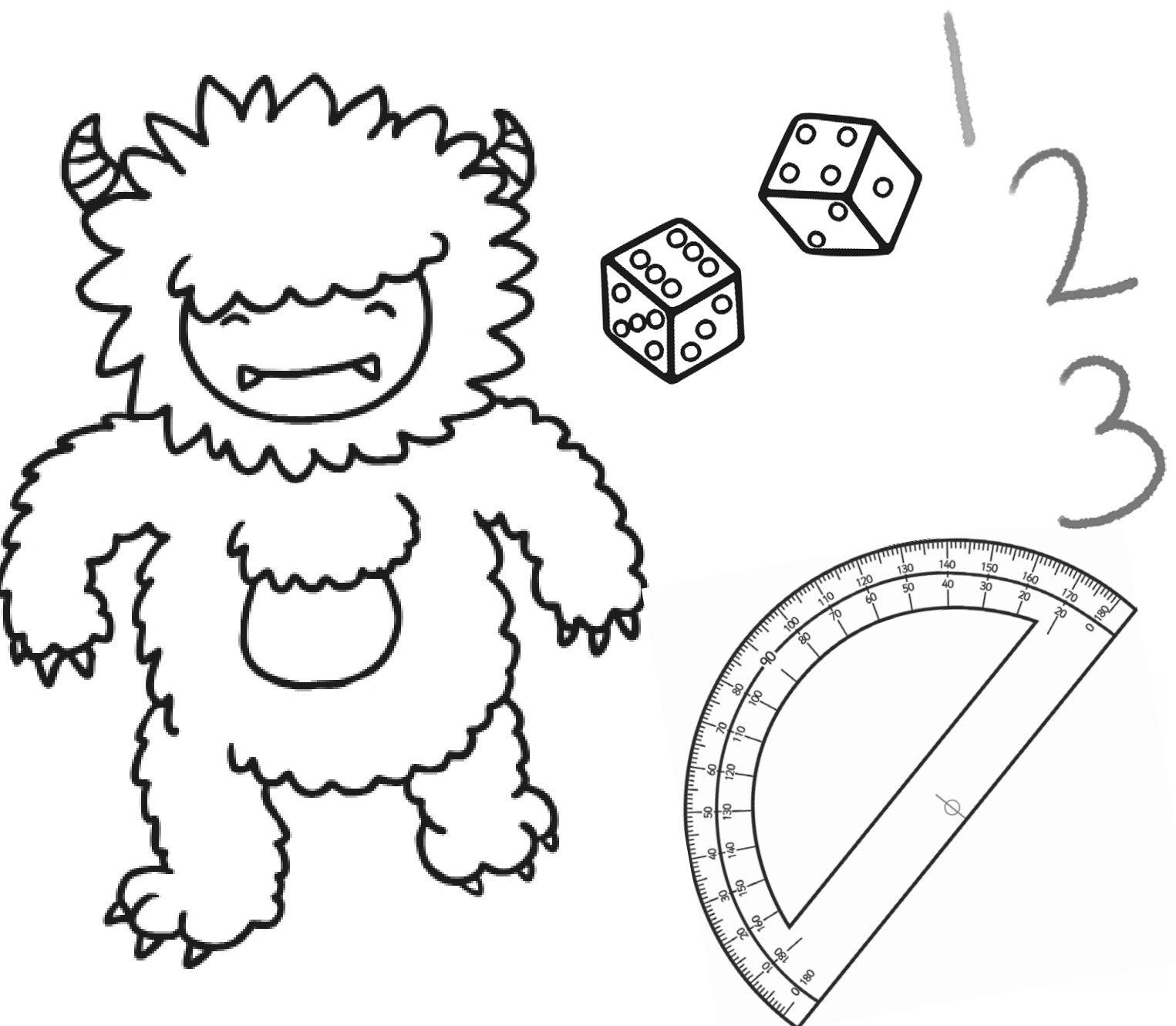# Year 3 Maths Number and Place Value Workbook

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) ___ 8 12 16 20 ___

b) 64 56 ___ 40 ___ 24

c) ___ 100 150 200 ___ 300

d) 900 ___ ___ 600 500 400

e) 56 ___ 64 68 ___ 76

f) ___ 64 56 ___ 40 32

g) 350 400 ___ 500 ___ 600

h) 1100 ___ ___ 800 700 600

i) ___ ___ 84 80 76 72

j) 80 88 ___ ___ 112 120

Continue the following sequences:

k) 4 8 12 __ __ __ __ __ __ __ __ __ __

l) 8 16 24 __ __ __ __ __ __ __ __ __

m) 50 100 150 __ __ __ __ __ __ __ __

n) 100 200 300 __ __ __ __ __ __ __ __

o) 80 84 88 __ __ __ __ __ __ __ __ __

p) 1250 1200 1150 __ __ __ __ __ __ __ __

q) 144 136 128 __ __ __ __ __ __ __ __

r) 1500 1400 1300 __ __ __ __ __ __ __ __

s) 124 120 116 __ __ __ __ __ __ __ __
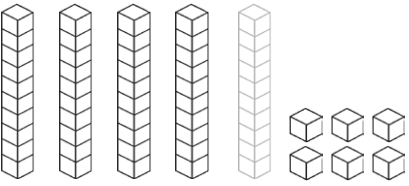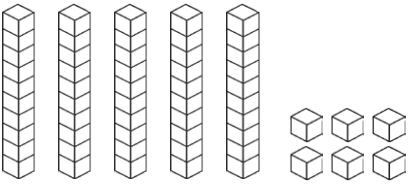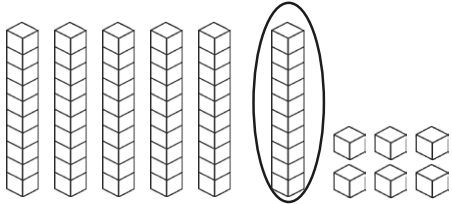
Challenge

