		CARD 1
1 Count backward	ls by 100 from 623. Write o	each answer.
2 Count forwards	from 456 by 100. Write th	e first six numbers you get.
3 Write the place	value of the 7 in each of th	nese numbers:
a) 274	c) 4790	e) 1087
b) 3872	d) 7281	
4 Write the number	er 1358 in expanded notat	ion.
5 Mentally calcular reached your an	te the difference between swer.	68 and 199. Explain how yo



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NUMBER Whole numbers

BLM 2

Crazy Hat Day

CARD 2

Complete the chart.

501	502			507	508	509	510
511							520
		583				589	590
591						599	600

2 On the chart above, colour the numbers as follows:

NUMBERS	
2 IN THE ONES PLACE	RED
8 IN THE TENS PLACE	GREEN
SAME NUMBER IN THE TENS PLACE AND THE ONES PLACE	BLUE
BETWEEN 567 AND 581	YELLOW
LESS THAN 507	BROWN
GREATER THAN 592	PURPLE

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Order these numbers from smallest to largest.



NUMBER Whole numbers April Fools' Day

The following calendar shows the year 2008.

	2008				
January S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	March April S M T W T F S 1 1 2 3 4 5 6 1 2 3 4 5 6 1 2 3 4 5 6 11 12 12 3 14 5 15 1 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31				
May S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	June July August S M T W T F S M T W T F S M T W T F S M T W T F S M T W T F S M T W T F S M T W T F S M T W T F S M T W T F S M T W T F S M T W T F S M T W T F S M T W T F S M T W T F S M T W T F S M T W T F S M T W T F <t< td=""><td>0</td></t<>	0			
September S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	October November S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31				
1 Write the day and date for April Fools' Day 2008.					
2 How many days	are there in the year 2008?				
3 Name the mont the month.	ths in 2008 which have a Tuesday as the first day of	×			

BLM 3

CARD 6

5

Mentally add the number of days in February, March, April and June.

5 Mentally subtract the days in July and August from the total number

of days in 2008.

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Maths-in-a-Box 2

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rour rours	CARD 9
Write the following numbers in de 3564, 4365, 5463, 3546, 3654, 54	escending order, i.e. largest to smallest: 36.
2 Write the number 5436 in words.	
3 Round 3564 to the nearest ten.	
4 Round 5463 to the nearest thousa	and.
5 How many hundreds are there alt	together in the number 3654?
6 Write all you can about the numb	per 3546.
7 Find the difference between the I	numbers 3564 and 5436.
B Add all the numbers in Question	1 together, without using a calculator.

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e) I add 9 more tens to 5912. Write the new number.



f) I take 910 away from 5912. Write the new number.

g) If I add 1 to each of the groupings (Th, H, T and U) in the number 5912, what will the new number be?....

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NUMBER Whole numbers The Strand Arcade

BLM 7

The Strand Arcade was opened in 1892. Write this number in words.
The Strand Arcade was opened in 1892. Write this number in words.
Place these numbers in descending order, i.e. largest to smallest: 1286, 1694, 1068, 1892, 1987, 1882.
Place these numbers in ascending order, i.e. smallest to largest: 1739, 2004, 1632, 1363, 1629, 1336.
Round these numbers to the nearest 100: 1867, 1456, 1449, 1533, 1892.
Round these numbers to the nearest 10: 1724, 1966, 1949, 1325, 1892.
Write the number 2169 using expanded notation.
What does the 8 represent in the number 1892?

3 What does the 3 represent in the number 1973?

9 The Strand Arcade is 304 metres in length. Write as much as you can about the number 304.



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NUMBER Whole numbers Inventions Many things we use today were invented i

BLM 8

CARD 13

Many things we use today were invented in the 1800s. Round the date of each invention to the nearest 10 years.

Telephone 1876	1	Zipper 1893	2
Photograph 1826	3	Bicycle 1839	4
Sewing machine 1846	5	Safety match 1844	6
Safety pin 1849	7	Pneumatic tyre 1845	8
Radio 1895	9	Phonograph 1877	10
Stethoscope 1816	11.	Typewriter 1876	12.

More practice

Round these numb nearest 10.	ers to the	Round these numbers to the nearest 100.		
13. 41	14. 324	19. 326	20. 693	
15. 75	16. 179	21. 555	22. 407	
17. 87	18. 645	23 . 839	24. 3495	

RESEARCH: Do your own research into any two of the above inventions. Find out who invented them, in which country and the age of the inventor at the time, as well as other points of interest. Write brief reports below.

