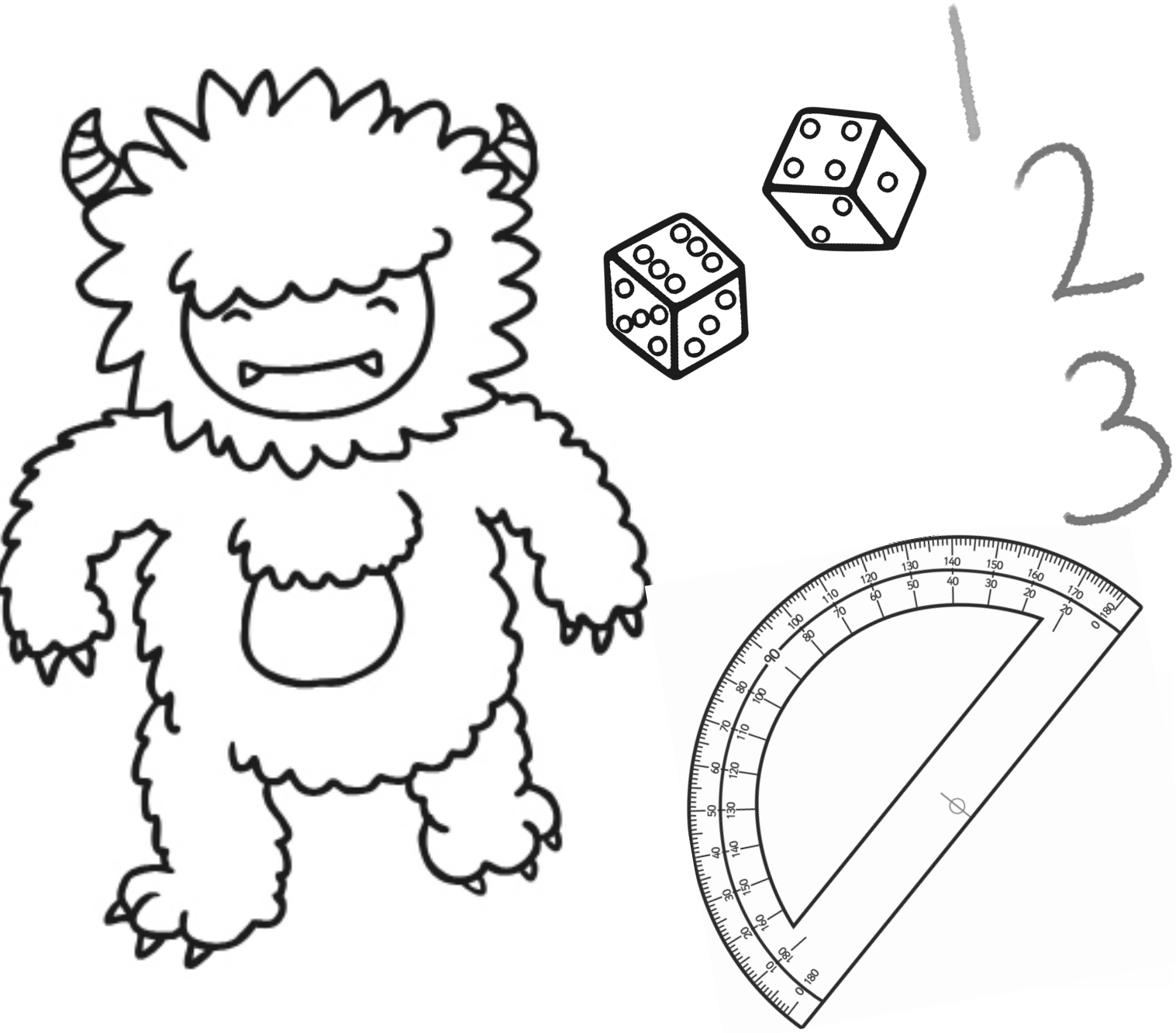
Year 3 Maths Number and Place Value Workbook - Answers



Home Learning Year 3 Maths Workbook Pack

Year 3 Programme of Study – Number and Place Value

Statutory Requirements	Worksheet	Page Number	vNotes
Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number	Counting in 4s, 8s, 50s and 100s worksheet. 10 More 10 Less Worksheet 100 More 100 Less Robots Activity Sheets 1, 2 and 3	3 - 8	
Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)	Maths Magician Partitioning Worksheet Hundreds, Tens and Units Hundreds and Ones Number Partitioning Worksheet	9 - 12	
Compare and order numbers up to 1000	Ordering Numbers to 1000 Worksheet 1 and 2	13 - 14	
Identify, represent and estimate numbers using different representations	Estimate Addition Calculations Worksheet Estimate Subtraction Calculation Worksheet Estimate Money Calculations Worksheet Representing Numbers Using Base 10 Estimate on 0-1000 Number Line Worksheet Estimate on Different Number Lines Worksheet	15 - 20	
Read and write numbers up to 1000 in numerals and in words	Writing Numbers in Words	21 – 23	
Solve number problems and practical problems involving these ideas.	Estimation Reading Speedometers Solving Number Problems Using Number Representation	24 - 27	

Counting in 4s, 8s, 50s and 100s

Complete the following sequences:

a) 4 8 12 16 20 24

b) 64 56 48 40 32 24

c) 50 100 150 200 250 300

d) 900 800 700 600 500 400

e) 56 60 64 68 72 76

f) 72 64 56 48 40 32

g) 350 400 450 500 550 600

h) 1100 1000 900 800 700 600

i) 92 88 84 80 76 72

j) 80 88 96 104 112 120

Continue the following sequences:

k) 4 8 12 16 20 24 28 32 36 40 44 48 52 56

l) 8 16 24 32 40 48 56 64 72 80 88 96 104 112

m) 50 100 150 200 250 300 350 400 450 500 550 600 650 700

n) 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400

o) 80 84 88 92 96 100 104 108 112 116 120 124 128 132

p) 1250 1200 1150 1100 1050 1000 950 900 850 800 750 700 650

q) 144 136 128 120 112 104 96 88 80 72 64 56 48 40

r) 1500 1400 1300 1200 1100 1000 900 800 700 600 500 400 300

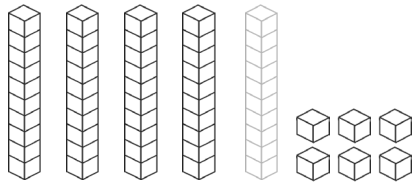
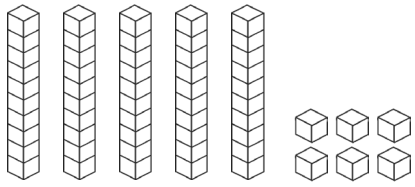
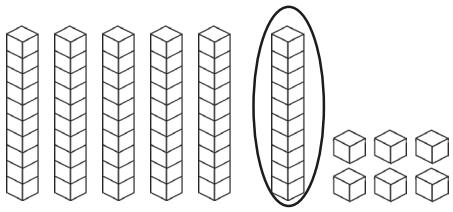
s) 124 120 116 112 108 104 100 96 92 88 84 80 76 72

