I A P

INTELLIGENT AUSTRALIA PRODUCTIONS

Pursuing Excellence

Smarten up in Maths

for students
7-8 years old

WRITTEN BY RON SHAW

EDUCATIONAL EXCELLENCE

THE ACTIVITIES IN THIS BOOK ADDRESS MANY OUTCOMES IN THE SYLLABUS

Smarten up in Maths (age 7-8)
Intelligent Australia Productions

Dedicated to the students of Beaconsfield Primary School

- <u>Postal Address</u>

IAP
PO Box 670
Hillarys, WA
Australia 6923

- <u>Email</u>

intelligent.australia@yahoo.com

- <u>Telephone</u>

(08) 9307 8365   Int'l (618) 9307 8365

- <u>Fax</u>

(08) 9402 2339   Int'l (618) 9402 2339

Intelligent Australia Productions is committed to raising standards in Literacy and Numeracy in Australian schools.

www.intelligentaustralia.com

Contents

Teachers Notes

About

This book has been written to complement core Mathematics texts for Australian students aged 7 and 8.
In some States this equates to year two and in others to year three.

In many classrooms there is an age range of twelve months or more; this may mean there are students in the class who are barely 7 years old while others are well past their 8th birthday.
The pages that follow endeavour to address this anomaly by providing activities that cater to ages across such a range.

What this book offers

  * exercises in the most important concepts from the Mathematics syllabus
  * worksheets with easy-to-follow instructions and space for working-out
  * solutions at the back of the book, for ready reference
  * activities that are equally useful as in-class lessons or home assignments

Benefits of Use

Teachers who use these worksheets with their students will be pleased with the results. There is plenty of scope for consolidation of previously-learned concepts and ample opportunities for accomplished maths students to demonstrate their skills.
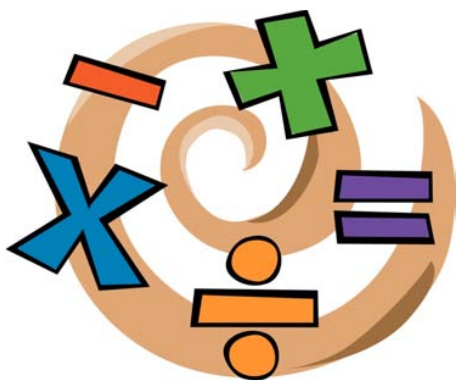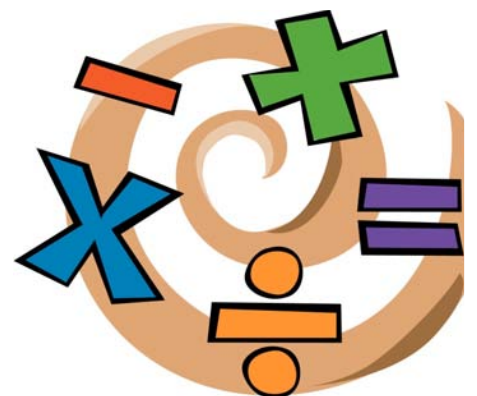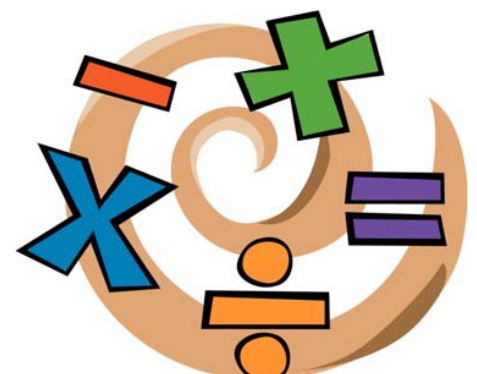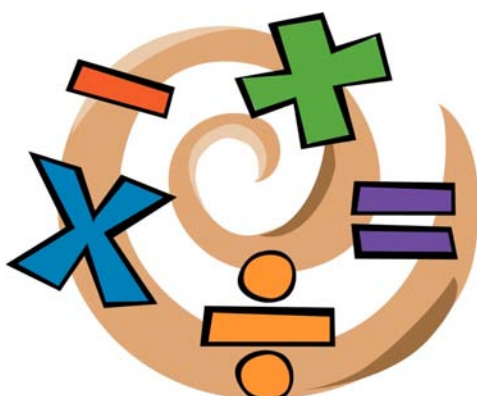
Addition

Adding a single-digit number to a double-digit number (no carrying)

1)
$$\begin{array}{r} 53 \\ +\ 5 \\ \hline \end{array}$$

2)
$$\begin{array}{r} 46 \\ +\ 3 \\ \hline \end{array}$$

3)
$$\begin{array}{r} 74 \\ +\ 5 \\ \hline \end{array}$$

4)
$$\begin{array}{r} 62 \\ +\ 7 \\ \hline \end{array}$$

5)
$$\begin{array}{r} 48 \\ +\ 1 \\ \hline \end{array}$$

6)
$$\begin{array}{r} 43 \\ +\ 5 \\ \hline \end{array}$$

7)
$$\begin{array}{r} 91 \\ +\ 8 \\ \hline \end{array}$$

8)
$$\begin{array}{r} 72 \\ +\ 4 \\ \hline \end{array}$$

9)
$$\begin{array}{r} 55 \\ +\ 3 \\ \hline \end{array}$$

10)
$$\begin{array}{r} 61 \\ +\ 7 \\ \hline \end{array}$$

11)
$$\begin{array}{r} 30 \\ +\ 7 \\ \hline \end{array}$$

12)
$$\begin{array}{r} 81 \\ +\ 4 \\ \hline \end{array}$$

13)
$$\begin{array}{r} 43 \\ +\ 6 \\ \hline \end{array}$$

14)
$$\begin{array}{r} 92 \\ +\ 5 \\ \hline \end{array}$$

15)
$$\begin{array}{r} 77 \\ +\ 1 \\ \hline \end{array}$$

16)
$$\begin{array}{r} 52 \\ +\ 5 \\ \hline \end{array}$$

17)
$$\begin{array}{r} 60 \\ +\ 8 \\ \hline \end{array}$$

18)
$$\begin{array}{r} 33 \\ +\ 3 \\ \hline \end{array}$$

19)
$$\begin{array}{r} 84 \\ +\ 4 \\ \hline \end{array}$$

20)
$$\begin{array}{r} 46 \\ +\ 2 \\ \hline \end{array}$$

Addition

*Adding a single-digit number to a
double-digit number (carrying)*

1)
```
  44
+  7
————
```

2)
```
  65
+  5
————
```

3)
```
  77
+  6
————
```

4)
```
  46
+  9
————
```

5)
```
  38
+  8
————
```

6)
```
  28
+  7
————
```

7)
```
  45
+  7
————
```

8)
```
  18
+  6
————
```

9)
```
  34
+  9
————
```

10)
```
  87
+  7
————
```

11)
```
  73
+  8
————
```

12)
```
  15
+  8
————
```

13)
```
  26
+  6
————
```

14)
```
  49
+  8
————
```

15)
```
  56
+  6
————
```

16)
```
  46
+  8
————
```

17)
```
  57
+  4
————
```

18)
```
  78
+  9
————
```

19)
```
  67
+  7
————
```

20)
```
  81
+  9
————
```

Addition

Adding a double-digit number to a double-digit number (no carrying)

1)
```
   53
+  36
─────
```

2)
```
   27
+  11
─────
```

3)
```
   32
+  24
─────
```

4)
```
   14
+  25
─────
```

5)
```
   50
+  33
─────
```

6)
```
   26
+  42
─────
```

7)
```
   41
+  27
─────
```

8)
```
   55
+  30
─────
```

9)
```
   71
+  15
─────
```

10)
```
   83
+  15
─────
```

11)
```
   42
+  34
─────
```

12)
```
   45
+  22
─────
```

13)
```
   53
+  23
─────
```

14)
```
   71
+  14
─────
```

15)
```
   62
+  22
─────
```

16)
```
   32
+  36
─────
```

17)
```
   65
+  13
─────
```

18)
```
   43
+  24
─────
```

19)
```
   13
+  62
─────
```

20)
```
   73
+  14
─────
```

Addition

Adding a double-digit number to a double-digit number (carrying)