	Invention 1	Item:	Invent	or:
	Age:	Countr	y:	
5				
4				
X				
9				
	Invention 2	Item:	Invente	or:
	Age:	Countr	y:	



NUMBER Whole numbers Walking the Bridge



BLM 9

CARD 14

00

× ∰ 9

Write the numeral for each number.

■ 20 more than 2974
■ 5 less than 4638
10 more than 1901
11 less than 4005
100 more than 970
■ 500 less than 2350
■ 200 more than 3912
■ 200 less than 9997
the number between 3569 and 3571
■ the number between 5099 and 5101

the small	lest four-digit number	
the large	st four-digit number	
Ask a classmate to c	check your work.	3
Mið	<i>Maths-in-a-Box 2</i> TEACHER RESOURCE BOOK © Cambridge University Press 2007	11
	$-\phi$	

BLM 10 NUMBER Whole numbers Australia's Highest Mountains CARD 15 1 Make these numbers with the Base 10 blocks. Then write the numeral for each of the following numbers. a) three thousand **b**) four thousand and eighty c) eight thousand and seventy d) four thousand eight hundred e) two thousand four hundred and fifty-six f) three thousand seven hundred and four **g**) three thousand one hundred and seventy ... h) nine thousand nine hundred and ninety-nine i) one thousand four hundred and ninety-seven. Tell your teacher the place value of the digits in each number. **2** Build these numbers: 2316 2136 2536 2613 Write them in order from smallest to largest. Build some numbers of your own with blocks, flats, longs and shorts. Ask a classmate to place them in order from smallest to largest.

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NUMBER Whole numbers Australia's Rivers

BLM 11

CARD 16

8

This is a table of the longest rivers in Australia. Round each number up or down to the nearest 100 kilometres and then to the nearest 1000 kilometres.

RIVER	LENGTH (km)	HUNDRED	THOUSAND
DARLING	2740		
MURRAY	2589		
MURRUMBIDGEE	1609		
BARWON-MACINTYRE	1577		
LACHLAN	1481		

2 Jim and Jean travelled the Murray on a houseboat. Round the distance they travelled each trip to the nearest 10, 100 and 1000 kilometres.

TRIP	ACTUAL DISTANCE	TO NEAREST TEN	TO NEAREST HUNDRED	TO NEAREST THOUSAND
1	83 KM			
2	132 KM			
3	481 KM			
4	1234 KM			
5	1845 KM			

Using a calculator, find the *total actual distance* travelled by Jim and Jean on the Murray River trips.

Now total your 'to nearest ten' column in



0

Snacks

Sultanas

Yoghurt

Drinks

Plain milk

Fruit juice

Salad

Ham

Sandwiches

Curried egg

Vegemite

Banana

Chocolate milk

Crisbread with

tomato and cheese

Price List

BLM 12

CARD 17

70c

35c

95c

\$1.20

\$1.60

\$1.00

\$2.00

\$1.60

\$1.90

\$1.40

\$1.55

Use the price list below to answer the following questions:

How much more is a salad sandwich than a banana sandwich?

What is the difference in price between a yoghurt and a crispbread with tomato and cheese?

S Miriam had \$4.00. She bought two banana sandwiches. How much change did she receive?

If you had \$2.00 and bought a fruit juice and some sultanas, how much change would you receive?

5 Choose your favourite sandwich, snack and drink. List them. How much change would you receive if you paid for them with \$5.00?



Ν	UMBER Addition and subtraction		BLM 13	Ĩ.
Ρ	et Parade		CARD 18	
			Tens Ones	
1	On Pet Parade Day, 56 dogs and brought to school. How many pe brought to school?	27 cats were		
2	In a game of netball Jayne scored and her sister Peta scored 14. Ho goals did they score?	l 15 goals w many	Tens Ones	
3	Answer the following questions a computing mentally. Explain how worked mathematically for each	oy v you question.		
a	What is 15 more than 58?	d) Add 25 and 55.		
				Ś
				A. 4
b	What is the total when 48 is added to 16?	e) Find the sum of 64 a	nd 25.	
Þ	What is the total when 48 is added to 16?	e) Find the sum of 64 a	nd 25.	
b	What is the total when 48 is added to 16?	e) Find the sum of 64 a	nd 25.	
Ь	What is the total when 48 is added to 16?	e) Find the sum of 64 a	nd 25.	Ŷ V ● □ ■ N 茶 V
Ь) с)	What is the total when 48 is added to 16?	e) Find the sum of 64 a	nd 25.	シュート 秋 ノー