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

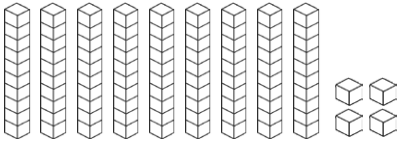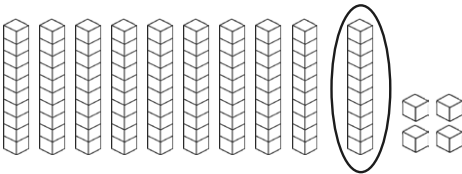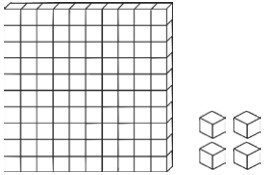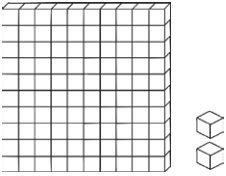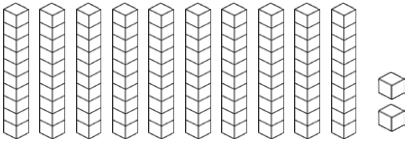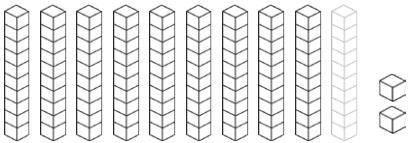# 10 More and 10 Less Worksheet

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.

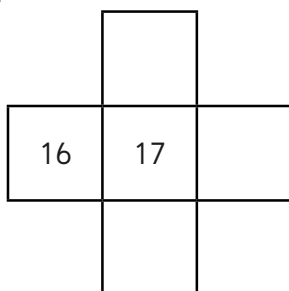1. Try these. Draw the hundreds, tens and units if you wish.

   1. 43 – 10 =

   2. 27 + 10 =

   3. 59 – 10 =

   4. 38 + 10 =

   5. 97 + 10 =

   6. 107 – 10 =

   7. 153 + 10 =

   8. 195 + 10 =

1. 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
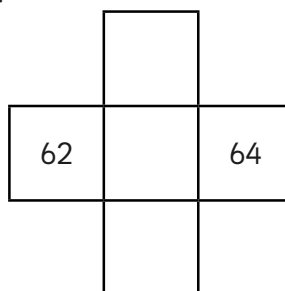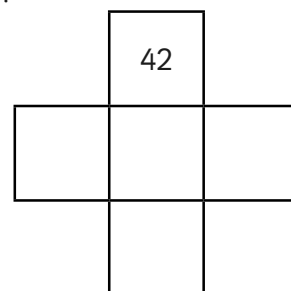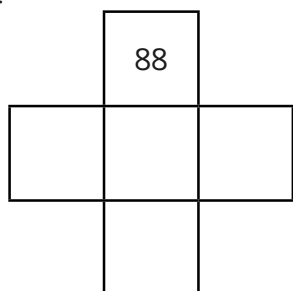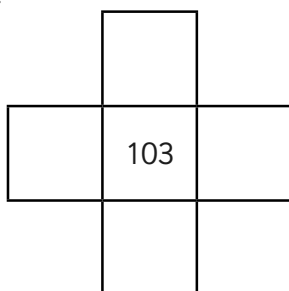
1.

	36	
45	46	

2.

16	17	

3.

62		64

4.

	42

5.

	88	

6.

	103	

7.
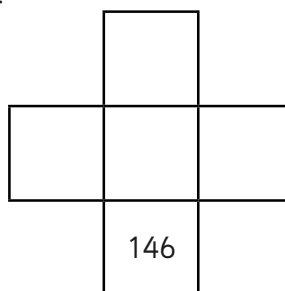
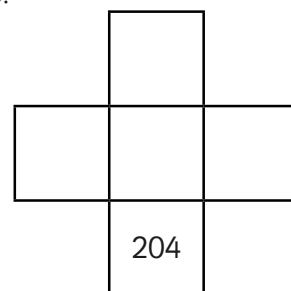| | | |
| | | |
| | 146 | |

8.

	204	
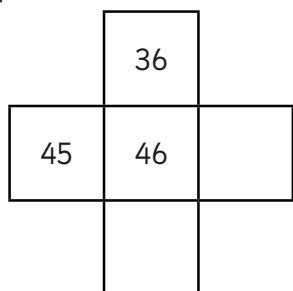
2. Look at the amounts these children have saved. How much would they have if they spent £10 or if they saved £10 more?

1.

- £10	£37	+ £10

2.

	£13	

3.

	£48	

4.

	£93	

5.

	£109	

6.

	£131	

7.

	£10	

8.

	£198	

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

E.g.