1)
```
   46
+  27
_____
```

2)
```
   53
+  17
_____
```

3)
```
   66
+  27
_____
```

4)
```
   34
+  58
_____
```

5)
```
   65
+  28
_____
```

6)
```
   39
+  29
_____
```

7)
```
   17
+  15
_____
```

8)
```
   34
+  27
_____
```

9)
```
   83
+  18
_____
```

10)
```
   57
+  38
_____
```

11)
```
   26
+  66
_____
```

12)
```
   67
+  27
_____
```

13)
```
   73
+  19
_____
```

14)
```
   61
+  29
_____
```

15)
```
   42
+  39
_____
```

16)
```
   56
+  19
_____
```

17)
```
   72
+  18
_____
```

18)
```
   55
+  19
_____
```

19)
```
   37
+  37
_____
```

20)
```
   17
+  19
_____
```

Subtraction

Subtracting a double-digit number from a double-digit number (no carrying)

1)
$$\begin{array}{r} 78 \\ -\ 43 \\ \hline \end{array}$$

2)
$$\begin{array}{r} 25 \\ -\ 11 \\ \hline \end{array}$$

3)
$$\begin{array}{r} 93 \\ -\ 70 \\ \hline \end{array}$$

4)
$$\begin{array}{r} 48 \\ -\ 21 \\ \hline \end{array}$$

5)
$$\begin{array}{r} 67 \\ -\ 35 \\ \hline \end{array}$$

6)
$$\begin{array}{r} 36 \\ -\ 21 \\ \hline \end{array}$$

7)
$$\begin{array}{r} 76 \\ -\ 54 \\ \hline \end{array}$$

8)
$$\begin{array}{r} 45 \\ -\ 22 \\ \hline \end{array}$$

9)
$$\begin{array}{r} 89 \\ -\ 31 \\ \hline \end{array}$$

10)
$$\begin{array}{r} 64 \\ -\ 13 \\ \hline \end{array}$$

11)
$$\begin{array}{r} 38 \\ -\ 31 \\ \hline \end{array}$$

12)
$$\begin{array}{r} 73 \\ -\ 40 \\ \hline \end{array}$$

13)
$$\begin{array}{r} 68 \\ -\ 13 \\ \hline \end{array}$$

14)
$$\begin{array}{r} 74 \\ -\ 43 \\ \hline \end{array}$$

15)
$$\begin{array}{r} 91 \\ -\ 21 \\ \hline \end{array}$$

16)
$$\begin{array}{r} 76 \\ -\ 31 \\ \hline \end{array}$$

17)
$$\begin{array}{r} 59 \\ -\ 43 \\ \hline \end{array}$$

18)
$$\begin{array}{r} 84 \\ -\ 34 \\ \hline \end{array}$$

19)
$$\begin{array}{r} 78 \\ -\ 26 \\ \hline \end{array}$$

20)
$$\begin{array}{r} 69 \\ -\ 12 \\ \hline \end{array}$$

Subtraction

Subtracting a double-digit number from a double-digit number (carrying)

1)
```
   63
 - 37
 ____
```

2)
```
   50
 - 28
 ____
```

3)
```
   37
 - 29
 ____
```

4)
```
   65
 - 28
 ____
```

5)
```
   90
 - 11
 ____
```

6)
```
   54
 - 28
 ____
```

7)
```
   61
 - 37
 ____
```

8)
```
   71
 - 18
 ____
```

9)
```
   82
 - 29
 ____
```

10)
```
   47
 - 39
 ____
```

11)
```
   30
 -  7
 ____
```

12)
```
   54
 - 37
 ____
```

13)
```
   28
 - 19
 ____
```

14)
```
   72
 - 26
 ____
```

15)
```
   63
 - 39
 ____
```

16)
```
   55
 - 38
 ____
```

17)
```
   61
 - 18
 ____
```

18)
```
   34
 - 19
 ____
```

19)
```
   57
 - 29
 ____
```

20)
```
   56
 - 19
 ____
```

Number Patterns

Whole Numbers Increasing & Decreasing

Write the next number

1)
0, 3, 6, 9, 12, 15, 18, _____

2)
4, 7, 10, 13, 16, 19, _____

3)
70, 72, 74, 76, 78, _____

4)
21, 23, 25, 27, 29, _____

5)
12, 16, 20, 24, 28, 32, _____

6)
1, 5, 9, 13, 17, 21, _____

7)
4, 10, 16, 22, 28, 34, _____

8)
1, 8, 15, 22, 29, 36, _____

9)
2, 7, 12, 17, 22, 27, _____

10)
40, 50, 60, 70, 80, 90, _____

11)
18, 15, 12, 9, 6, 3, _____

12)
24, 20, 16, 12, 8, 4, _____

13)
34, 31, 28, 25, 22, 19, _____

14)
49, 42, 35, 28, 21, 14, _____

15)
40, 34, 28, 22, 16, 10, _____

16)
29, 26, 23, 20, 17, 14, _____

17)
56, 48, 40, 32, 24, 16, _____

18)
59, 55, 51, 47, 43, _____

19)
75, 69, 63, 57, 51, 45, _____

20)
90, 81, 72, 63, 54, 45, _____

Number Patterns

Whole Numbers Increasing & Decreasing

Write the missing numbers

1)
17, 20, _____, 26, 29, _____

2)
16, 20, _____, 28, 32, _____

3)
3, 9, _____, 21, 27, 33, _____

4)
2, 9, _____, 23, 30, _____, 44

5)
3, 11, 19, _____, 35, _____

6)
3, 7, 11, 15, _____, 23, _____

7)
11, 17, _____, 29, 35, _____

8)
0, 9, _____, 27, 36, _____

9)
5, 12, _____, 26, _____, 40

10)
4, 13, _____, 31, 40, _____

11)
29, 26, _____, 20, 17, _____

12)
49, 44, 39, _____, 29, _____

13)
38, 32, _____, 20, 14, _____

14)
39, 35, 31, _____, 23, _____

15)
28, 23, _____, 13, 8, _____

16)
42, 37, _____, 27, 22, _____

17)
29, 26, _____, 20, _____, 14

18)
45, 39, _____, 27, _____, 15

19)
87, 79, 71, 63, _____, _____

20)
54, 47, _____, 33, _____, 19

Ordering Numbers

Ordering to 99: *Smallest first*

Put these number cards in order, smallest first.

1. **46** **83** **19** **67** **51** →

2. **63** **14** **90** **8** **77** →

3. **49** **30** **23** **67** **32** →

4. **19** **28** **91** **53** **16** →

5. **44** **26** **75** **48** **73** →

6. **70** **37** **51** **64** **82** →

7. **16** **29** **92** **4** **42** →

13

Ordering Numbers

Ordering to 99: *Largest first*

Put these number cards in order, largest first.

1. **34** **78** **98** **67** **43** ➜

2. **65** **76** **7** **67** **80** ➜

3. **93** **45** **67** **82** **54** ➜

4. **36** **64** **55** **88** **23** ➜

5. **65** **84** **51** **29** **60** ➜

6. **42** **89** **18** **37** **58** ➜

7. **20** **62** **96** **66** **17** ➜

Numbers to 999

Reading & Writing Numbers

A. Read the number to yourself (in your mind) & then write it in figures.

1) **Three hundred and thirty-two** ....

2) **Six hundred and seventeen** ....

3) **One hundred and seventy-five** ....

4) **Nine hundred and two** ....

5) **Seven hundred and forty-six** ....

6) **Four hundred and eleven** ....

7) **Eight hundred and eighteen** ....

8) **Five hundred and fifty-five** ....

9) **Three hundred and six** ....

I'm 218 cm tall.

And if I stand on your head I'll be 318!

B. Say the number to yourself (in your mind) and then write it in words.

1) **563** ....

2) **211** ....

3) **714** ....

4) **998** ....

5) **604** ....

6) **132** ....

7) **599** ....

8) **802** ....

9) **427** ....

Numbers to 999

Ordering to 999: *Smallest first; Largest first*

Put these number cards in order, smallest first.

1. | 713 | 405 | 586 | 267 | → | | | | |

2. | 340 | 945 | 187 | 487 | → | | | | |

3. | 618 | 482 | 907 | 233 | → | | | | |

Put these number cards in order, largest first.

4. | 358 | 906 | 219 | 213 | → | | | | |

5. | 678 | 843 | 179 | 544 | → | | | | |

6. | 238 | 600 | 493 | 214 | → | | | | |

7. | 412 | 307 | 509 | 273 | → | | | | |

Multiplication

Times Tables: x 2 x 3 x 4 x 5 x 10

Multiply the white numbers by the number at the left.
How fast can you go?