Challenge

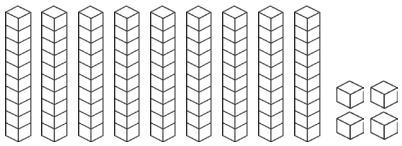
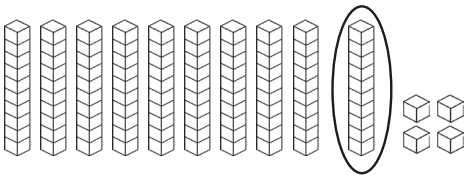
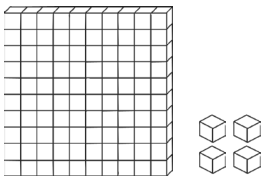
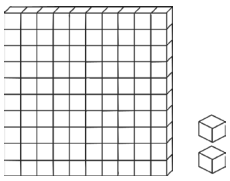
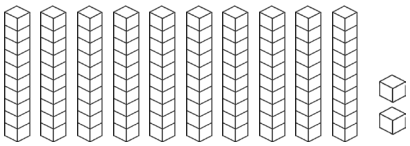
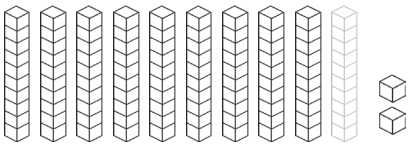
Explain the relationship between counting in 4s and 8s and compare this to the relationship between counting in 50s and 100s.

10 More and 10 Less Worksheet

Adding or subtracting 10 can be done by representing or imagining a number as hundreds, tens and units and simply adding or removing one of the tens e.g.

		
56 - 10 = 46	56	56 + 10 = 66

Sometimes you will make a new hundred or need to break a hundred down into tens to be able to do this. e.g.

94 	94 + 10 	94 + 10 = 104  10 lots of 10 = 100 so a new 100 is made.
102 	102 - 10 We need to work with 10s so we break the hundred down into 10 lots of 10. 	102 - 10 = 92 Then we can take one away. 

1. Try these. Draw the hundreds, tens and units if you wish.

1. 43 – 10 = **33**
2. 27 + 10 = **37**
3. 59 – 10 = **49**
4. 38 + 10 = **48**
5. 97 + 10 = **107**
6. 107 – 10 = **97**
7. 153 + 10 = **163**
8. 195 + 10 = **205**

1. Try these. Draw the hundreds, tens and units if you wish.

2. Can you fill in the missing numbers in these pieces snipped from number squares? Don't forget you can have number squares that are bigger than 0-100

1.

	36	
45	46	**47**
	56	

2.

	7	
16	17	**18**
	27	

3.

	53	
62	**63**	64
	73	

4.

	42	
51	**52**	**53**
	62	

5.

	88	
97	**98**	**99**
	108	

6.

	93	
102	103	**104**
	113	

7.

	126	
135	**136**	**137**
	146	

8.

	184	
193	**194**	**195**
	204	

3. Look at the amounts these children have saved. How much would they have if they spent £10 or if they saved £10 more?

1.

- £10	£37	+ £10

2.

£3	£13	**£23**

3.

£38	£48	**£58**

4.

£83	£93	**£103**

5.

£99	£109	**£119**

6.

£121	£131	**£141**

7.

£0	£10	**£20**

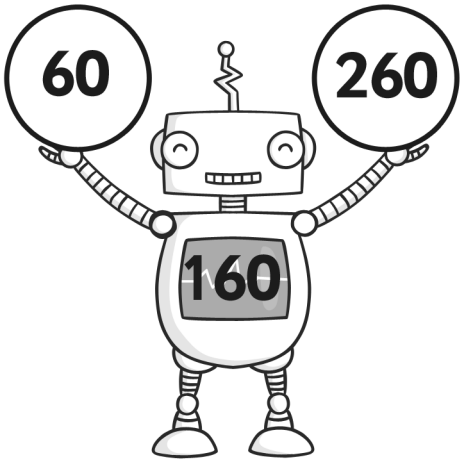
8.

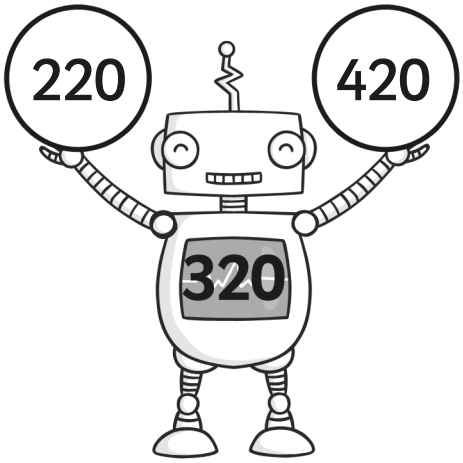
£188	£198	**£208**

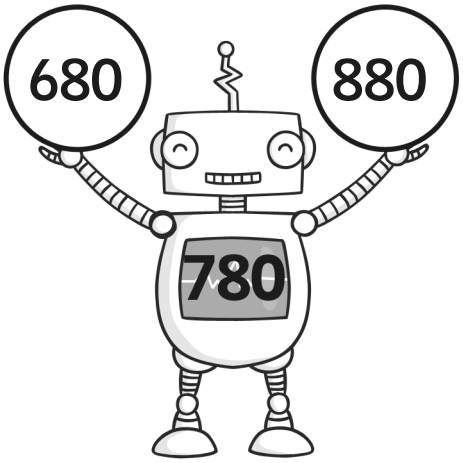
100 More 100 Less Worksheet 1

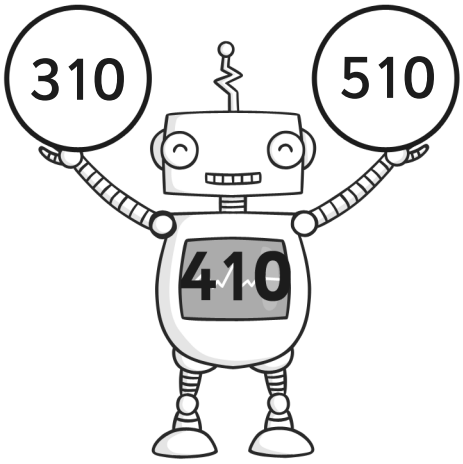
Can you find 100 more than and 100 less than the number in the robot's tummy?

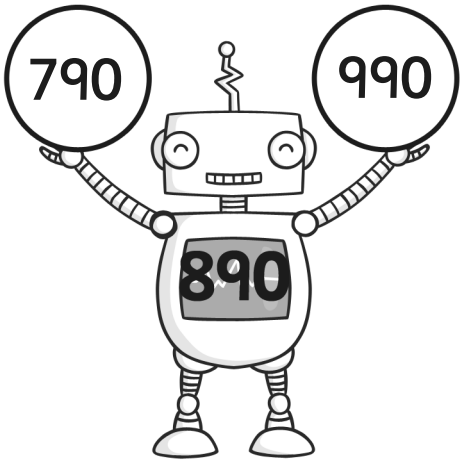
E.g.