60	160	260
	320	
	780	

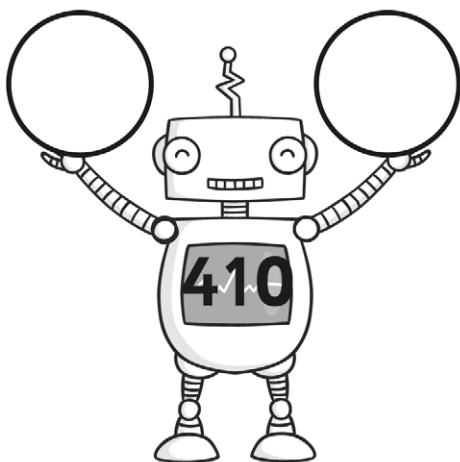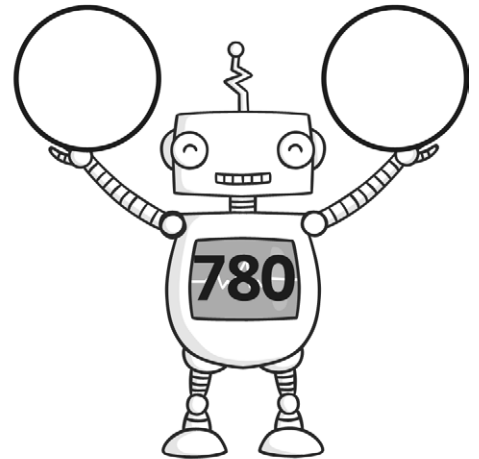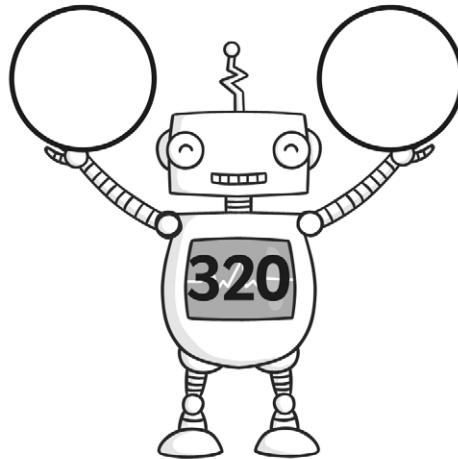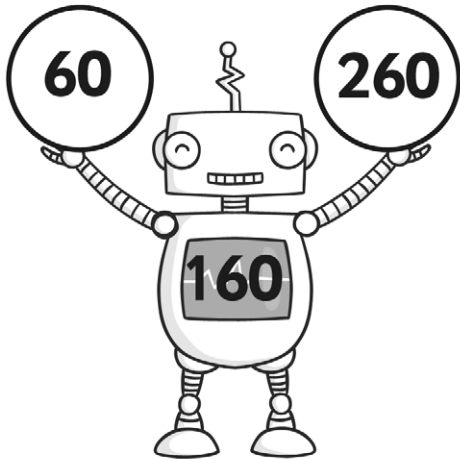| | 410 | |
| | 890 | |
| | 540 | |

	290	
	670	
	830	

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.

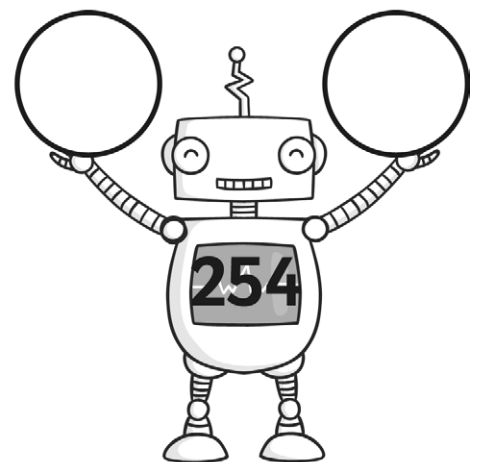| 64	164	264

	823	

	378	

	741	

	559	

	254	

	629	

	467	

	634	

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

E.g.

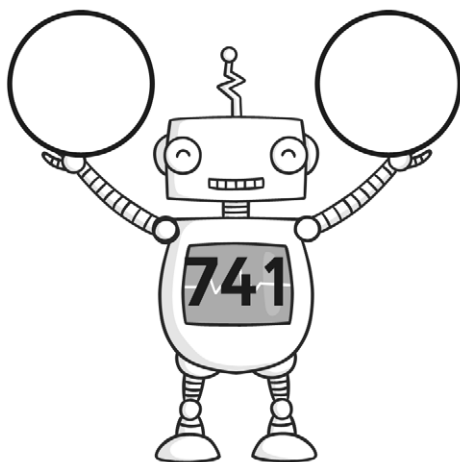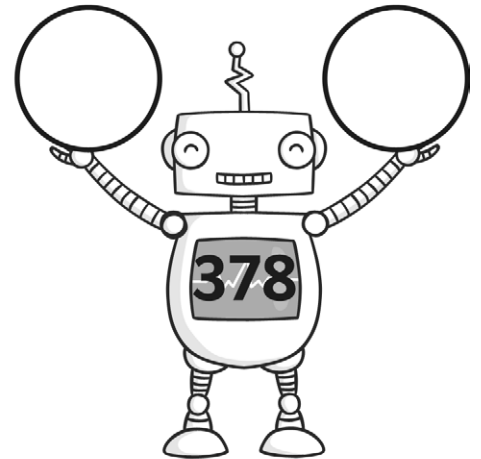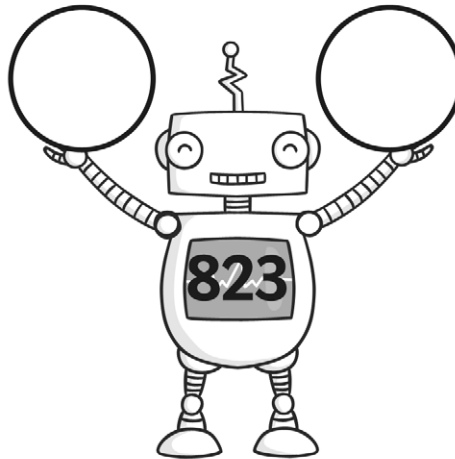| 541	741
641	