	0	1	2	3	4	5	6	7	8	9	10
x 2											

	0	1	2	3	4	5	6	7	8	9	10
x 3											

	0	1	2	3	4	5	6	7	8	9	10
x 4											

	0	1	2	3	4	5	6	7	8	9	10
x 5											

	0	1	2	3	4	5	6	7	8	9	10
x 10											

Multiplication

Multiplying a two-digit number by a one-digit number (no carrying)

1) 32
x 4

2) 31
x 5

3) 34
x 2

4) 23
x 2

5) 52
x 3

6) 22
x 2

7) 41
x 3

8) 24
x 2

9) 21
x 4

10) 23
x 3

11) 22
x 3

12) 33
x 3

13) 50
x 3

14) 31
x 3

15) 51
x 3

16) 41
x 4

17) 22
x 4

18) 41
x 2

19) 21
x 5

20) 52
x 2

Multiplication

*Multiplying a two-digit number by
a one-digit number (carrying)*

1) 22
x 5

2) 35
x 5

3) 55
x 2

4) 45
x 5

5) 23
x 4

6) 43
x 4

7) 23
x 5

8) 32
x 5

9) 33
x 5

10) 43
x 5

11) 45
x 4

12) 24
x 5

13) 55
x 3

14) 35
x 4

15) 45
x 3

16) 42
x 5

17) 25
x 5

18) 34
x 4

19) 33
x 4

20) 55
x 4

Number Sentences

(one and two-digit numbers)

Put a + or − sign in the circles to make the number sentences true.

1) $58 \bigcirc 4 = 54$

2) $17 \bigcirc 9 = 26$

3) $41 \bigcirc 20 = 61$

4) $60 \bigcirc 5 = 55$

5) $73 \bigcirc 4 = 69$

6) $9 \bigcirc 11 = 20$

7) $50 \bigcirc 51 = 101$

8) $35 \bigcirc 12 = 47$

9) $84 \bigcirc 10 = 74$

10) $75 \bigcirc 7 = 82$

11) $104 \bigcirc 5 = 99$

12) $19 \bigcirc 7 = 12$

13) $27 \bigcirc 18 = 45$

14) $79 \bigcirc 30 = 109$

15) $60 \bigcirc 24 = 36$

16) $9 \bigcirc 18 = 27$

17) $72 \bigcirc 18 = 90$

18) $64 \bigcirc 17 = 47$

19) $93 \bigcirc 24 = 69$

20) $56 \bigcirc 26 = 82$

Telling the Time

*Write the time.   Draw the hands.*

a quarter to   a quarter past

1) **Write the times shown on the clocks.**
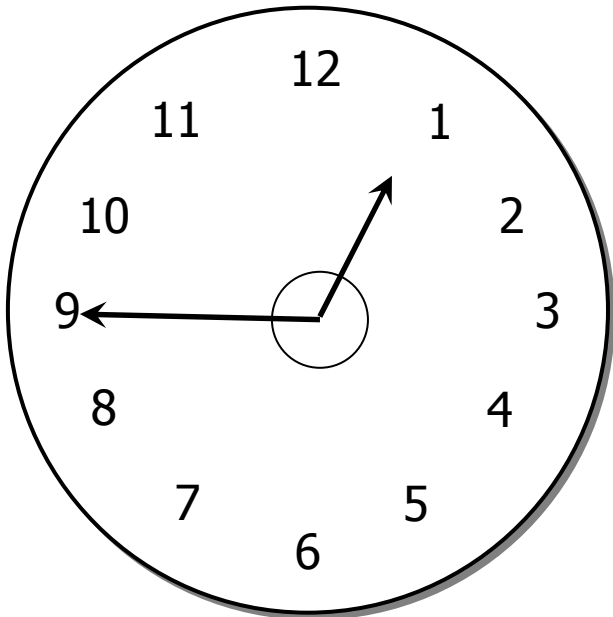
If you finish your work early see if you can answer the questions below.

:

:
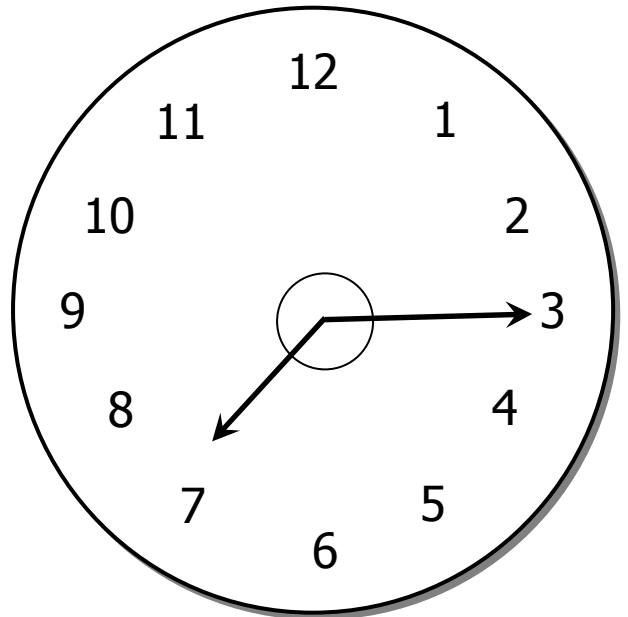
2) **See if you can draw in the clocks' hands.**
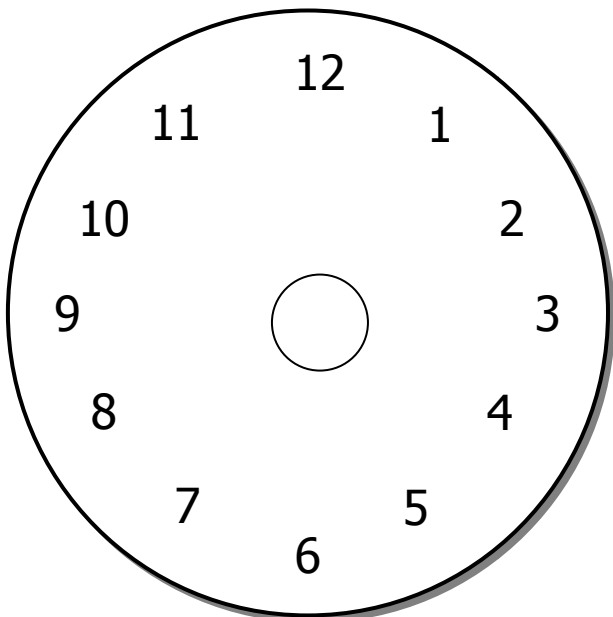
How many minutes in two hours?

How many seconds in a quarter of a minute?

How many hours in half of a day?

11:15

1:45

21
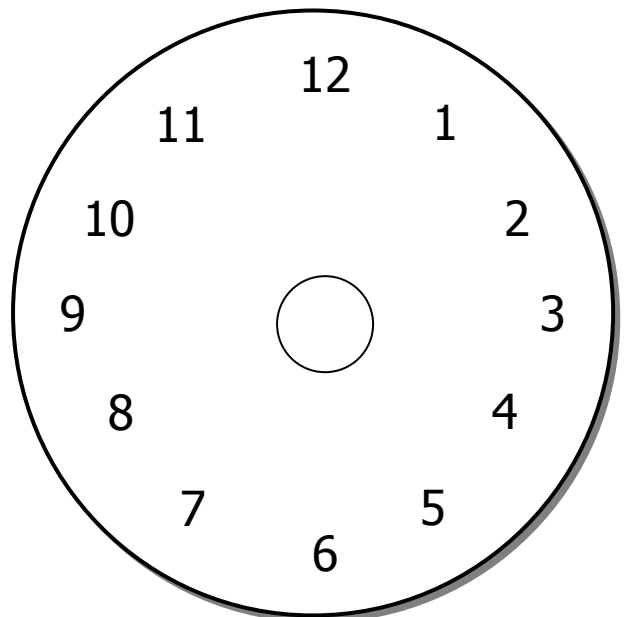
Telling the Time

Write the time.   Draw the hands.

Minutes to and past the hour: multiples of 5 minutes

1) Write the times shown on the clocks.
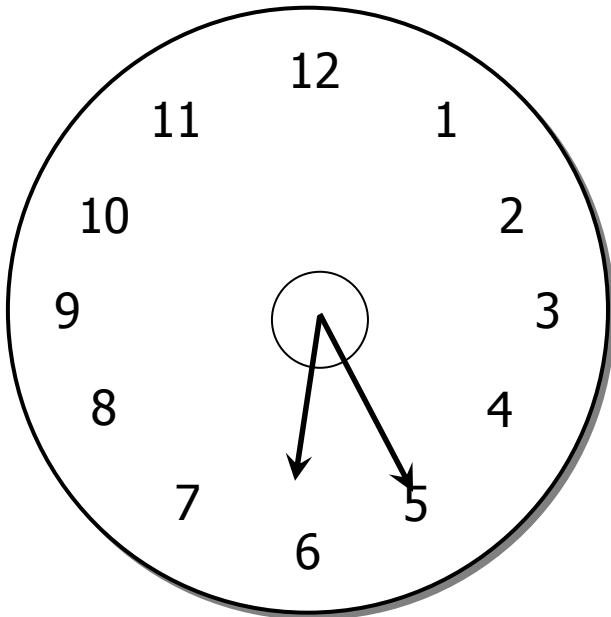
If you finish your work early see if you can answer the questions below.