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A/rite a quastion for each of these addition pr	chlome Mork out your
exercise book.	r work in your maths
Leisha and her family owned a property th They bought another property that was 27	at was 898 hectares in area. 6 hectares in area.
Question:	
2 During their holiday, Stephanie and her far on the first day, 398 kilometres on the seco the third day.	nily travelled 154 kilometres and day and 79 kilometres on
2 During their holiday, Stephanie and her far on the first day, 398 kilometres on the seco the third day. Question:	nily travelled 154 kilometres ond day and 79 kilometres on
2 During their holiday, Stephanie and her far on the first day, 398 kilometres on the seco the third day. Question:	nily travelled 154 kilometres and day and 79 kilometres on
 During their holiday, Stephanie and her far on the first day, 398 kilometres on the second the third day. Question:	nily travelled 154 kilometres and day and 79 kilometres on
 During their holiday, Stephanie and her far on the first day, 398 kilometres on the second the third day. Question: Nirvana is a town with a population of 164 in Westford and 462 living in Lawler. Question: 	nily travelled 154 kilometres ond day and 79 kilometres on . There are 596 people living
 During their holiday, Stephanie and her far on the first day, 398 kilometres on the second the third day. Question: Nirvana is a town with a population of 164 in Westford and 462 living in Lawler. Question: 	nily travelled 154 kilometres ond day and 79 kilometres on . There are 596 people living

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Question:



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NUMBER Addition and subtraction	BLM 15	
White Plastic Chairs	CARD 26	5
1 A hardware store displayed five stacks of white plas stack were 25, 33, 18, 21 and 23 chairs. How many altogether?	stic chairs. In each chairs were displayed	
		~
Prom a display of 137 chairs, a customer purchased café. How many remained in the display?	48 for an outdoor	
		Ż
If each chair in Question 2 cost the customer \$5.00 the cost of the 48 chairs.	, mentally calculate	
Explain how you worked mentally in Question 3.		Š
E From a display of 158 plastic chairs, the following r by customers: 12, 9, 6, 4, 8, 20 and 2. How many w altogether?	numbers were bought vere purchased	
After the sales in Question 5 had been made, how on display?	may chairs remained	×
		X
		4.545



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Hot Fish	Sam's Fish 'n'	Chips	
and	MENU		
Chips	Bream and chips	\$5.50	
	Whiting and chips	\$6.30	
	Dory and chips	\$4.70	
	Flathead and chips	\$6.10	
		4- 00	
	Seafood packs	\$5.00	
	Seafood packs Green salad	\$5.00 \$4.00	
1 Sally ordered k and chips. The	Green salad All drinks oream and chips, Kim flat y all bought drinks. How	\$5.00 \$4.00 \$2.20 head and chips a much did it all c	and Lisa dory ost?
 Sally ordered by and chips. The sand chips. The sale of the second second	Seafood packs Green salad All drinks oream and chips, Kim flat y all bought drinks. How mily bought their take-av hiting and chips, Mum bo all requested seafood pace among them all. How m	\$5.00 \$4.00 \$2.20 head and chips a much did it all c vay meal at Sam ought bream and cks. Mum bought uch did the mea	and Lisa dory ost? 's Fish 'n' Chips I chips and the t two green I cost?



NUMBER Addition and subtraction

Fresh Fruit in a Bowl

At the Show

Ticket prices to the show are \$15.00 for adults and \$7.00 for children. A family ticket for two adults and two or more children costs \$40.00. How much is saved if dad, mum and three children use a family ticket?

2 Rides at the show cost \$5.00 for three. Susan, Kathy and Jamie all want to go on nine different rides. How much money will they need?

Sample bags at the show cost \$4.00, \$7.00 and \$10.00. Susan has been given \$40.00 to spend on sample bags for herself and her friends. Make a list of all the possible combinations of \$4.00, \$7.00 and \$10.00 bags she could buy by spending EXACTLY the \$40.00 she was given.

Dad and Mum bring lunch with them but the children buy their lunch. Visitors to the show can choose from the following lunch items:

Meat pie \$2.50 Hot dog \$3.00 Kebab \$3.00
Salad sandwich \$3.50 Ham roll \$2.75 Apple \$0.80
Banana \$1.00
Kathy buys a meat pie, apple and juice. How much does she pay?
Susan buys a hot dog, banana and juice. How much does she pay?
Jamie buys a salad sandwich, ham roll and juice. How much does he pay?
How much does it cost altogether for the three children to buy their lunch?