238	

783	

417	

995	

545	

896	

726	

346	
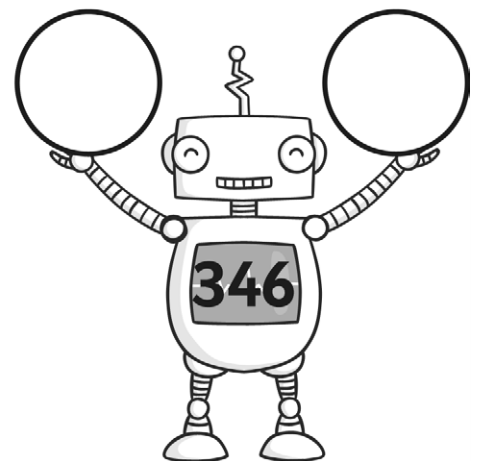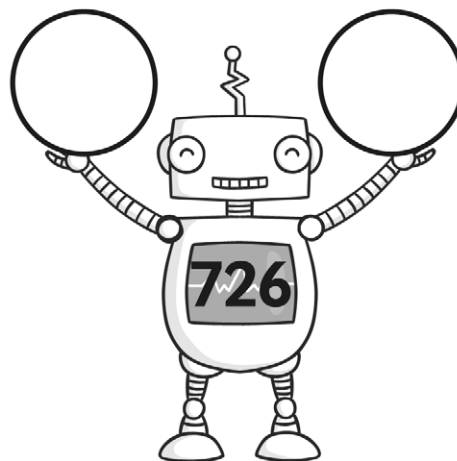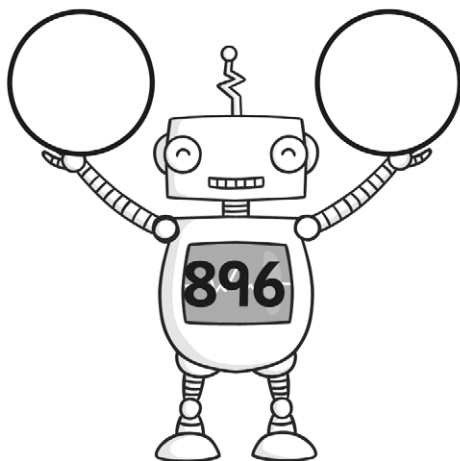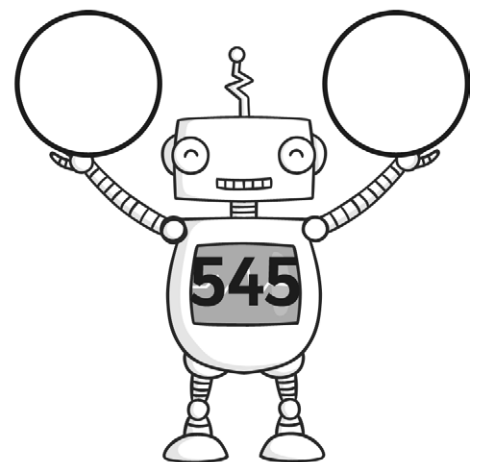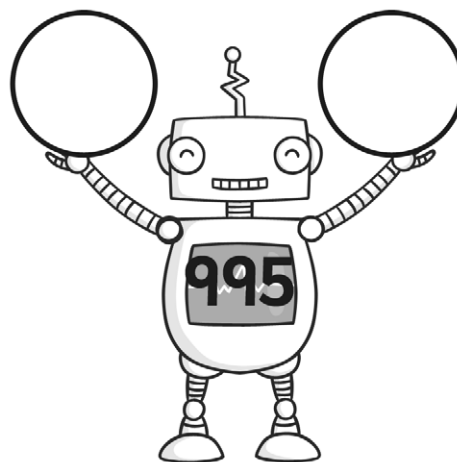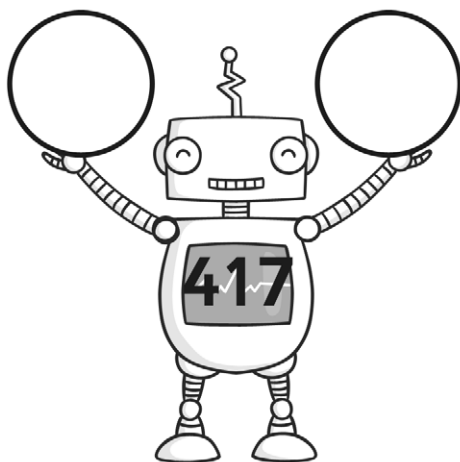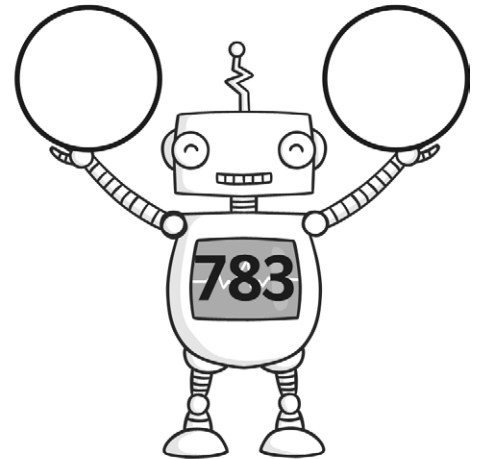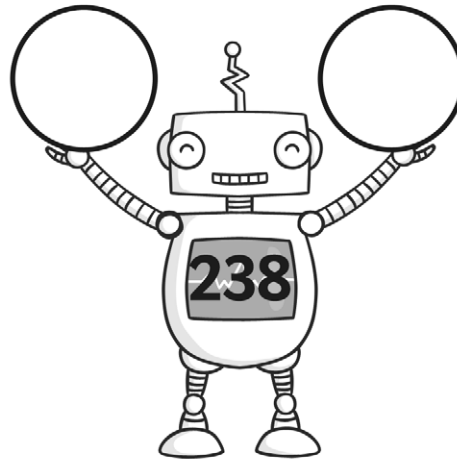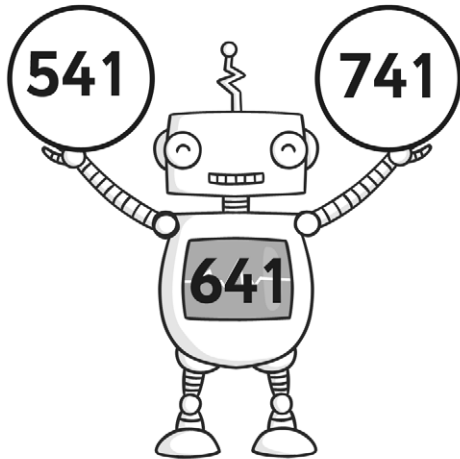
Maths Magician Partitioning Worksheet Hundreds, Tens and Units
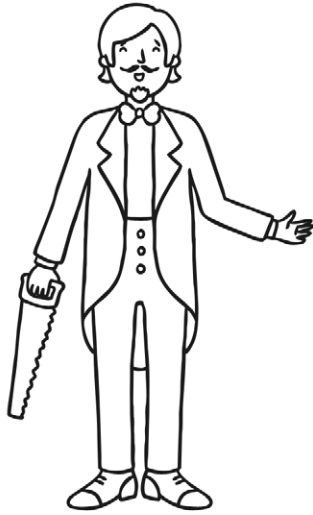
Can you put these numbers into hundreds, tens and units?