:

:
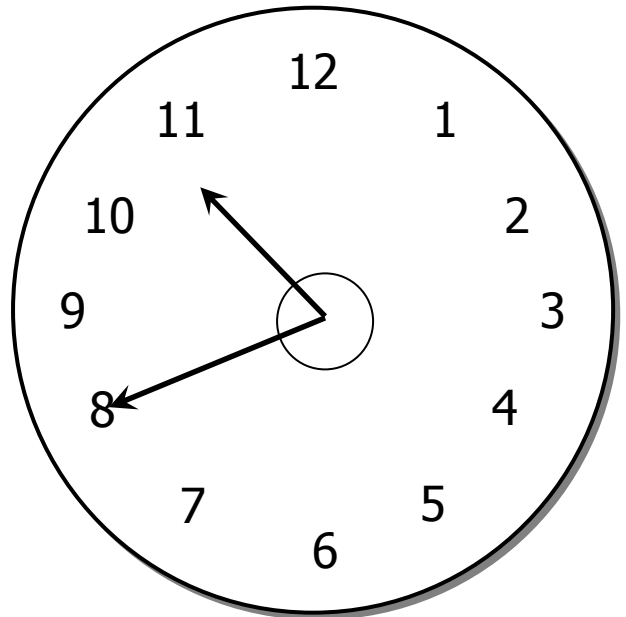
2) See if you can draw in the clocks' hands.
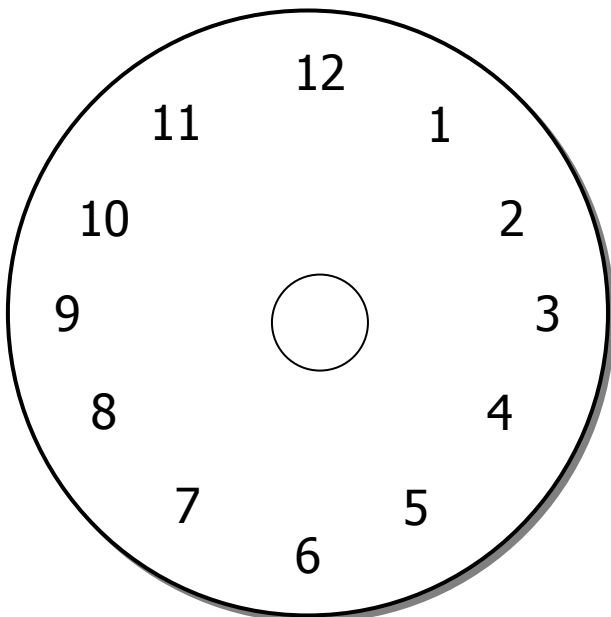
How many seconds in five minutes?

How many minutes in three hours?

How many hours in two days?

5:10

7:40

22
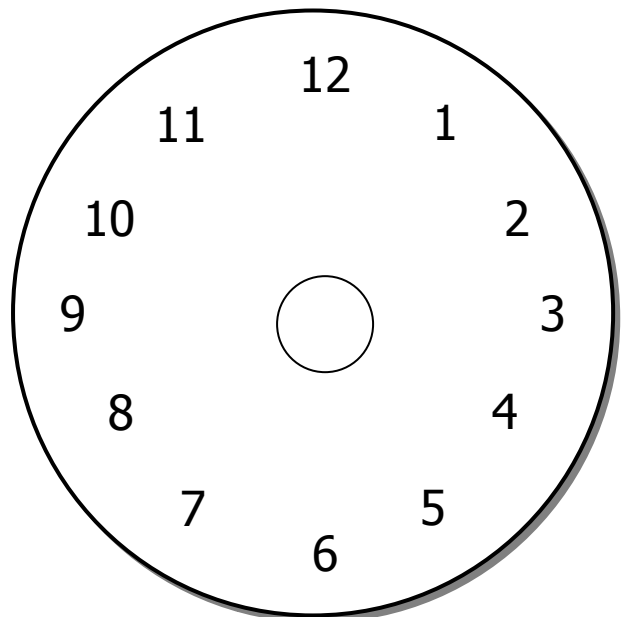
Telling the Time

Writing times shown on clocks.

Minutes to and past the hour: multiples of 5 minutes

Write the time shown on each clock.
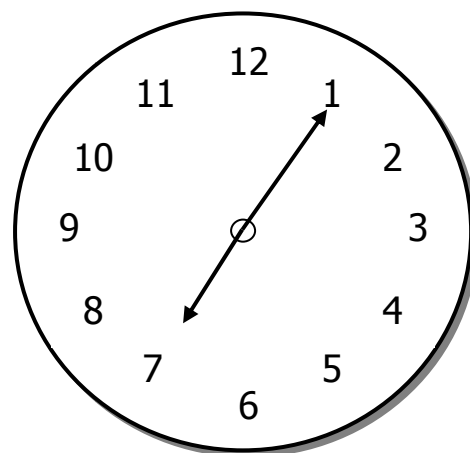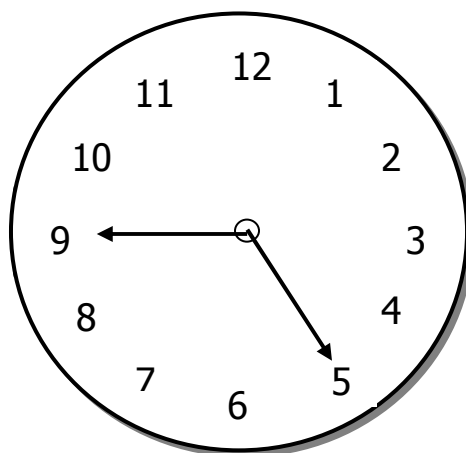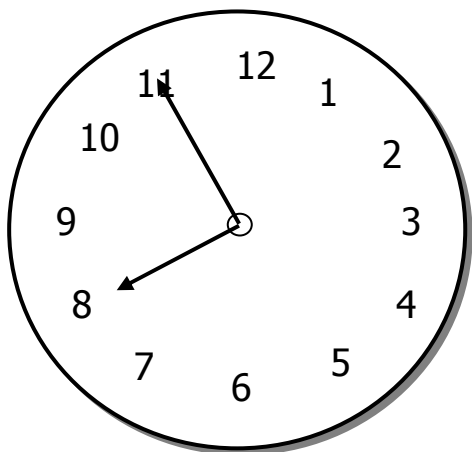
Do you know what time it is?

It's exactly 9.40 am, Tuesday 26th August, 92 million years BC.
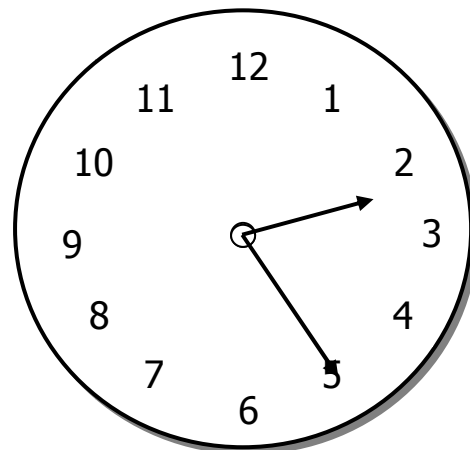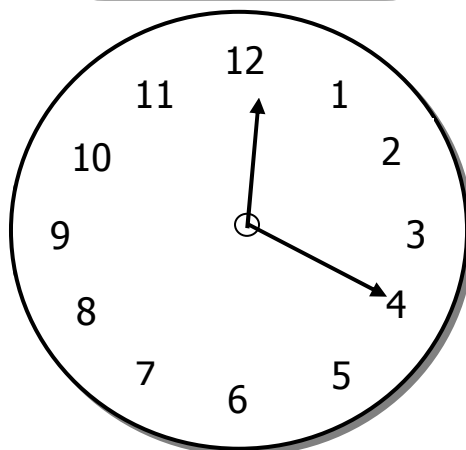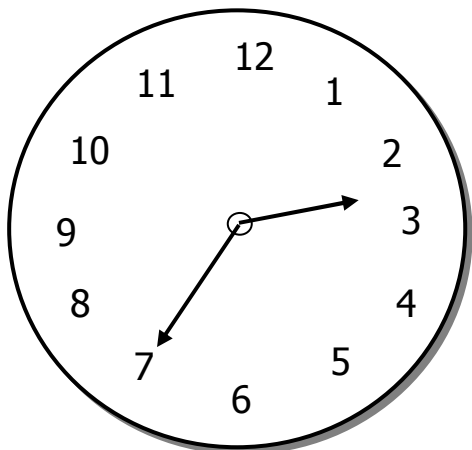
Telling the Time

