

MATHS WATHS

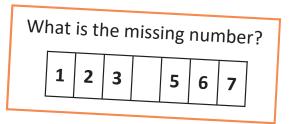
CODEBREAKER RESOURCE

TEACHER INFORMATION SHEET

Print the activity cards out and cut them up.

- The activity cards work for all year group challenges so can be shared between classes.
- Spread the cards around the hall, playground or field.
- Give each child or team a challenge sheet.

Children answer a question...



...run to locate their answer on an activity card...

40.5	38
4	350
16	8,479

...and write the corresponding letter in their table.

Qı	iestion	Answer	Letter
What is the i	nissing number?		
1 2 3	5 6 7	4	M

If the answers are correct, the corresponding letters will unlock a code.

Additional activity

The activity cards can be used again and again to provide new challenges for your pupils.

Ask children to design their own codebreaker task by using the answers provided to create their own questions.

	9,217	86		3	112
Α	1	8	B	18	1,539
	48	541		600	21
	13	20		22	132
	4,550	400		550	81
	103	144		15.5	12,100
	28	13,200		26	8,500
Ε	19	54		15	116
	61	14,997	_	240	5,782
	31	650		4,000	1,995
	49	120		5	64
	2,789	20,719		836	750
	500	12.5		33	124
	34	106		190	63
	1,808	21,700		1,000	6,448
	36	7.5		12	37
	40	900		10	96

40.5	38
4	350
16	8,479

18,668	150
14	30
420	41

14,500	556
17	24
35	200

	53	250
P	7,320	290
	32	99

39	3,280
180	620
28.5	84

25	1,342
6	102
27	450

23	7
80	160
11	9,998

 6,910	42
9	50
138	10,000

 45	800
72	275
1,499	100

29	44
2,225	525
7,196	1,684

8,797	199
700	75
280	47

	70	1,288
X	56	46
	950	4,200

	20,000	85
Y	66	110
	77	79

60	107
299	52
5,000	88

Year 1 Codebreaker Challenge

Answer a question then try to find your answer on a card.

Write down the letter next to the answer to crack the code.

Activity 1

Question	Answer	Letter
What is the missing number?		
1 2 3 5 6 7		
4 – 3 =		
What is the missing number? 0 1 2 3 4 5 7 8 9 10		
Which number is the greatest?		
2 + 7 =		
How many stars are there?		
What number is shown?		
What is the missing number?		

Question	Answer	Letter
What is the missing number?		
18 – 1 =		
Which number is the greatest?		
What number is shown?		
11 + 7 =		
+ 7 = 15		
How many squares are there?		
Which number is the smallest?		

Year 1 Codebreaker Challenge ANSWERS

Answer a question then try to find your answer on a card.

Write down the letter next to the answer to crack the code.

Activity 1

Question	Answer	Letter
What is the missing number? 1 2 3 5 6 7	4	M
4 – 3 =	1	Α
What is the missing number? 0 1 2 3 4 5 7 8 9 10	6	R
Which number is the greatest?	8	Α
2 + 7 =	9	т
How many stars are there?	5	н
What number is shown?	17	0
What is the missing number?	14	N

Question	Answer	Letter
What is the missing number?	15	F
18 – 1 =	17	0
Which number is the greatest?	17	0
What number is shown?	9	т
11 + 7 =	18	В
+ 7 = 15	8	Α
How many squares are there?		
	10	L
Which number is the smallest? 8 2 12 6	2	L

Year 2 Codebreaker Challenge

Answer a question then try to find your answer on a card.

Write down the letter next to the answer to crack the code.

Activity 1

Question	Answer	Letter
Which number is the smallest?		
28 + 7 =		
tens + 7 ones = 27		
47 = 35 +		
What is the missing part? 11 ? 30		
What number is 7 less than 73?		
What is the missing number? 9, 12, 15,, 21		
3 tens + ones = 38		
Write "ninety-six" in numerals.		
What is the missing number? 20, 18, 16, 14,, 10		

4 tens + 9 ones = Write "seventy-nine" in numerals. What is the missing number? 20, 18,, 14, 12, 10 What is the missing number? 15, 18, 21, 24, 27, What number is 6 less than 54?	r
in numerals. What is the missing number? 20, 18,, 14, 12, 10 What is the missing number? 15, 18, 21, 24, 27,	
20, 18,, 14, 12, 10 What is the missing number? 15, 18, 21, 24, 27,	
15, 18, 21, 24, 27,	
What number is 6 less than 54?	
= 60 + 20	
What is the missing part? 31 ? 40	
39 – 5 =	
38 = 25 +	
Which number is the smallest? 35 23 32 51	

Year 2 Codebreaker Challenge ANSWERS

Answer a question then try to find your answer on a card.

Write down the letter next to the answer to crack the code.