For example:
438 =

| 400 | 30 | 8 |

529 =

296 =

381 =

173 =

945 =

1. $47 = 40 + 7$

2. $56 = \bigcirc + \bigcirc$

3. $72 = \bigcirc + \bigcirc$

4. $34 = \bigcirc + \bigcirc$

5. $45 = \bigcirc + \bigcirc$

6. $11 = \bigcirc + \bigcirc$

7. $10 = \bigcirc + \bigcirc$

8. $99 = \bigcirc + \bigcirc$

9. $253 = \bigcirc + \bigcirc + \bigcirc$

10. $146 = \bigcirc + \bigcirc + \bigcirc$

11. $929 = \bigcirc + \bigcirc + \bigcirc$

12. $728 = \bigcirc + \bigcirc + \bigcirc$

Number Partitioning Worksheet 2

1. $555 = 500 + 50 + 5$

2. $632 = \bigcirc + \bigcup + \bigcup$

3. $211 = \bigcirc + \bigcup + \bigcup$

4. $823 = \bigcirc + \bigcup + \bigcup$

5. $129 = \bigcirc + \bigcup + \bigcup$

6. $512 = \bigcirc + \bigcup + \bigcup$

7. $655 = \bigcirc + \bigcup + \bigcup$

8. $840 = \bigcirc + \bigcup + \bigcup$

9. $154 = \bigcirc + \bigcup + \bigcup$

10. $974 = \bigcirc + \bigcup + \bigcup$

11. $770 = \bigcirc + \bigcup + \bigcup$

12. $821 = \bigcirc + \bigcup + \bigcup$

1. 1247 = 1000 + 200 + 40 + 7

2. 2352 = ⃝ + ⃝ + ⃝ + ⃝

3. 4285 = ⃝ + ⃝ + ⃝ + ⃝

4. 3462 = ⃝ + ⃝ + ⃝ + ⃝

5. 1456 = ⃝ + ⃝ + ⃝ + ⃝

6. 1111 = ⃝ + ⃝ + ⃝ + ⃝

7. 6735 = ⃝ + ⃝ + ⃝ + ⃝

8. 9563 = ⃝ + ⃝ + ⃝ + ⃝

9. 8253 = ⃝ + ⃝ + ⃝ + ⃝

10. 9146 = ⃝ + ⃝ + ⃝ + ⃝

11. 1029 = ⃝ + ⃝ + ⃝ + ⃝

12. 3728 = ⃝ + ⃝ + ⃝ + ⃝

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

76   67   66   77   17

48   49   44   94   84

16   61   18   81   14

720   270   170   710   210
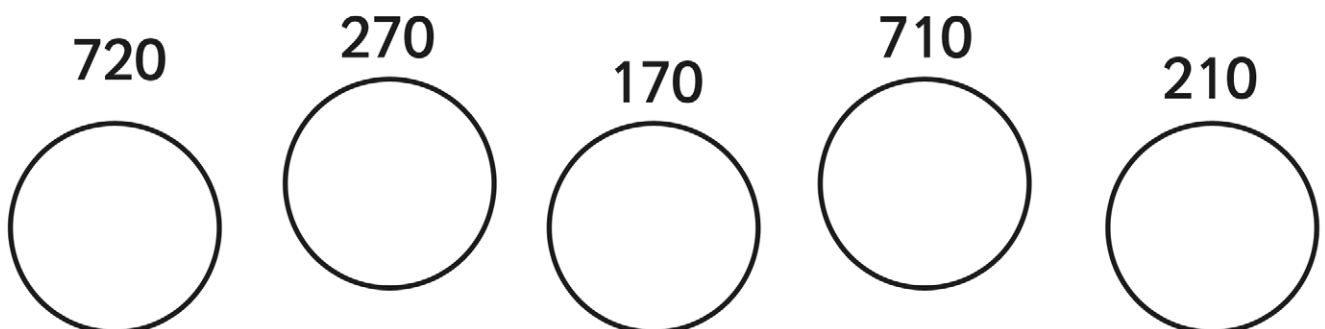
Ordering Numbers to 1000 Worksheet 2