Drawing hands on clock faces.
Minutes to and past the hour: multiples of 5 minutes

Draw hands on the clocks to match the times below.
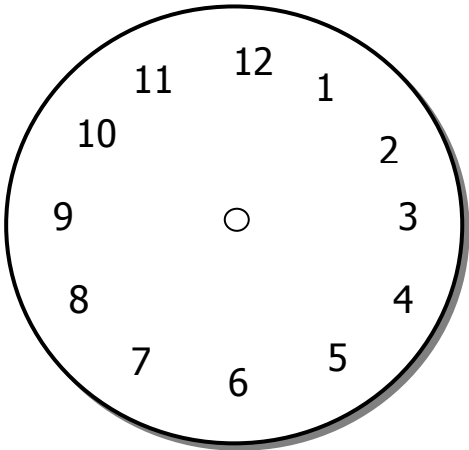
11:20
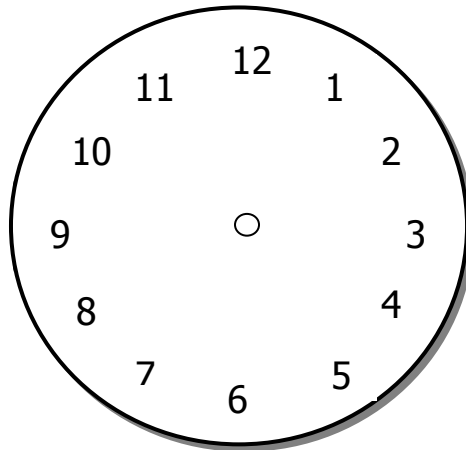
6:35
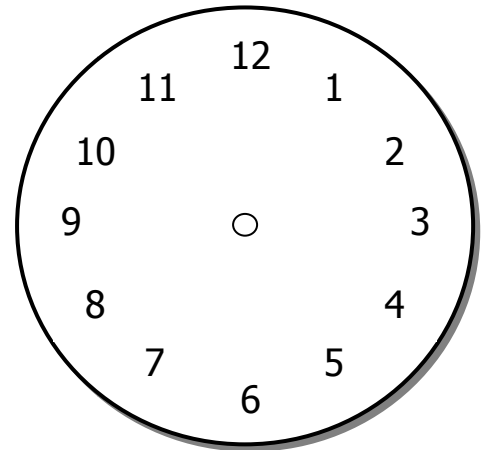
2:10

I know how many minutes there are in a day.

*Whoopee doo! I know how many **seconds** there are in a day....**86 400** !!*
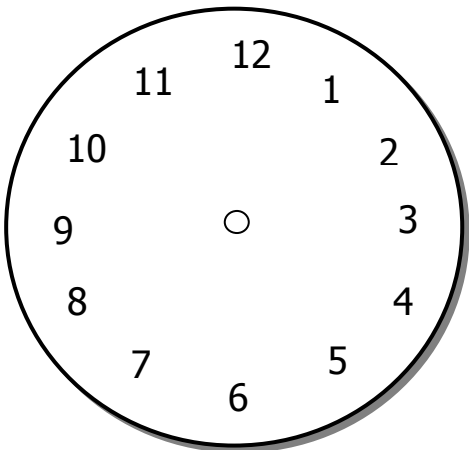
10:05
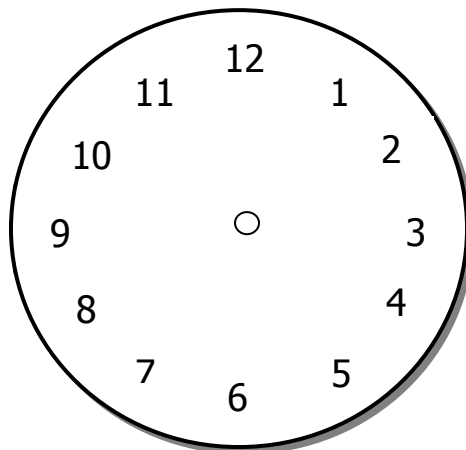
7:50
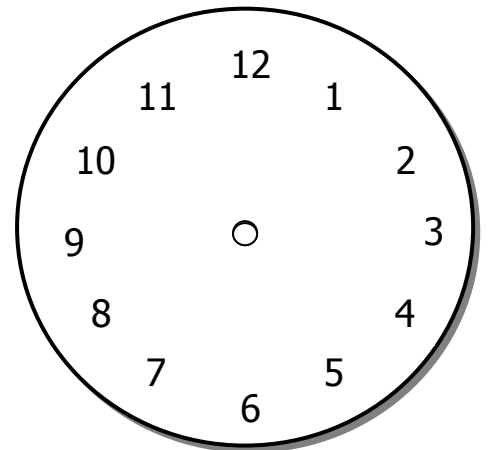
1:50

Place Value

Hundreds, Tens & Ones

Re-arranging digits to make different numbers.

Rearrange the cards to make the smallest and largest numbers. (the first one has been done for you)
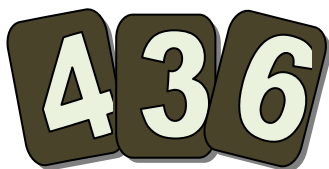
4 3 6   smallest   largest
               346   643

8 9 5   smallest   largest
....

4 5 3   smallest   largest
....

6 2 9   smallest   largest
....

8 6 9   smallest   largest
....

9 0 5   smallest   largest
....

3 8 0   smallest   largest
....

6 7 3   smallest   largest
....

Challenge

When you have completed the examples on the left, try these.

- Make the smallest number possible using these digits: **7 1 2 4 8**

....

- Make the largest number possible using these digits: **5 2 6 8 1**

....

- Make the smallest number possible using these digits: **7 5 2 9 5 8**

....

- Make the largest number possible using these digits: **3 8 5 0 1 4**

....

- Make the smallest number possible using these digits: **4 2 7 1 9 5 7**

....

- Make the largest number possible using these digits: **8 5 7 3 0 2 4**

....

Division

How to set out division problems *(two ways)*
Dividing is about finding how many groups.

Example: How many 4s in 12?

This may be written 12 ÷ 4 = ? or $4\overline{)12}^{\,?}$

oooo
oooo
oooo

I want to find how many lots of 4 fit into 12.
I draw 4 circles, then another 4, then another 4, as shown here. (I stop because I now have 12).

Answer: 12 ÷ 4 = 3 **or** $4\overline{)12}^{\,3}$

Use this method to find the answers to the following division questions. Draw very small circles as above.
Write your answers in the two ways shown here.

1) **How many 5s in 10?**	2) **How many 2s in 8?**	3) **How many 3s in 12?**	4) **How many 4s in 8?**
5) **How many 5s in 15?**	6) **How many 2s in 10?**	7) **How many 3s in 15?**	8) **How many 4s in 16?**
9) **How many 5s in 20?**	10) **How many 2s in 12?**	11) **How many 3s in 9?**	12) **How many 4s in 24?**
13) **How many 5s in 25?**	14) **How many 2s in 14?**	15) **How many 3s in 18?**	16) **How many 4s in 20?**

Fractions

Understanding that ½ is more than ¼
and ¼ is more than ⅛.
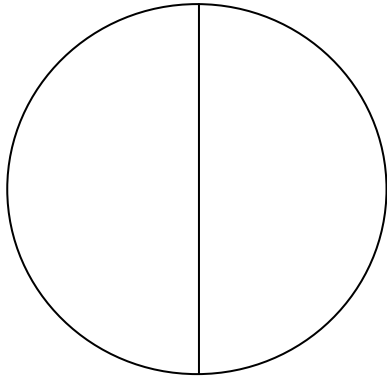
1) Colour one part red.

No. red parts =

Total no. parts =

Fraction coloured red

= _____
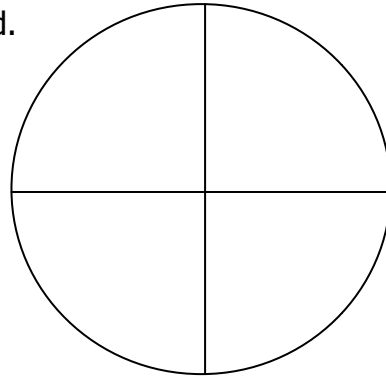
2) Colour one part blue.