5 Admission tickets to the animal nursery are \$5.50 for adults and \$3.50 for children. How much will it cost for dad, mum and three children?

The family travels home by bus. Fares are \$4.00 for each adult and \$2.25 for each of their children. How much did it cost the family in bus fares?

7 Estimate first, then calculate the total cost of the family's visit to the show (Questions 1-6 above).

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BLM 17

CARD 28

NUMBER Addition and subtraction	BLM 18
ix fours	CARD 29
Arrange the following numbers in descending or smallest): 2527, 3894, 2985, 2959, 2498, 1844	rder (largest to
Round these numbers to the nearest ten: 3456,	5849, 3254, 9255
Write the first four numbers when counting forw	vard by tens from 1466.
Write the number 4658 using expanded notation	۱.
3 Which numbers come before and after 4899?	
Write in words the number 3896.	
	ion 1.
Use a calculator to add the six numbers in Quest	



Use pencil and paper to add 2769, 4578 and 8963.



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Explain the method you used to solve the magic squares.

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If a shopper purchased one of each item advertised, how much would she save?



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BLM 21

What are Words Worth?

NUMBER Addition and subtraction

CARD 32

Letter Values

In the game of Scrabble players make words from the letters provided. Each letter has a numerical value. Letters that occur very frequently in English are given a very low Scrabble value. Letters that occur less frequently are given higher values. During the game players score the value of the letters used in the words they form.





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CARD 33

Queen Victoria Markets

° The Pet Sh	op °	
Kittens (vaccinations extra)	\$22	
Dwarf rabbits	\$29	
Puppies \$54 (vaccinations extra)		
Budgerigars	\$19	
Rabbits	\$18	
Lovebirds	\$28	
Guineapigs	\$8	
v_{\circ}	\$35 _°	

Mentally solve these problems.

she pay?

NUMBER Addition and subtraction

If Rebecca bought a rabbit and a budgerigar, how much would

2 Jessica bought a dwarf rabbit, a budgerigar and two lovebirds. What

did they cost all together?

Kittens and puppies need vaccinations, which cost \$35 each. If you bought a kitten and a puppy and had them both vaccinated, what

would the total cost be?

If Vlado's grandmother gave him \$40 to buy two pets, what choices could he make? Would he receive any change? How much?

How many different choices could you make if you had exactly \$50 to spend?



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NUMBER Multiplication and division Egg Arrays Use 24 counters to make as many different arrays as you can. Draw all your arrangements in the space below.

2 Write the multiplication number sentences and related division number sentences for each array below its diagram.

BLM 24

CARD 36



Bk2 p1-36 15/7/07 9:12 PM Page 27 NUMBER Multiplication and division BLM 25 Noughts and Crosses CARD 37 **WORKING MATHEMATCIALLY:** Use the 3 x 3 square grids to play the six games. 00 **1** INVESTIGATION: Use the 4 x 4 square grids to play two games. く ※ 9



BLM 26

CARD 38

The	Giant	Claw	

NUMBER Multiplication and division

Colour the table of 2s to 1 **2** Circle the table of 4s to 10

S What do you notice about the pattern?

00.	1	2	3	4	5	6	7	8	9	10
00.	11	12	13	14	15	16	17	18	19	20
t	21	22	23	24	25	26	27	28	29	30
	31	32	33	34	35	36	37	38	39	40
	41	42	43	44	45	46	47	48	49	50
	51	52	53	54	55	56	57	58	59	60
	61	62	63	64	65	66	67	68	69	70
	71	72	73	74	75	76	77	78	79	80
	81	82	83	84	85	86	87	88	89	90
	91	92	93	94	95	96	97	98	99	100

4 Help find the hidden sign in the table below. Colour boxes with the same answers in the same colour. (For example, colour all the answers that are 24 in red, all the answers that are 20 in green.)

The hidden sign is

_					
	6 x 4	4 x 5	8 x 2	5 x 4	4 x 6
	7 x 4	12 x 2	3 x 3	8 x 3	4 x 4
	10 x 2	7 x 4	4 x 6	3 x 7	9 x 3
	4 x 10	2 x 12	3 x 7	3 x 8	5 x 2
	3 x 8	0 x 5	8 x 2	9 x 2	2 x 12

5 Using your calculator constant, start with 4 х Χ

Continue to press =

Πι,	start	WILII	4	

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NUMBER Multiplication and division

BLM 27

CARD 39

Groups of Seven

Multiply mentally to get Freida the frog across the lily pads.