Fill in the spaces below with the numbers in order from smallest to largest.
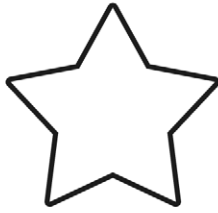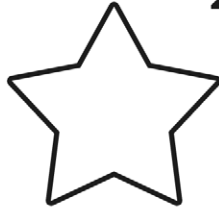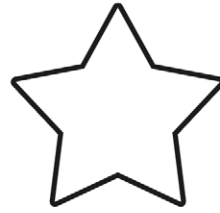
212   221   202   201   222

675   576   567   657   756
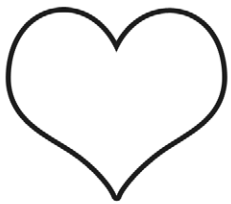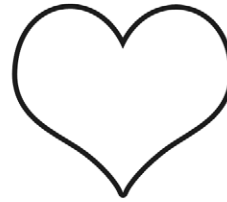
902   912   921   919   909
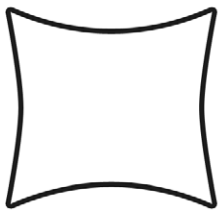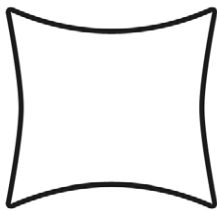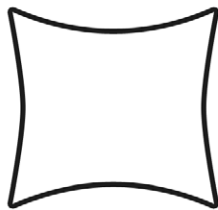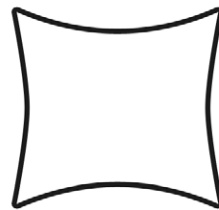
612   621   532   602   512
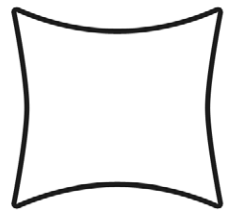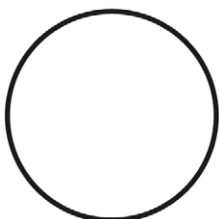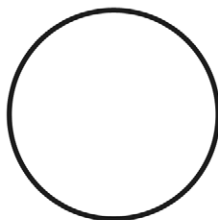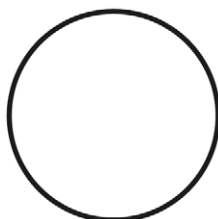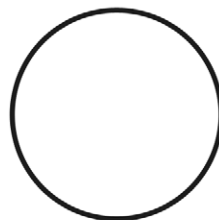
369   936   963   396   693
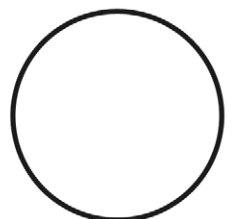
Estimating Addition Calculations

1. Which of these calculations give an answer of about 50?	2. Which of these calculations give an answer of about 60?	3. Which of these calculations give an answer of about 80?	4. Which of these calculations give an answer of about 100?	5. Which of these calculations give an answer of about 120?
34 + 17	37 + 23	72 + 25	87 + 26	84 + 23
13 + 45	31 + 16	47 + 31	14 + 98	46 + 76
28 + 31	17 + 53	29 + 32	82 + 17	98 + 32
45 + 18	39 + 29	35 + 27	45 + 67	53 + 56

6. Which of these calculations give an answer of about 150?	7. Which of these calculations give an answer of about 200?	8. Which of these calculations give an answer of about 300?	9. Which of these calculations give an answer of about 400?	10. Which of these calculations give an answer of about 110?
76 + 77	120 + 60	150 + 175	234 + 129	87 + 26
63 + 76	50 + 180	205 + 90	294 + 213	14 + 98
125 + 41	130 + 70	105 + 175	301 + 102	82 + 17
95 + 43	140 + 160	75 + 220	241 + 156	45 + 67