No. blue parts =

Total no. parts =

Fraction coloured blue

= _____
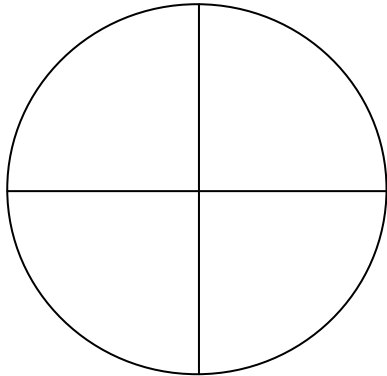
3) Colour two adjacent parts blue.

No. blue parts =

Total no. parts =

Fraction coloured blue

= _____
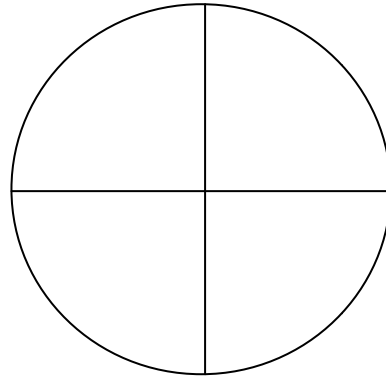
4) Colour three parts blue.

No. blue parts =

Total no. parts =

Fraction coloured blue

= _____
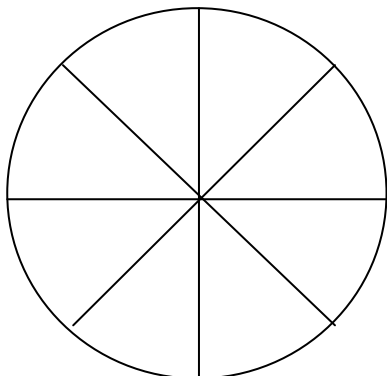
5) Colour one part green.

No. green parts =

Total no. parts =

Fraction coloured green

= _____
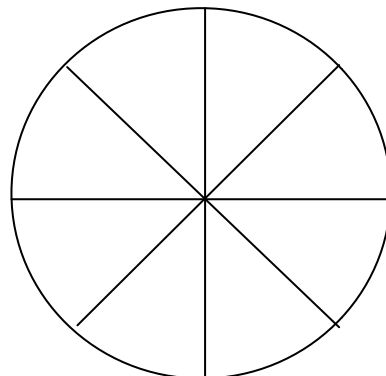
6) Colour two adjacent parts green.

No. green parts =

Total no. parts =

Fraction coloured green

= _____
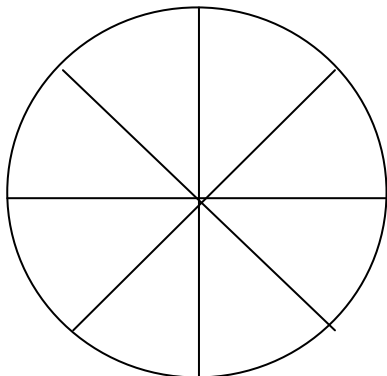
7) Colour four adjacent parts green.

No. green parts =

Total no. parts =

Fraction coloured green

= _____
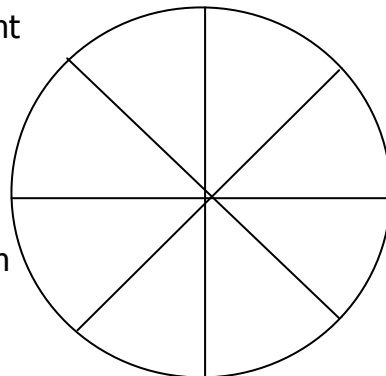
8) Colour six adjacent parts green.

No. green parts =

Total no. parts =

Fraction coloured green

= _____

Finished? Now, on the other side of this page or in your book, answer these questions: (1) Is $^2/_4$ the same size as $^1/_2$? (2) Is $^2/_8$ the same size as $^1/_4$?

(3) Are $^4/_8$, $^2/_4$ and $^1/_2$ all the same size? (4) Does $^6/_8$ equal $^3/_4$?

Bar Graphs

Interpreting Information Presented Graphically

Favourite Fruits of Year Two Children

a p r i c o t   **o r a n g e**   **b a n a n a**   **g r a p e**   **a p p l e**   **p e a r**   **p e a c h**
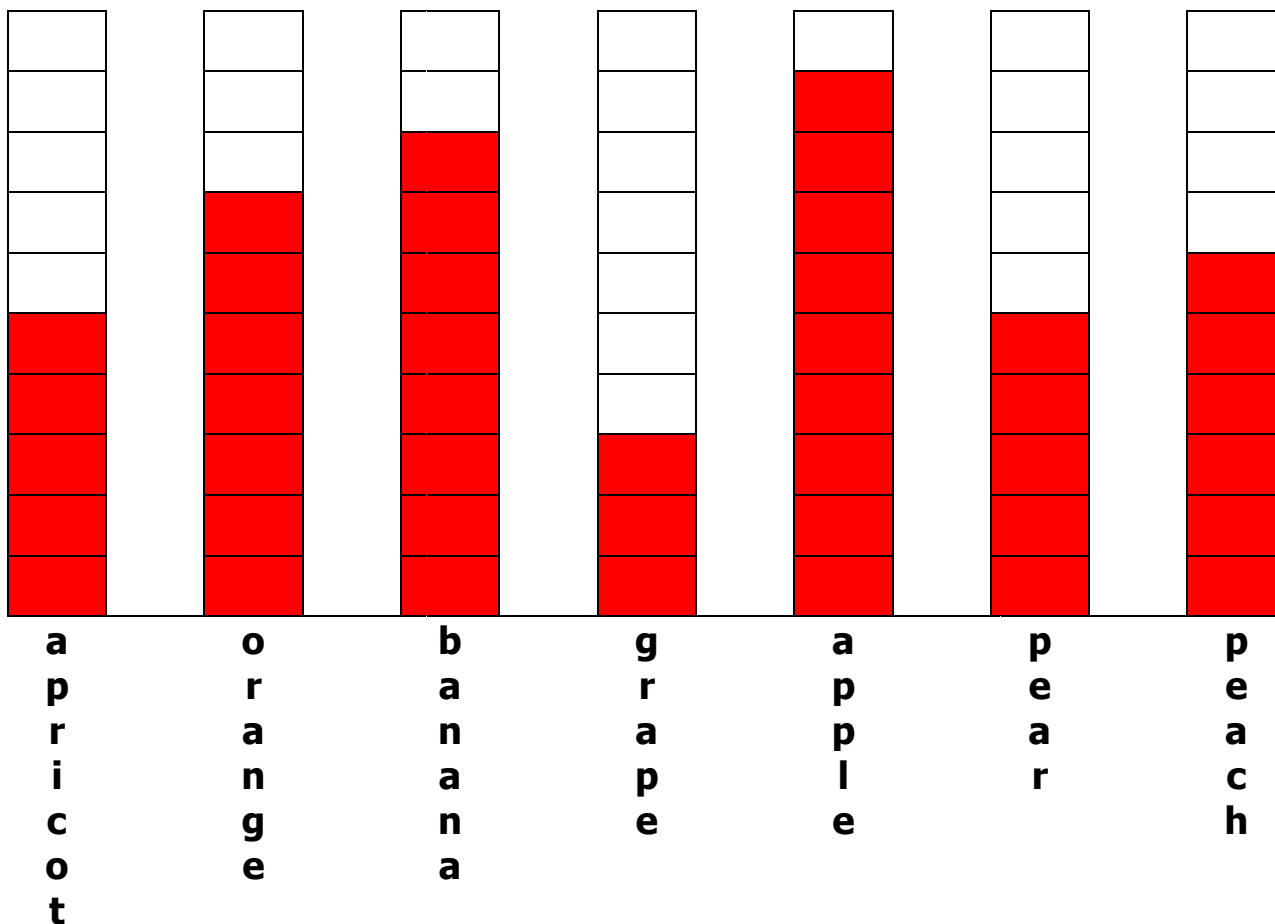
1) Which fruit is most liked by the year twos? ....

2) Which is the least popular fruit? ....

3) Which two fruits are equally popular? ....

4) How many more children prefer bananas to pears? ....

5) How many children like apples and oranges, in total? ....

6) How many year twos like fruits beginning with 'a'? ....

7) How many year twos like fruits beginning with 'p'? ....

8) Which fruit got as many votes as grapes + pears? ....