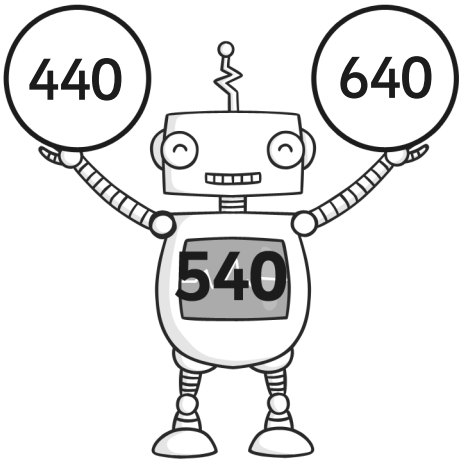


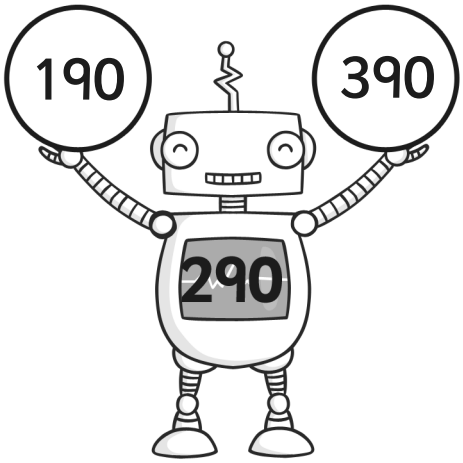


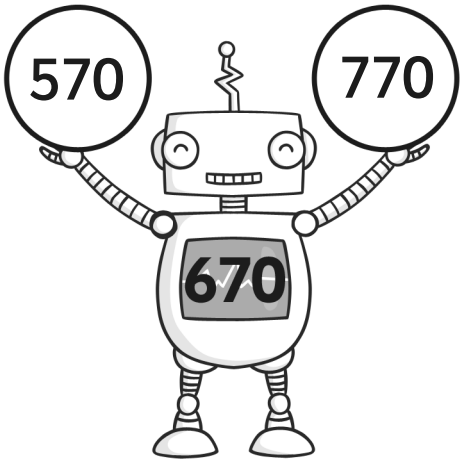


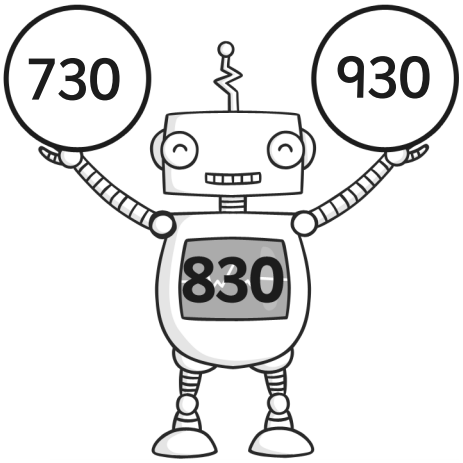








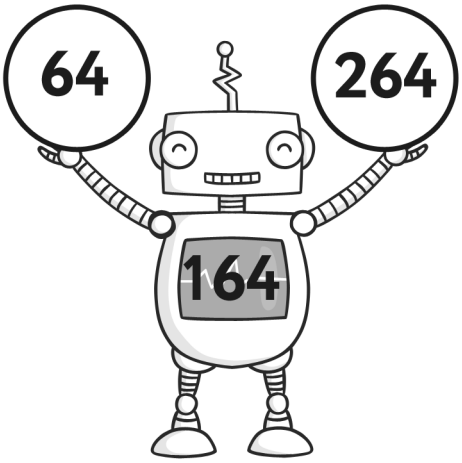


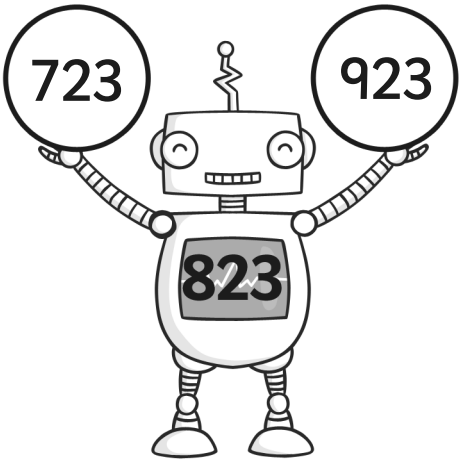


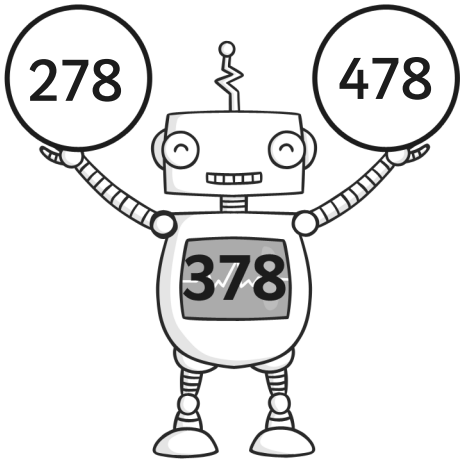
100 More 100 Less Worksheet 2

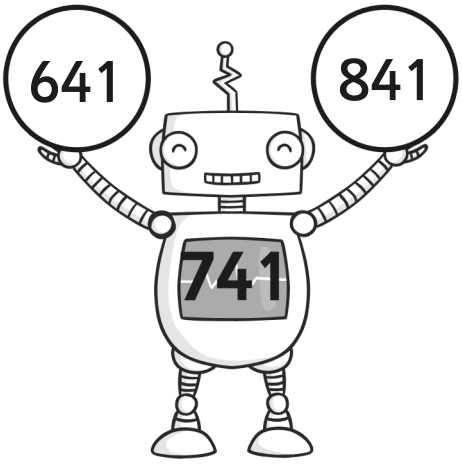
Can you find 100 more than and 100 less than the number in the robot's tummy?

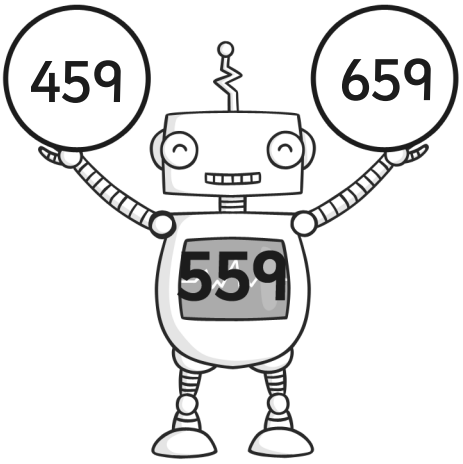
E.g.