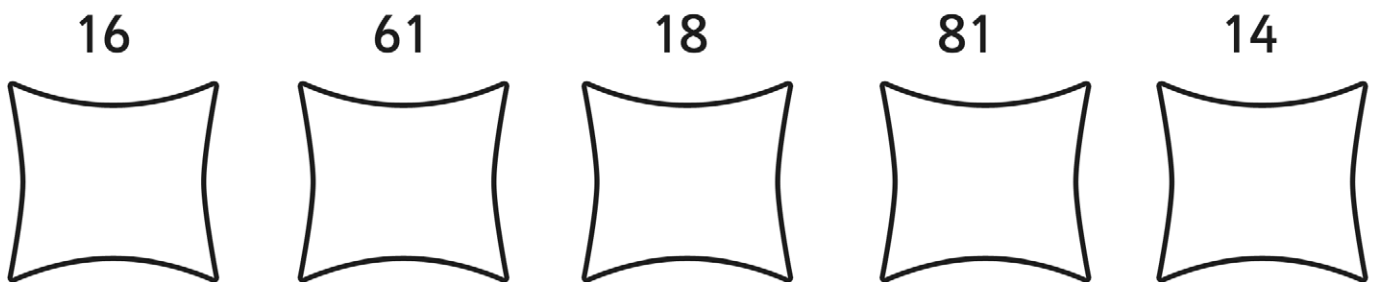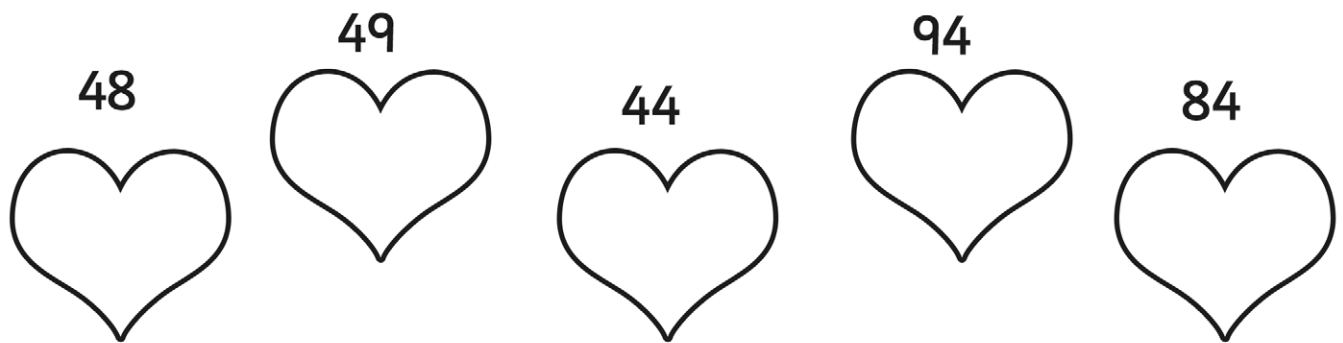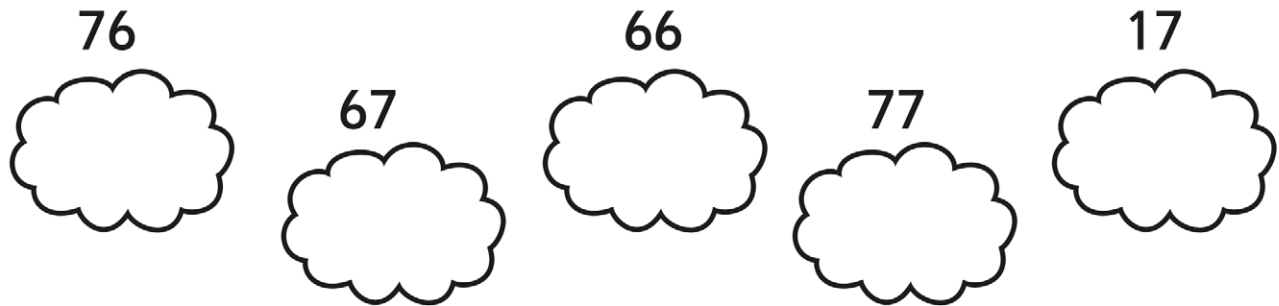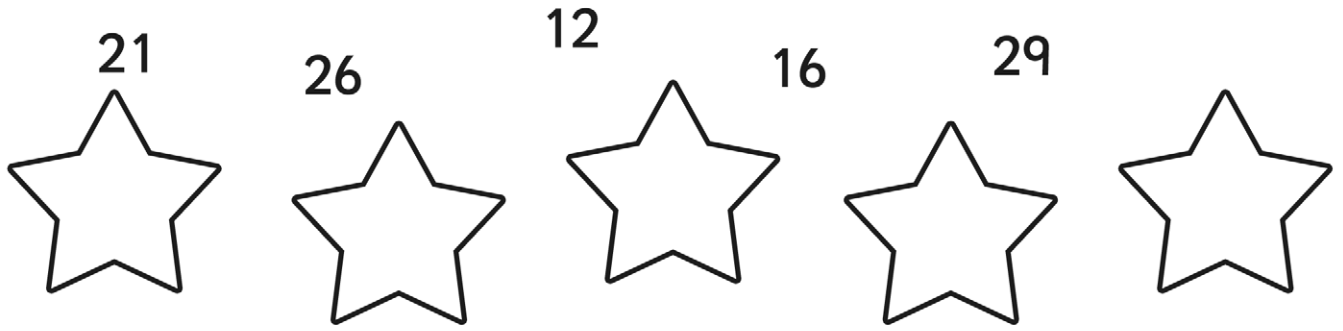| 11. Which of these calculations give an answer of about 250?	12. Which of these calculations give an answer of about 350?	13. Which of these calculations give an answer of about 500?	14. Which of these calculations give an answer of about 750?	15. Which of these calculations give an answer of about 1000?
124 + 221	237 + 114	245 + 275	534 + 220	901 + 156
113 + 135	290 + 98	135 + 450	235 + 480	139 + 786
26 + 231	104 + 216	285 + 180	150 + 563	456 + 553
175 + 55	98 + 228	345 + 160	378 + 330	782 + 214

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 75?