9) Which fruit got as many votes as grapes + peaches? ....

More Place Value

Hundreds, Tens & Units

Example:

Hundreds place   *Tens place*   *Units place*

576

1) Write the digit that's in the hundreds place.

649 ....

2) Write the digit that's in the tens place.

246 ....

3) Write the digit that's in the units place.

105 ....

4) Write the digit that's in the hundreds place.

209 ....

5) Write the digit that's in the tens place.

703 ....

6) Write the digit that's in the units place.

840 ....

7) Write the digit that's in the hundreds place.

347 ....

8) Write the digit that's in the tens place.

128 ....

9) Write the digit that's in the units place.

637 ....

10) Write the digit that's in the hundreds place.

912 ....

11) Write the digit that's in the tens place.

753 ....

12) Write the digit that's in the units place.

894 ....

13) Write either 'H', 'T' or 'U' for the digit in bold.

5**8**2 ....

14) Write either 'H', 'T' or 'U' for the digit in bold.

119 ....

15) Write either 'H', 'T' or 'U' for the digit in bold.

437 ....

16) Write either 'H', 'T' or 'U' for the digit in bold.

630 ....

17) Write either 'H', 'T' or 'U' for the digit in bold.

372 ....

18) Write either 'H', 'T' or 'U' for the digit in bold.

20**4** ....

19) Write either 'H', 'T' or 'U' for the digit in bold.

638 ....

20) Write either 'H', 'T' or 'U' for the digit in bold.

6**0**5 ....

Doubling & Halving

Multiple choice answers

When we double a number we add the number to itself. <u>Example:</u> 3 + 3 = **6**
Another way to double a number is to multiply it by 2. <u>Example:</u> 3 x 2 = **6**
When we halve a number we divide the number by 2. <u>Example:</u> 8 ÷ 2 = **4**

<u>Note:</u> Many numbers with two or more digits may be doubled or halved by doubling or halving the individual digits.
<u>Example:</u> Double 21 = **42**   <u>Example:</u> Halve 64 = **32**

Put a ring around the correct answers:

<u>Doubling</u>

1) Double 2.
4 8 6

2) Double 4.
8 12 10

3) Double 3.
4 8 6

4) Double 5.
12 8 10

5) Double 10.
22 20 18

6) Double 20.
40 60 42

7) Double 30.
40 60 80

8) Double 40.
80 60 44

9) Double 12.
22 24 18

10) Double 22.
66 44 42

11) Double 13.
28 24 26

12) Double 23.
64 66 46

13) Double 14.
18 28 30

14) Double 24.
48 28 42

15) Double 31.
62 60 64

16) Double 41.
80 84 82

17) Double 33.
66 60 68

18) Double 44.
82 88 84

19) Double 32.
68 60 64

20) Double 43.
86 68 88

<u>Halving</u>

21) Halve 4.
2 3 1

22) Halve 10.
4 6 5

23) Halve 6.
2 3 4

24) Halve 8.
2 4 3

25) Halve 12.
5 7 6

26) Halve 14.
7 9 8

27) Halve 16.
9 7 8

28) Halve 18.
10 8 9

29) Halve 20.
11 10 12

30) Halve 40.
20 10 18

31) Halve 60.
20 30 24

32) Halve 80.
40 30 20

33) Halve 24.
10 11 12

34) Halve 48.
22 24 25

35) Halve 66.
33 32 34

36) Halve 84.
40 42 41

Odd & Even Numbers

Identifying Odd & Even Using Pictures, Patterns & Sequences

1) Count the number of objects and write **odd** or **even** on the line.

a. ☺ ☺ ☺ ☺ ☺ ☺

....

f. ☆☆☆☆☆☆
☆☆☆☆☆☆

....

b. ❗❗❗❗❗❗

....

c. 🚲 🚲 🚲 🚲 🚲 🚲 🚲

....

g. 🐱 🐱 🐱 🐱
🐱 🐱 🐱

....

d. 🕊 🕊 🕊 🕊 🕊 🕊 🕊 🕊 🕊 🕊

....

h. 🧍 🧍 🧍 🧍
🧍 🧍 🧍
🧍

....

e. 🚌🚌🚌🚌🚌🚌🚌🚌🚌🚌🚌

....

2) One of the three numbers is odd. Circle it.

a. **23   12   18**   b. **12   17   22**   c. **18   24   21**

3) Underline the even number.

a. **9   10   11**   b. **17   19   16**   c. **36   37   39**

4) Fill in the blanks for the odd number patterns.

a. **1, 3, 5, 7, ____, 11, 13**   b. **15, 17, 19, 21, ____, 25, 27**

c. **31, 33, ____, 37, 39, _____**   d. **41, 43, 45, ____, ____, 51**

5) Fill in the blanks for the even number patterns.

a. **2, 4, 6, 8, ____, 12, 14**   b. **16, 18, 20, 22, ____, 26, 28**

c. **30, 32, ____, 36, 38, _____**   d. **42, 44, 46, ____, ____, 52**

Problem Solving

Money

1) James buys a banana for 50c and an apple for 25c. How much does he spend altogether?

2) Jenny had $1. She bought a cake for 65c. How much change did he get?

3) I have 4 coins in my hand. My total amount of money is 85c. Which coins are in my hand?

4) Here is one way to make 95c.

➔ **20c + 20c + 20c + 20c + 10c + 5c**

Can you think of two other ways to make 95c? Write them here. ➔

➔

5) Alice put a $2 coin in her money box. Then she put a 50c coin, a 20c coin, a 10c coin and two 5c coins in the money box. How much did Alice put in the money box altogether?

6) Jack and Billy did some odd jobs for their neighbours. Mr Brown paid the boys $4 for cleaning up his yard, Mrs Smith paid them $2.50 for walking her dog and Mr Thomas gave them $3.50 for helping to wash his car.

How much did the boys earn altogether?

Problem Solving

Time & Measurement

1) The disco starts at 6 o'clock and it goes for one and a half hours. At what time does it end?

`Working-out space and answer`

2) School finished at 3.15. Shane arrived home from school at 4 o'clock. How many minutes did it take Shane to get from school to home?

`Working-out space and answer`

3) Joe's sunflower is 30cm tall. Zoe's is 12cm taller. How tall is Zoe's sunflower?

`Working-out space and answer`

`Working-out space and answer`

4) Jill did a hop of 1 metre on her right foot. Katy's hop on her right foot was 85cm. Whose hop was the longer and by how much?

5) Toby weighed 30kg when dressed in his school clothes. At school Toby picked up a large book that weighed 1kg and two smaller books that each weighed ½ kg. While holding all the books Toby stepped onto some bathroom scales. What weight was shown on the scales?

`Working-out space and answer`

Problem Solving

Real-life Situations

1) Ebony has 4 packs of stickers. In each pack there are 6 stickers. How many stickers does Ebony have altogether?

Working-out space and answer

2) The postman began the day with 40 letters to deliver. So far he has delivered 15 letters. How many letters does the postman still have to deliver?

Working-out space and answer

Working-out space and answer

3) In Susie's class there are 26 children. Half of the children are girls. How many boys are there in Susie's class?

4) Bobby's uncle has goats on his farm. Between them the goats have 24 legs. How many goats does Bobbie's uncle have?

Working-out space and answer

Working-out space and answer

5) Bree, Tess, Kylie and Jane shared (evenly) 12 lollies between them. How many lollies did each girl have?

6) Michael wants to make triangles out of pieces of string. He has 21 pieces of string. How many triangles is Michael able to make?

Working-out space and answer

7) Sam counted 32 cars in the car park. 12 of the cars were white and 8 were silver. How many of the cars were neither white nor silver?