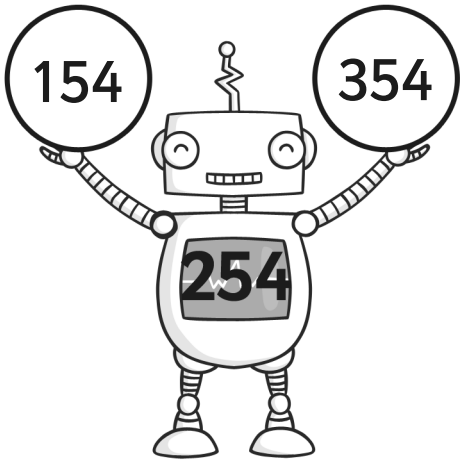


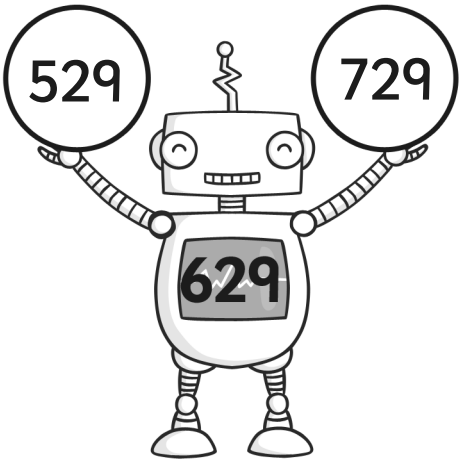


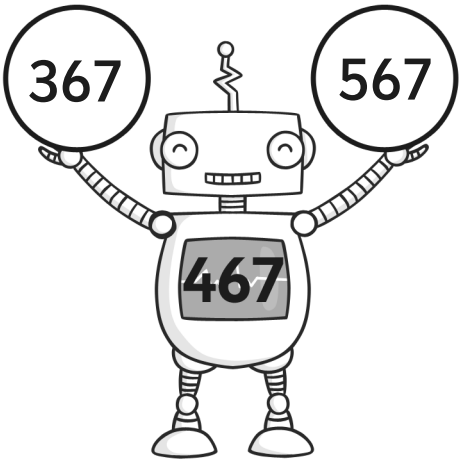


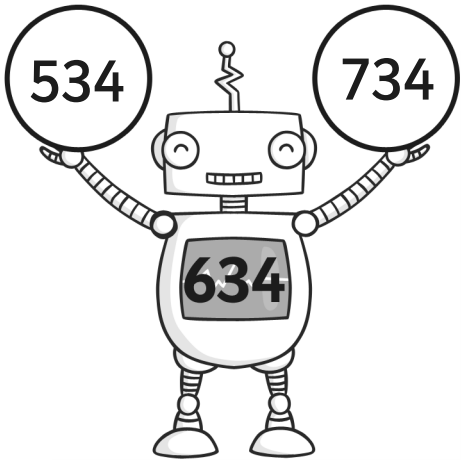








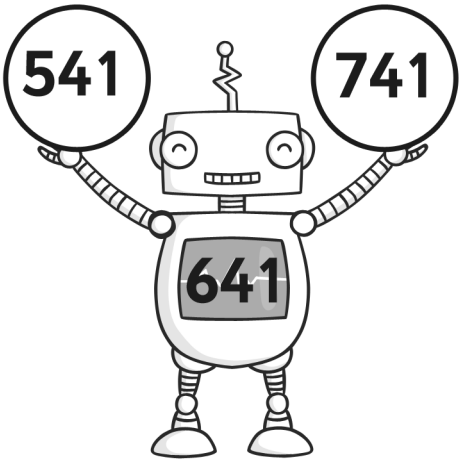


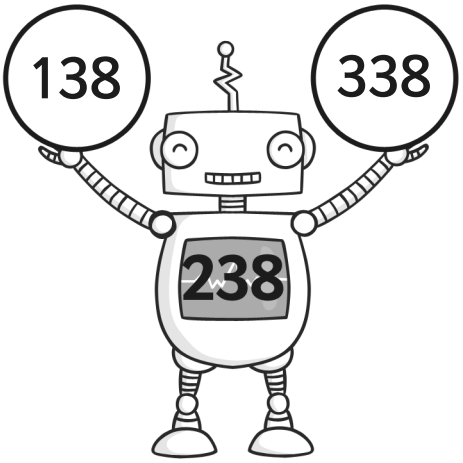


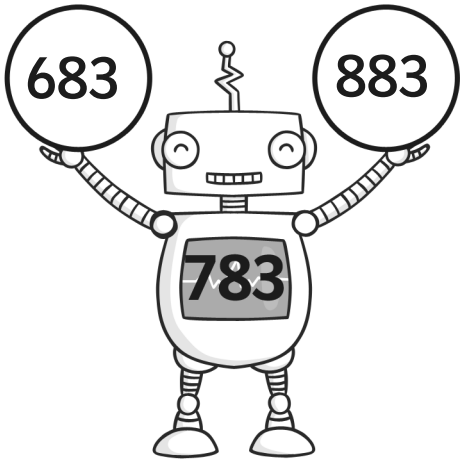
100 More 100 Less Worksheet 3

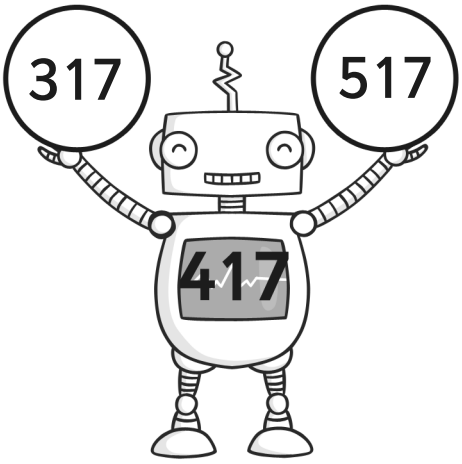
Can you find 100 more than and 100 less than the number in the robot's tummy?

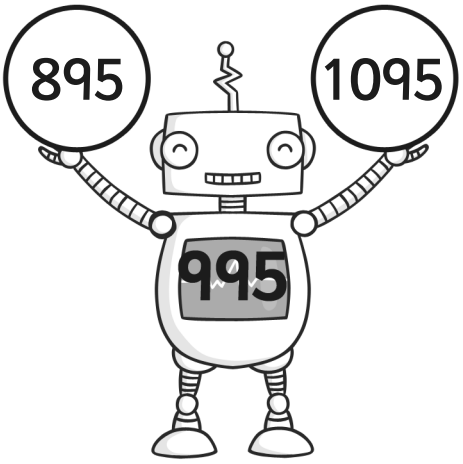
E.g.