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

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

Representing Numbers Using Base 10

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

Estimate on 0-1000 Number Line Worksheet

a) 459

|
0   1000

b) 213

|
0   1000

c) 987

|
0   1000

d) 753

|
0   1000

e) 289

|
0   1000

f) 672

|
0   1000

g) 31

|
0   1000

h) 814

|
0   1000

Estimate on Different Number Lines Worksheet

a) 743

500   1000

b) 857

700   1000

c) 387

300   500

d) 198

100   300

e) 449

200   500

f) 576

500   700

g) 610

450   650

h) 841

750   900

i) 338

300   350

Writing Numbers in Words

Write the following numbers in words:

243	Two hundred and forty three
562	
785	
391	
669	
402	
513	
699	
840	
709	
112	
590	
519	
101	

Writing Numbers in Words

Write the following words in numbers:

Three hundred and forty six	346
Six hundred and thirty nine	
Nine hundred and thirteen	
Seven hundred and twenty eight	
Four hundred and six	
Nine hundred and thirty	
One hundred and four	
Five hundred and thirty five	
Two hundred and twenty two	
Four hundred and sixty	
Eight hundred and seventy eight	
Nine hundred and ninety one	
One hundred and ninety nine	
Five hundred and fifteen	

Writing Numbers in Words
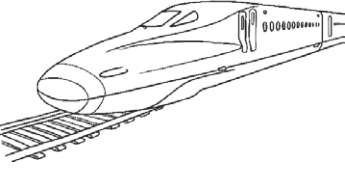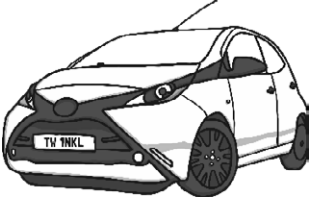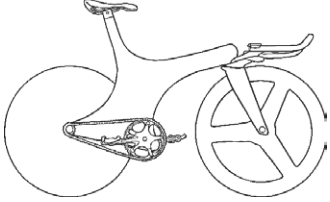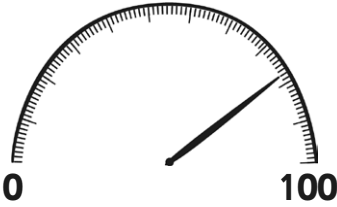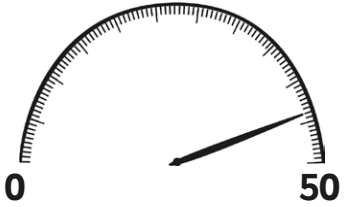
Write the following words into numbers and numbers into words.

	561
	902
Two hundred and fourteen	
Six hundred and fifty nine	
	327
Four hundred and twelve	
Eight hundred and eight	
	880
	660
Six hundred and sixteen	
	779
Three hundred and thirty seven	
	819
Seven hundred and forty	

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.
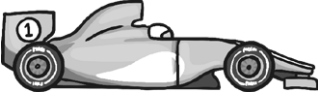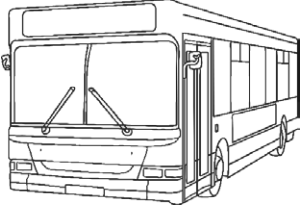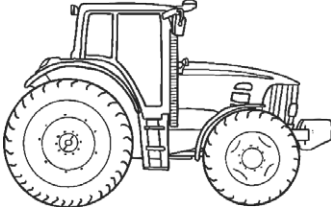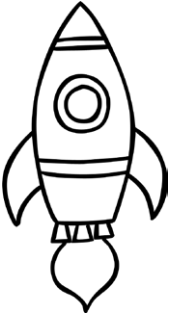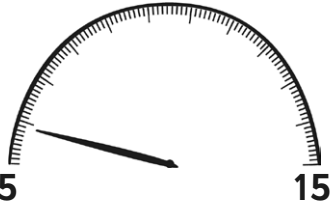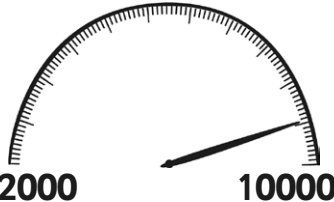
1.	2.	3.	4.
95	50	70	40
0 100	0 80	0 200	0 50
Estimated Speed	**Estimated Speed**	**Estimated Speed**	**Estimated Speed**
78			
Driving Safely			

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.
200	70	10	3600
100 300	50 80	5 15	2000 10000
Estimated Speed	**Estimated Speed**	**Estimated Speed**	**Estimated Speed**

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.

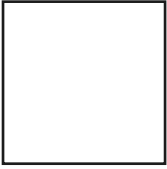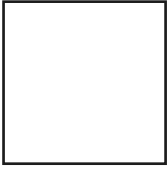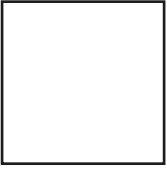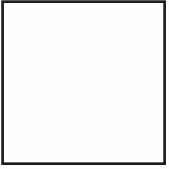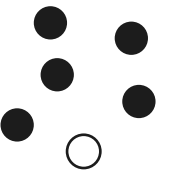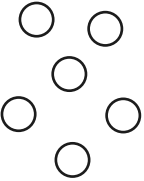| Hundreds	Tens	Units
	● ● ● ● ● ○	○ ○ ○ ○ ○ ○

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

2. Raj has saved £49.

   His grandmother gives him £10. How much does he have altogether?
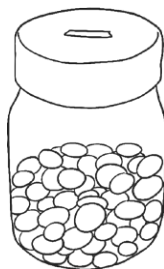
Hundreds	Tens	Units	Answer

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

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

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

6. Freya collects 103 conkers.

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

Hundreds	Tens	Units	Answer

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

8. A shark has 295 teeth.

   It loses 110. How many does it have left?

Hundreds	Tens	Units	Answer