Complete this multiplication grid to check the answers above. Colour patterns in the tables of 3, 6 and 9.

х	1	2	3	4	5	6	7	8	9	10
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

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SWrite a multiplication word problem involving the legs of a number of Japanese spider crabs for a classmate to solve.



NUMBER Multiplication and division

The Big Wheel

Complete the multiplication grid.

Х	5	3	7	2	1	0	4	9	11	6	8	10	12
2													
10													
4													
5													
3													

BLM 29

CARD 42

8

× ∰ 9

31

2 Complete.

a)	7 + 7 + 7 + 7 =	x 7 =	28	
ь)	5 + 5 + 5 + 5 + 5 + 5 =	×	=	
c)	3 + 3 + 3 + 3 + 3 + 3 + 3 =		. x =	
d)	7 + 7 + 7 + 7 + 7 =		=	
e)	4 + 4 + 4 + 4 + 4 + 4 =		. x =	
f)	0 + 0 + 0 + 0 + 0 =	×	=	
3 Fin	d the answers.			
a)	How many 3s in 18?	18 ÷ 3 =		
ь)	How many 5s in 35?	35 ÷ 5 =		
c)	How many 7s in 14?	14 ÷ 7 =		
d)	How many 9s in 36?	36 ÷ 9 =		
e)	How many 8s in 32?	32 ÷ 8 =		
f)	How many 5s in 40?	40 ÷ 5 =		
g)	How many 9s in 45?	45 ÷ 9 =		
h)	How many 2s in 22?	22 ÷ 2 =		
Mie	Mat	hs-in-a-Box 2 TEACHE	R RESOURCE BOOK © Cambric	dge University Press 2007

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Louves of bread	CARD 43
Write and solve a word problem to suit sentence.	each multiplication number
a) 18 x 4 =	
b) 21 x 3 =	
c) 17 x 5 =	
d) 32 x 7 =	
Write and solve a word problem to suit e	each division number sentence.
a) $45 \div 9 =$	
(b) $24 \div 8 =$	
b) 24 · 0 -	

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NUMBER Multiplication and division

BLM 32

Square Numbers

CARD 48

Draw arrays of crosses which show that 9 and 36 are square numbers.

2 Which square number follows 49? How do you know?

List all the square numbers up to and including 100.

Closely examine the list of numbers in Question 3. Describe the pattern shown in the differences between each successive square number.

5 Using a calculator, find all the square numbers between 100 and 1000 and list them.

6 In the space below, using an array and two different colours, show that the square number 64 is made up of two triangular numbers, 28 and 36.



	Bk2 p1-36	15/7/07	9:12 PM Pag	e 35		$ \varphi$ $-$		_
		NUMB Fille	ER Multip ed-ir TIGATION	olication Red N: Comp	and div ctan	rision BLM 33 Gles CARD 50 table with your results.		
		NUMBER	IS IT POSSIBLE TO MAKE A FILLED-IN RECTANGLE? YES OR NO	Number of Rows in Your Filled-in Rectangle	NUMBER OF COLUMNS IN YOUR FILLED-IN RECTANGLE	Multiplication Number Sentence Based on Your Filled-in Rectangle	3▲ +++ 2 ☆	
		20					**	
		21						
-		22					4	
		23						
		24						
		25					×	
		26					***	
		27					9	
		28						
		20						

			000
30			
50			3

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NUMBER Fractions and decimals Floral Fractions

BLM	35
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CARD 52

- Shade three-eighths of the above grid green, one-eighth of the grid red, one-quarter of the grid yellow and two-eighths of the grid blue.
- Draw a bunch of eight flowers. Colour two-eighths yellow, three-eighths blue and three-eighths red.

- Draw a ring around the flowers in Question 2 which make threequarters of 8.
- Draw a full carton of a dozen eggs. Put a cross on one-half of the eggs. Put a tick on one-quarter of the eggs. Draw a coloured pattern on the remaining one-quarter.

5 Draw a picket fence with 16 palings on it. Paint half of them brown. Paint one-quarter green and two-eighths red.



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3

4

The glass panel above consists of 10 rectangular panes. Colour 10% yellow, 30% red, $\frac{1}{2}$ green and $\frac{1}{10}$ purple.



Write your own fraction instructions for a classmate to follow in colouring the panes in this glass panel.