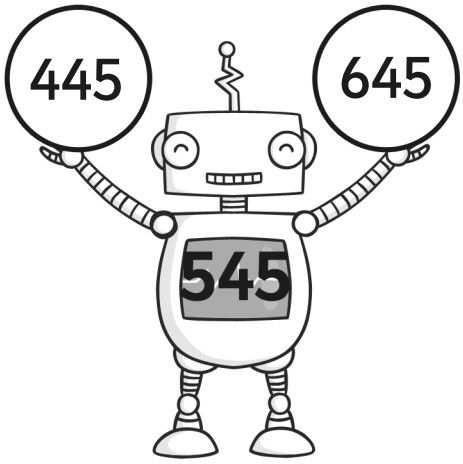


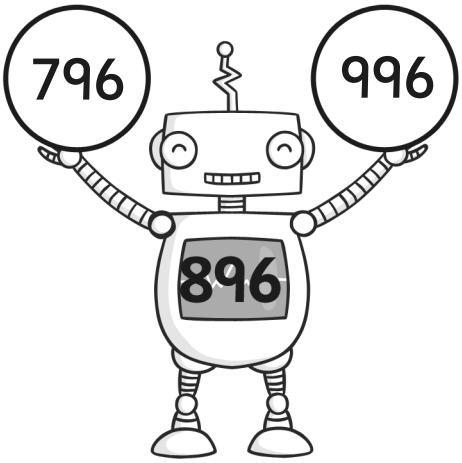


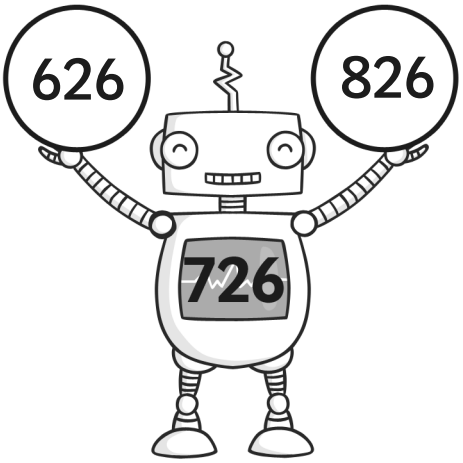


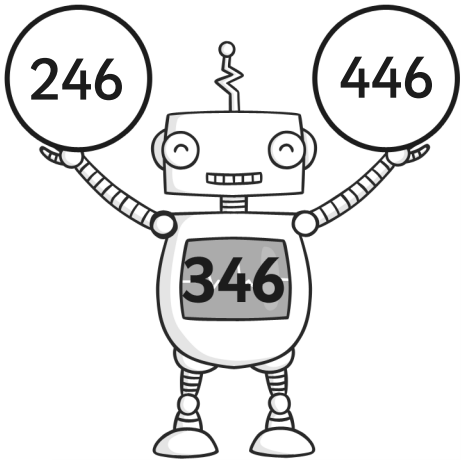




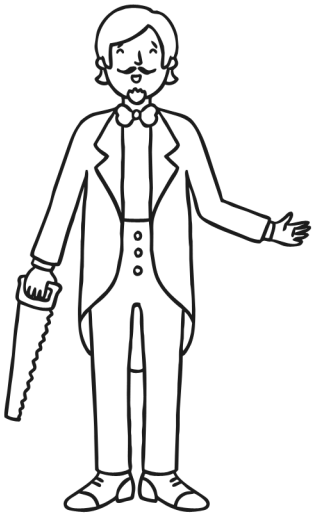








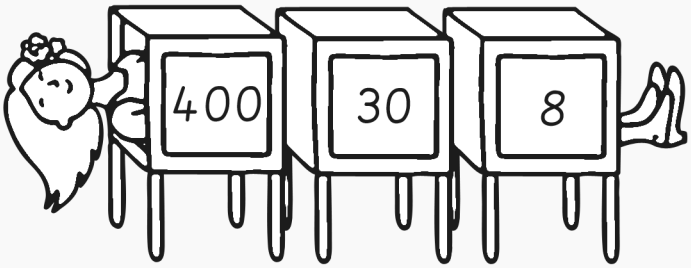
Maths Magician Partitioning Worksheet Hundreds, Tens and Units



Can you put these numbers into hundreds, tens and units?

For example:

438 =



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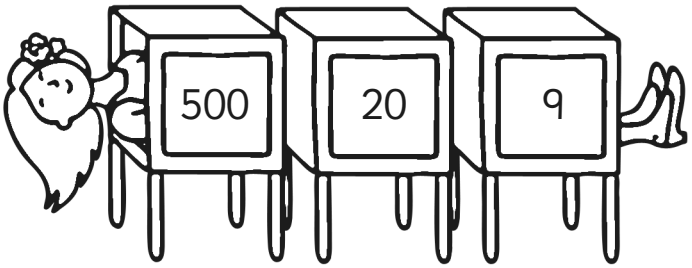

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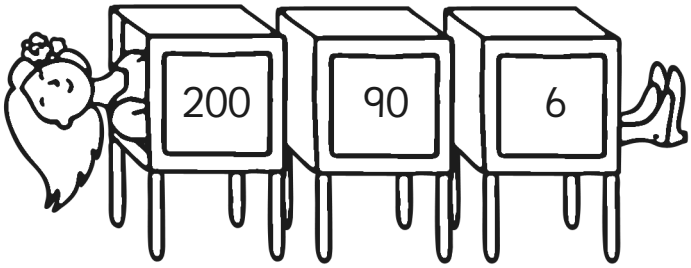

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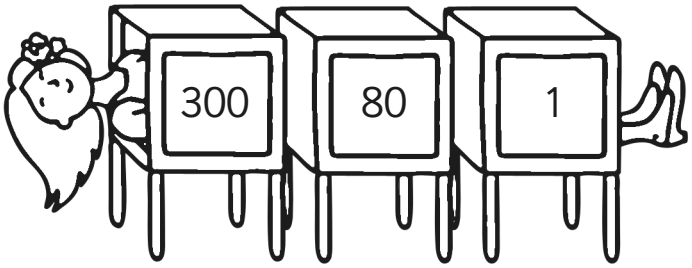

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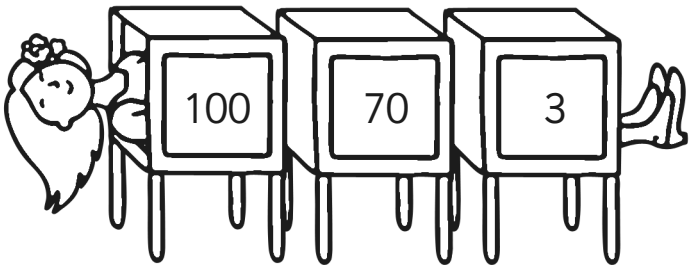

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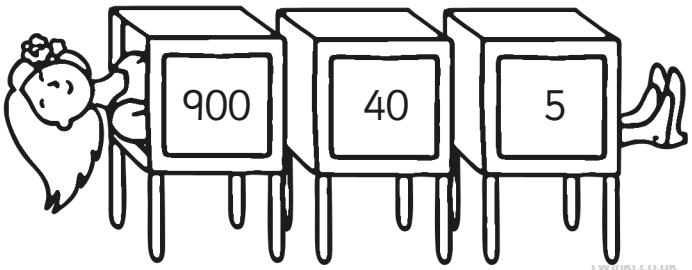

Number Partitioning Worksheet 1

1. 47 = 40 + 7

2. 56 = 50 + 6

3. 72 = 70 + 2

4. 34 = 30 + 4

5. 45 = 40 + 5

6. 11 = 10 + 1

7. 10 = 10 + 0

8. 99 = 90 + 9

9. 253 = 200 + 50 + 3

10. 146 = 100 + 40 + 6

11. 929 = 900 + 20 + 9

12. 728 = 700 + 20 + 8

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Number Partitioning Worksheet 2