Working-out space and answer

Solutions

page 5 **Addition** *Adding a single-digit number to a double-digit number: no carrying*

1) **58**   2) **49**   3) **79**   4) **69**   5) **49**   6) **48**   7) **99**   8) **76**   9) **58**   10) **68**
11) **37**   12) **85**   13) **49**   14) **97**   15) **78**   16) **57**   17) **68**   18) **36**   19) **88**   20) **48**

page 6 **Addition** *Adding a single-digit number to a double-digit number: carrying*

1) **51**   2) **70**   3) **83**   4) **55**   5) **46**   6) **35**   7) **52**   8) **24**   9) **43**   10) **94**
11) **81**   12) **23**   13) **32**   14) **57**   15) **62**   16) **54**   17) **61**   18) **87**   19) **74**
20) **90**

page 7 **Addition** *Adding a double-digit number to a double-digit number: no carrying*

1) **89**   2) **38**   3) **56**   4) **39**   5) **83**   6) **68**   7) **68**   8) **85**   9) **86**   10) **98**
11) **76**   12) **67**   13) **76**   14) **85**   15) **84**   16) **68**   17) **78**   18) **67**   19) **75**   20) **87**

page 8 **Addition** *Adding a double-digit number to a double-digit number: carrying*

1) **73**   2) **70**   3) **93**   4) **92**   5) **93**   6) **68**   7) **32**   8) **61**   9) **101**   10) **95**
11) **92**   12) **94**   13) **92**   14) **90**   15) **81**   16) **75**   17) **90**   18) **74**   19) **74**   20) **36**

page 9 **Subtraction** *Subtracting a double-digit number from a double-digit number: no carrying*

1) **35**   2) **14**   3) **23**   4) **27**   5) **32**   6) **15**   7) **22**   8) **23**   9) **58**   10) **51**
11) **7**   12) **33**   13) **55**   14) **31**   15) **70**   16) **45**   17) **16**   18) **50**   19) **52**   20) **57**

page 10 **Subtraction** *Subtracting a double-digit number from a double-digit number: carrying*

1) **26**   2) **22**   3) **8**   4) **37**   5) **79**   6) **26**   7) **24**   8) **53**   9) **53**   10) **8**
11) **23**   12) **17**   13) **9**   14) **46**   15) **24**   16) **17**   17) **43**   18) **15**   19) **28**   20) **37**

page 11 **Number Patterns** *Whole Numbers Increasing & Decreasing. Write the next number.*

1) **21**   2) **22**   3) **80**   4) **31**   5) **36**   6) **25**   7) **40**   8) **43**   9) **32**   10) **100**
11) **0**   12) **0**   13) **16**   14) **7**   15) **4**   16) **11**   17) **8**   18) **39**   19) **39**   20) **36**

page 12 **Number Patterns** *Whole Numbers Increasing & Decreasing. Write the missing numbers.*

1) **23, 32**   2) **24, 36**   3) **15, 39**   4) **16, 37**   5) **27, 43**   6) **19, 27**   7) **23, 41**
8) **18, 45**   9) **19, 33**   10) **22, 49**   11) **23, 14**   12) **34, 24**   13) **26, 8**   14) **27, 19**   15) **18, 3**   16) **32, 17**   17) **23, 17**   18) **33, 21**   19) **55, 47**   20) **40, 26**

page 13 **Ordering Numbers** *Ordering to 99: Smallest first*

1. **19, 46, 51, 67, 83**   2. **8, 14, 63, 77, 90**   3. **23, 30, 32, 49, 67**   4. **16, 19, 28, 53, 91**   5. **26, 44, 48, 73, 75**   6. **37, 51, 64, 70, 82**   7. **4, 16, 29, 42, 92**

page 14 **Ordering Numbers** *Ordering to 99: Largest first*
1. **98, 78, 67, 43, 34**   2. **80, 76, 67, 65, 7**   3. **93, 82, 67, 54, 45**
4. **88, 64, 55, 36, 23**   5. **84, 65, 60, 51, 29**   6. **89, 58, 42, 37, 18**
7. **96, 66, 62, 20, 17**

page 15 **Numbers to 999** *Reading & Writing Numbers*
A. 1) **332** 2) **617** 3) **175** 4) **902** 5) **746** 6) **411** 7) **818** 8) **555** 9) **306**
B. 1) **five hundred and sixty-three** 2) **two hundred and eleven** 3) **seven hundred and fourteen** 4) **nine hundred and ninety eight** 5) **six hundred and four** 6) **one hundred and thirty-two** 7) **five hundred and ninety-nine** 8) **eight hundred and two** 9) **four hundred and twenty-seven**

page 16 **Numbers to 999** *Ordering: Smallest first; Largest first*
1) **267, 405, 586, 713** 2) **187, 340, 487, 945** 3) **233, 482, 618, 907**
4) **906, 358, 219, 213** 5) **843, 678, 544, 179** 6) **600, 493, 238, 214**
7) **509, 412, 307, 273**

page 17 **Multiplication** *Times Tables: x 2   x 3   x 4   x 5   x 10*

x 2 **0, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20**   x 3 **0, 3, 6, 9, 12, 15, 18, 21, 24, 27, 30**
x 4 **0, 4, 8, 12, 16, 20, 24, 28, 32, 36, 40**   x 5 **0, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50**
x 10 **0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100**

page 18 **Multiplication** *Multiplying a two-digit number by a one-digit number (no carrying)*
1) **128** 2) **155** 3) **68** 4) **46** 5) **156** 6) **44** 7) **123** 8) **48** 9) **84** 10) **69**
11) **66** 12) **99** 13) **150** 14) **93** 15) **153** 16) **164** 17) **88** 18) **82** 19) **105** 20) **104**

page 19 **Multiplication** *Multiplying a two-digit number by a one-digit number (carrying)*
1) **110** 2) **175** 3) **110** 4) **225** 5) **92** 6) **172** 7) **115** 8) **160** 9) **165** 10) **215**
11) **180** 12) **120** 13) **165** 14) **140** 15) **135** 16) **210** 17) **125** 18) **136** 19) **132** 20) **220**

page 20 **Number Sentences** *Insert a + or – sign to make the number sentence true (one and two-digit numbers)*
1) **-** 2) **+** 3) **+** 4) **-** 5) **-** 6) **+** 7) **+** 8) **+** 9) **-** 10) **+** 11) **-** 12) **-** 13) **+** 14) **+** 15) **-**
16) **+** 17) **+** 18) **-** 19) **-** 20) **+**

page 21 **Telling the Time** *a quarter to   a quarter past*
1) **12:45**   **7:15**   2) teacher to check

page 22 **Telling the Time** *Minutes to and past the hour: multiples of 5 minutes*
1) **6:25**   **10:40**   2) teacher to check

page 23 **Telling the Time** *Writing times shown on clocks*
7:55   9:25   7:05   2:35   12:20   2:25

page 24 **Telling the Time** *Drawing hands on clock faces*
teacher to check

page 25 **Place Value** *Hundreds, Tens and Ones* Re-arranging digits to make different numbers
589 985   345 543   269 962   689 986   509 950
308 830   367 763

page 26 **Division** *How to set out division problems* (two ways)
teacher to check

page 27 **Fractions** *Understanding that ½ is more than ¼ and ¼ is more than ⅛*
teacher to check

page 28 **Bar Graphs** *Interpreting Information Presented Visually*
1) **apple** 2) **grape** 3) **apricot/pear** 4) **three** 5) **sixteen** 6) **fourteen**
7) **eleven** 8) **banana** 9) **apple**

page 29 **More Place Value** *Hundreds, Tens & Units*
1) **6** 2) **4** 3) **5** 4) **2** 5) **0** 6) **0** 7) **3** 8) **2** 9) **7** 10) **9**
11) **5** 12) **4** 13) **T** 14) **H** 15) **H** 16) **H** 17) **H** 18) **U** 19) **H** 20) **T**

page 30 **Doubling and Halving** *Multiple choice answers*
1) **4** 2) **8** 3) **6** 4) **10** 5) **20** 6) **40** 7) **60** 8) **80** 9) **24** 10) **44** 11) **26** 12) **46**
13) **28** 14) **48** 15) **62** 16) **82** 17) **66** 18) **88** 19) **64** 20) **86** 21) **2** 22) **5** 23) **3** 24) **4**
25) **6** 26) **7** 27) **8** 28) **9** 29) **10** 30) **20** 31) **30** 32) **40** 33) **12** 34) **24** 35) **33** 36) **42**

page 31 **Odd & Even Numbers** *Identifying Odd & Even Using Pictures, Patterns & Sequences*
1) a **even**   b **even**   c **odd**   d **even**   e **odd**   f **even**   g **odd**   h **odd**
2) a **23**   b **17**   c **21**   3) a **10**   b **16**   c **36**
4) a **9**   b **23**   c **35, 41**   d **47, 49**   5) a **10**   b **24**   c **34, 40**   d **48, 50**

page 32 **Problem Solving** *Money*
1) **75c** 2) **35c** 3) **50c, 20c, 10c, 5c** 4) teacher to check 5) **$2.90** 6) **$10**

page 33 **Problem Solving** *Time & Measurement*
1) **7:30** 2) **45mins** 3) **42cm** 4) **Jill's, 15cm** 5) **32kg**

page 34 **Problem Solving** *Real-life Situations*
1) **24 stickers** 2) **25 letters** 3) **13 boys** 4) **6 goats** 5) **3 lollies**
6) **7 triangles** 7) **12 cars**