1. 555 = 500 + 50 + 5

2. 632 = 600 + 30 + 2

3. 211 = 200 + 10 + 1

4. 823 = 800 + 20 + 3

5. 129 = 100 + 20 + 9

6. 512 = 500 + 10 + 2

7. 655 = 600 + 50 + 5

8. 840 = 800 + 40 + 0

9. 154 = 100 + 50 + 4

10. 974 = 900 + 70 + 4

11. 770 = 700 + 70 + 0

12. 821 = 800 + 20 + 1

Number Partitioning Worksheet 3

1. 1247 = 1000 + 200 + 40 + 7

2. 2352 = 2000 + 300 + 50 + 2

3. 4285 = 4000 + 200 + 80 + 5

4. 3462 = 3000 + 400 + 60 + 2

5. 1456 = 1000 + 400 + 50 + 6

6. 1111 = 1000 + 100 + 10 + 1

7. 6735 = 6000 + 700 + 30 + 5

8. 9563 = 9000 + 500 + 60 + 3

9. 8253 = 8000 + 200 + 50 + 3

10. 9146 = 9000 + 100 + 40 + 6

11. 1029 = 1000 + 0 + 20 + 9

12. 3728 = 3000 + 700 + 20 + 8

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Ordering Numbers to 1000 Worksheet 1

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

21 26 12 16 29

12 16 21 26 29

76 66 17

17 67 66 77 67 76 77

48 49 44 94 84

44 48 49 84 94

16 61 18 81 14

14 16 18 61 81

720 270 170 710 210

170 210 270 710 720

Ordering Numbers to 1000 Worksheet 2

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

212 221 202 201 222

201 202 212 221 222

675 567 576 657 756

567 576 657 675 756

902 912 921 919 909

902 909 912 919 921

612 621 532 602 512

512 532 602 612 621

369 936 963 396 693

369 396 693 936 963

Estimating Addition Calculations

1. Which of these calculations give an answer of about 50? 34 + 17 13 + 45 28 + 31 45 + 18	2. Which of these calculations give an answer of about 60? 37 + 23 31 + 16 17 + 53 39 + 29	3. Which of these calculations give an answer of about 80? 72 + 25 47 + 31 29 + 32 35 + 27	4. Which of these calculations give an answer of about 100? 87 + 26 14 + 98 82 + 17 45 + 67	5. Which of these calculations give an answer of about 120? 84 + 23 46 + 76 98 + 32 53 + 56
6. Which of these calculations give an answer of about 150? 76 + 77 63 + 76 125 + 41 95 + 43	7. Which of these calculations give an answer of about 200? 120 + 60 50 + 180 130 + 70 140 + 160	8. Which of these calculations give an answer of about 300? 150 + 175 205 + 90 105 + 175 75 + 220	9. Which of these calculations give an answer of about 400? 234 + 129 294 + 213 301 + 102 241 + 156	10. Which of these calculations give an answer of about 110? 87 + 26 14 + 98 82 + 17 45 + 67
11. Which of these calculations give an answer of about 250? 124 + 221 113 + 135 26 + 231 175 + 55	12. Which of these calculations give an answer of about 350? 237 + 114 290 + 98 104 + 216 98 + 228	13. Which of these calculations give an answer of about 500? 245 + 275 135 + 450 285 + 180 345 + 160	14. Which of these calculations give an answer of about 750? 534 + 220 235 + 480 150 + 563 378 + 330	15. Which of these calculations give an answer of about 1000? 901 + 156 139 + 786 456 + 553 782 + 214

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Estimating Subtraction Calculations

1. Which of these calculations give an answer of about 10? 34 - 23 65 - 45 27 - 12 98 - 77	2. Which of these calculations give an answer of about 20? 45 - 18 39 - 29 37 - 16 31 - 17	3. Which of these calculations give an answer of about 30? 92 - 54 31 - 12 115 - 76 76 - 47	4. Which of these calculations give an answer of about 40? 77 - 26 114 - 98 87 - 46 45 - 17	5. Which of these calculations give an answer of about 50? 84 - 23 124 - 76 98 - 32 53 - 11
6. Which of these calculations give an answer of about 60? 76 - 17 63 - 11 125 - 54 95 - 43	7. Which of these calculations give an answer of about 70? 120 - 60 250 - 180 130 - 70 200 - 160	8. Which of these calculations give an answer of about 80? 150 - 75 205 - 120 220 - 150 300 - 220	9. Which of these calculations give an answer of about 90? 234 - 129 294 - 213 301 - 102 241 - 153	10. Which of these calculations give an answer of about 100? 324 - 221 113 - 35 226 - 31 175 - 55
11. Which of these calculations give an answer of about 150? 237 - 114 290 - 98 404 - 216 380 - 228	12. Which of these calculations give an answer of about 200? 490 - 265 431 - 239 835 - 670 496 - 267	13. Which of these calculations give an answer of about 250? 345 - 98 513 - 245 268 - 31 459 - 181	14. Which of these calculations give an answer of about 350? 934 - 627 513 - 135 428 - 231 465 - 112	15. Which of these calculations give an answer of about 500? 934 - 427 613 - 145 728 - 231 1045 - 518

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Estimating Money Calculations

1. Which of these calculations give an answer of about 20p? 11p + 17p 6p + 15p 5p + 9p 12p + 18p	2. Which of these calculations give an answer of about 30p? 17p + 16p 21p + 14p 19p + 21p 23p + 17p	3. Which of these calculations give an answer of about 40p? 22p + 25p 31p + 21p 29p + 27p 14p + 27p	4. Which of these calculations give an answer of about 50p? 27p + 26p 14p + 28p 35p + 26p 41p + 18p	5. Which of these calculations give an answer of about 25p? 8p + 23p 10p + 9p 17p + 10p 11p + 22p
6. Which of these calculations give an answer of about 75p? 7p + 70p 50p + 24p 18p + 41p 42p + 43p	7. Which of these calculations give an answer of about £1? 70p + 60p 50p + 40p 30p + 70p 20p + £1	8. Which of these calculations give an answer of about £2? £1.50 + £1.25 £1.05 + 90p £1.05 + £1.20 75p + £2.20	9. Which of these calculations give an answer of about £3? £2.34 + 29p £1.45 + £1.53 £2.01 + £1.02 £2.41 + £1.36	10. Which of these calculations give an answer of about £1.50? £1.24 + 35p £1 + 23p 76p + 72p £0.75 + £0.55
11. Which of these calculations give an answer of about £2.50? £2.17 + £1.14 90p + 98p £1.02 + £1.16 76p + £1.78	12. Which of these calculations give an answer of about £3.50? £1.90 + £1.65 £3 + 29p £1.35 + £3.00 96p + £2.67	13. Which of these calculations give an answer of about £5? £1.23 + £2.75 £1.35 + £4.40 £2.75 + £1.90 £4.45 + 60p	14. Which of these calculations give an answer of about £7.50? £3.20 + £2.30 £3.50 + £4.60 £1.50 + £6.10 £3.78 + £3.74	15. Which of these calculations give an answer of about £10? £9 + 40p £1.20 + £8.10 £3.60 + £4.50 £7 + £3.10

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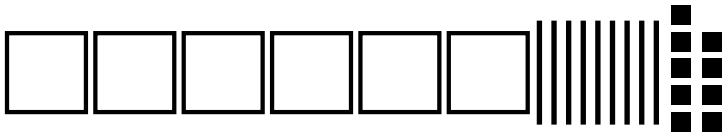
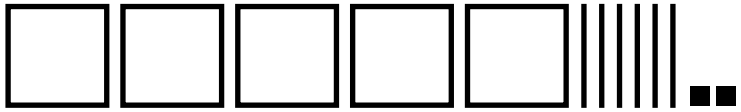
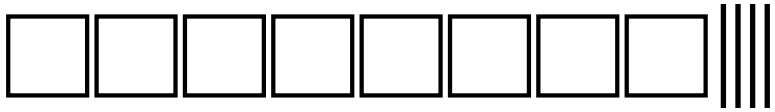
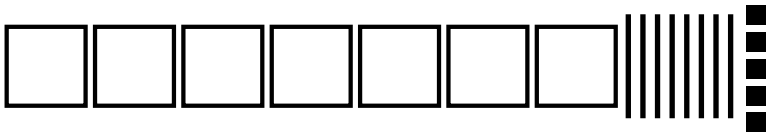
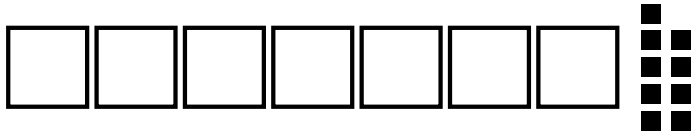
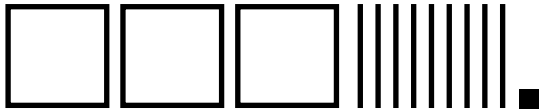
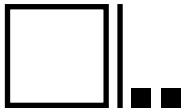
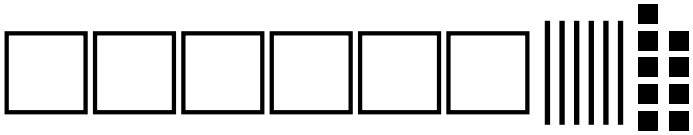
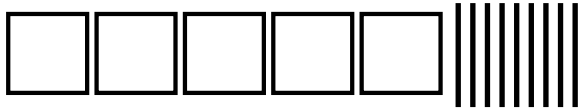
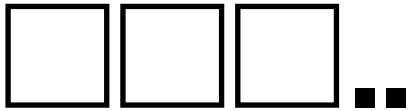
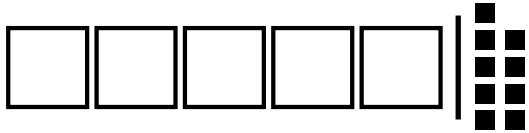
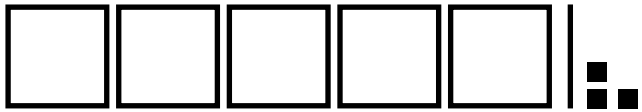
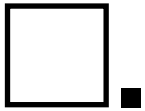
Representing Numbers Using Base 10

243		699	
562		840	
785		709	
391		112	
669		590	
402		519	
513		101	

Estimate on 0-1000 Number Line Worksheet

a) 459

b) 213

c) 987

d) 753

e) 289

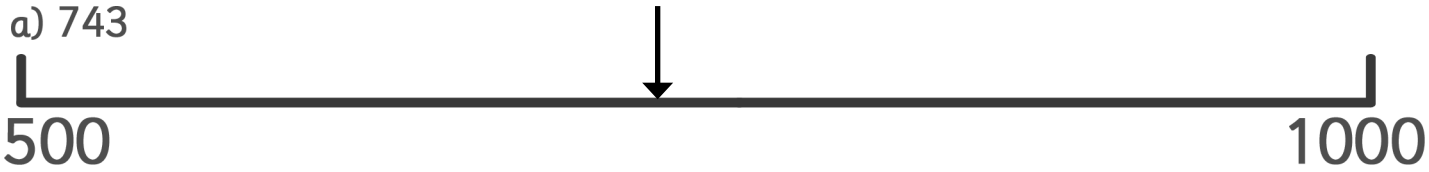
f) 672

g) 31

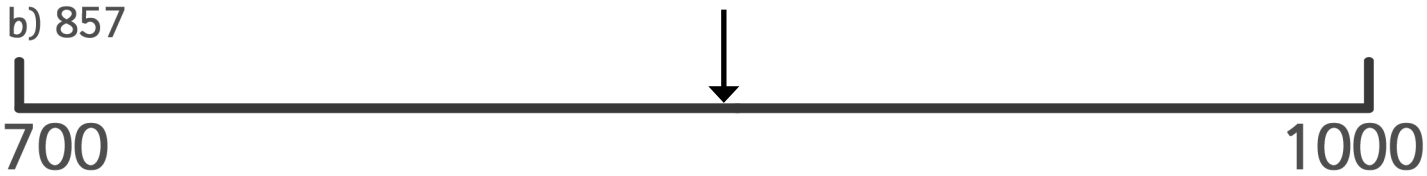
h) 814

Estimate on Different Number Lines Worksheet

a) 743

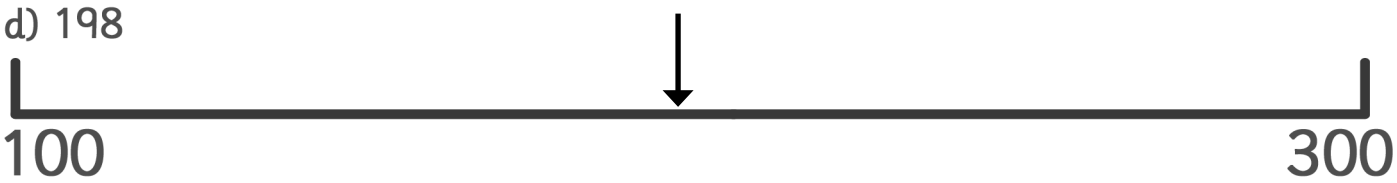


b) 857



c) 387

d) 198



e) 449

f) 576

g) 610

h) 841

i) 338

Writing Numbers in Words

Write the following numbers in words:

243	Two hundred and forty three
562	Five hundred and sixty two
785	Seven hundred and eighty five
391	Three hundred and ninety one
669	Six hundred and sixty nine
402	Four hundred and two
513	Five hundred and thirteen
699	Six hundred and ninety nine
840	Eight hundred and forty
709	Seven hundred and nine
112	One hundred and twelve
590	Five hundred and ninety
519	Five hundred and nineteen
101	One hundred and one

Writing Numbers in Words

Write the following words in numbers:

Three hundred and forty six	346
Six hundred and thirty nine	639
Nine hundred and thirteen	913
Seven hundred and twenty eight	728
Four hundred and six	406
Nine hundred and thirty	930
One hundred and four	104
Five hundred and thirty five	535
Two hundred and twenty two	222
Four hundred and sixty	460
Eight hundred and seventy eight	878
Nine hundred and ninety one	991
One hundred and ninety nine	199
Five hundred and fifteen	515

Writing Numbers in Words

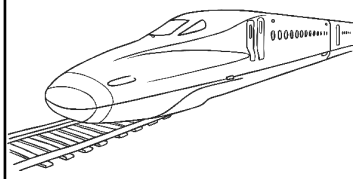
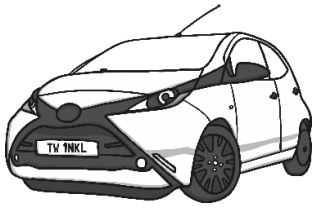
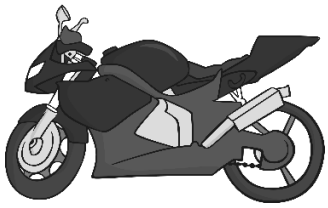
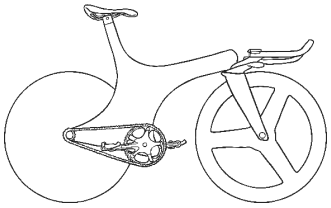
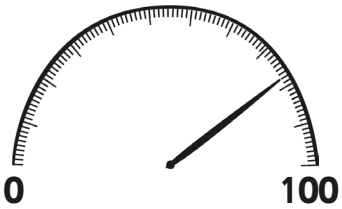
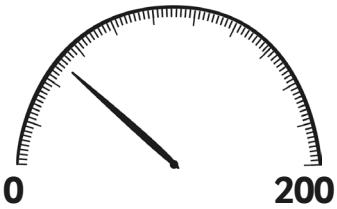
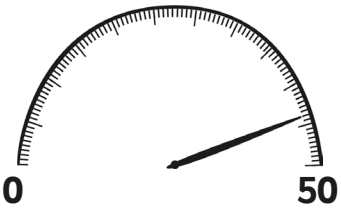
Write the following words into numbers and numbers into words.

Five hundred and sixty one	561
Nine hundred and two	902
Two hundred and fourteen	214
Six hundred and fifty nine	659
Three hundred and twenty seven	327
Four hundred and twelve	412
Eight hundred and eight	808
Eight hundred and eighty	880
Six hundred and sixty	660
Six hundred and sixteen	616
Seven hundred and seventy nine	779
Three hundred and thirty seven	337
Eight hundred and nineteen	819
Seven hundred and forty	740

Estimation – Reading Speedometers

Estimation can be useful in real life situations. Be useful and apply your estimation skills to these situations.

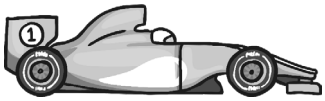
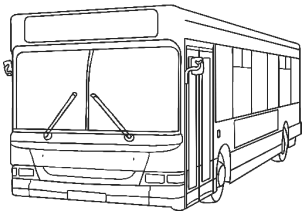
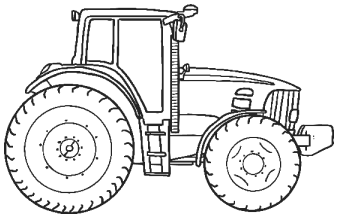
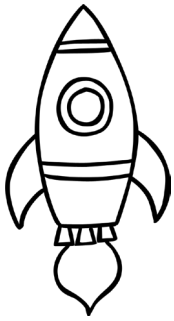
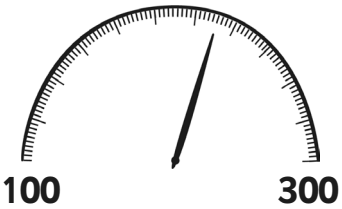
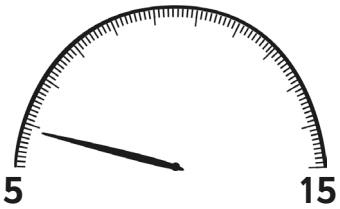
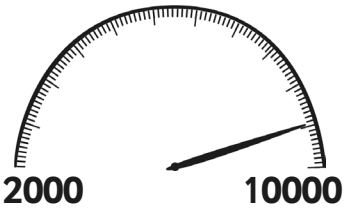
Look at the speed limit signs and the speedometers. Is the driver going **Too Fast!** or **Driving Safely**? The first one is done for you.

1.	2.	3.	4.
			
			
			
Estimated Speed	**Estimated Speed**	**Estimated Speed**	**Estimated Speed**
78	**44**	**50**	**44**
Driving Safely	Driving Safely	Driving Safely	Too Fast!

Estimation – Reading Speedometers

Estimation can be useful in real life situations. Be useful and apply your estimation skills to these situations.

Look at the speed limit signs and the speedometers. Is the driver going **Too Fast!** or **Driving Safely**? The first one is done for you.

1.	2.	3.	4.
			
			
			
Estimated Speed	**Estimated Speed**	**Estimated Speed**	**Estimated Speed**
228	**61**	**6**	**9200**
Too Fast!	Driving safely	Driving safely	Too Fast!

Solving Number Problems Using Number Representation

For each of the problems below, begin by representing the number in the place value chart then complete the calculation by adding or subtracting from the appropriate column.

E.g. The Jones family have 56 fish.

Represent 56 in the chart by using dots or base 10 bars.

Hundreds	Tens	Units

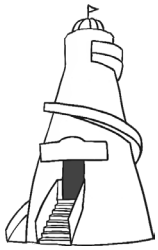
Then read the rest of the question and add or cross out the extra dots or bars needed.

They buy 10 more. How many do they have altogether?

Don't forget to make a new hundred if you have 10 dots or bars in the tens column.

1. 76 people have attended the School Summer Fayre.

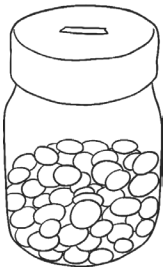
   If 10 go home, how many are left?



Hundreds	Tens	Units	Answer
			66

2. Raj has saved £49.

   His grandmother gives him £10. How much does he have altogether?



Hundreds	Tens	Units	Answer
			£59

3. Bilal collects stamps. He has 326.

   He buys a packet of 100 with his pocket money. How many does he have now?

Hundreds	Tens	Units	Answer
			426

Solving Number Problems Using Number Representation

4. There are 97 guinea pigs in the zoo enclosure.

   10 babies are born. How many are there altogether?

Hundreds	Tens	Units

Answer
107

5. Billy is playing a video game. He has scored 872 points.

   He misses a jump and loses 100 points.

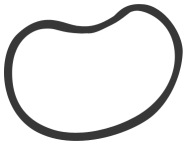
   How many does he have now?

Hundreds	Tens	Units

Answer
772

6. Freya collects 103 conkers.

   She gives 10 of them to a friend. How many does she have left?



Hundreds	Tens	Units

Answer
93

7. There are 372 children in the school.

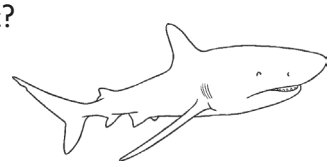
   When a nearby school closes, 110 more children join. How many pupils are there now?

Hundreds	Tens	Units

Answer
482

8. A shark has 295 teeth.

   It loses 110. How many does it have left?



Hundreds	Tens	Units

Answer
185