Activity 1

Question	Answer	Letter
Which number is the smallest? 48 82 41 29	29	V
28 + 7 =	35	0
tens + 7 ones = 27	2	L
47 = 35 +	12	L
What is the missing part? 11 ? 30	19	E
What number is 7 less than 73?	66	Y
What is the missing number? 9, 12, 15,, 21	18	В
3 tens + ones = 38	8	A
Write "ninety-six" in numerals.	96	L
What is the missing number? 20, 18, 16, 14,, 10	12	L

Question	Answer	Letter
4 tens + 9 ones =	49	G
Write "seventy-nine" in numerals.	79	Y
What is the missing number? 20, 18,, 14, 12, 10	16	М
What is the missing number? 15, 18, 21, 24, 27,	30	N
What number is 6 less than 54?	48	A
= 60 + 20	80	S
What is the missing part? 31 ? 40	9	т
39 – 5 =	34	I
38 = 25 +	13	С
Which number is the smallest? 35 23 32 51	23	S

Year 3 Codebreaker Challenge

Answer a question then try to find your answer on a card.

Write down the letter next to the answer to crack the code.

Activity 1

Question	Answer	Letter
What is the value of the number 8 in the number 387?		
÷ 8 = 5		
8 x 6 =		
36 ÷ 4 =		
What number is 23 less than 77?		
28 – = 7		
What is the missing number? 4, 8, 12, 16, 20,, 28, 32		
What is the greatest number you can make using these cards? 4 1 5		
What is the smallest number? 201 102 221 112		
What is the missing number? 650 600 500 450		

Question	Answer	Letter
What is the smallest number you can make using these cards?		
What is the missing number? 50, 45, 40,, 30, 25		
What number is 16 less than 88?		
÷ 3 = 9		
What is the greatest number?		
93 – 7 =		
What is the missing number? 250 300 400 450		
What is the missing number? 4, 8, 12, 16, 20, 24,, 32		
5 x 6 =		
What is the value of the number 5 in the number 751?		

Year 3 Codebreaker Challenge ANSWERS

Answer a question then try to find your answer on a card.

Write down the letter next to the answer to crack the code.

Activity 1

Question	Answer	Letter
What is the value of the number 8 in the number 387?	80	S
÷ 8 = 5	40	K
8 x 6 =	48	Α
36 ÷ 4 =	9	т
What number is 23 less than 77?	54	E
28 – = 7	21	В
What is the missing number? 4, 8, 12, 16, 20,, 28, 32	24	0
What is the greatest number you can make using these cards?	541	A
What is the smallest number? 201 102 221 112	102	R
What is the missing number? 650 600 500 450	550	D

Question	Answer	Letter
What is the smallest number you can make using these cards?	138	т
What is the missing number? 50, 45, 40,, 30, 25	35	0
What number is 16 less than 88?	72	U
÷ 3 = 9	27	R
What is the greatest number?	420	N
93 – 7 =	86	A
What is the missing number? 250 300 400 450	350	М
What is the missing number? 4, 8, 12, 16, 20, 24,, 32	28	E
5 x 6 =	30	N
What is the value of the number 5 in the number 751?	50	т

Year 4 Codebreaker Challenge

Answer a question then try to find your answer on a card.

Write down the letter next to the answer to crack the code.

Activity 1

Question	Answer	Letter
Round 163 to the nearest 10.		
4,200 ÷ 10 =		
What is the value of the underlined digit? 8, 2 53		
3 6 9 0 + 5 1 0 7		
Round 559 to the nearest 100.		
What number is 100 more than 456?		
4,541 – 4,000 =		
Write the Roman Numeral XXV as a number.		
What is the missing number? 650 625 600 575		
540 = x 10		
72 ÷ = 12		

Question	Answer	Letter
What number is 100 less than 111?		
What is the value of the underlined digit? 4 ,869		
Write the Roman Numeral XVII as a number.		
Round 740 to the nearest 100.		
Round 194 to the nearest 10.		
What is double 36?		
1 3 2 6 + 7 1 5 3		
320 = x 10		
5,000 ÷ 10 =		
x 3 = 90		
÷ 7 = 7		
÷ 7 = 7		

Year 4 Codebreaker Challenge ANSWERS

Answer a question then try to find your answer on a card.

Write down the letter next to the answer to crack the code.

Activity 1

Question	Answer	Letter
Round 163 to the nearest 10.	160	S
4,200 ÷ 10 =	420	N
What is the value of the underlined digit? 8, 2 53	200	0
3 6 9 0 + 5 1 0 7	8,797	W
Round 559 to the nearest 100.	600	В
What number is 100 more than 456?	556	0
4,541 – 4,000 =	541	A
Write the Roman Numeral XXV as a number.	25	R
What is the missing number? 650 625 600 575	550	D
540 = x 10	54	E
72 ÷ = 12	6	R

Question	Answer	Letter
What number is 100 less than 111?	11	S
What is the value of the underlined digit? 4 ,869	4,000	н
Write the Roman Numeral XVII as a number.	17	0
Round 740 to the nearest 100.	700	w
Round 194 to the nearest 10.	190	J
What is double 36?	72	U
1 3 2 6 + 7 1 5 3	8,497	M
320 = x 10	32	Р
5,000 ÷ 10 =	500	I
x 3 = 90	30	N
÷ 7 = 7	49	G

Year 5 Codebreaker Challenge

Answer a question then try to find your answer on a card.

Write down the letter next to the answer to crack the code.

Activity 1

Question	Answer	Letter
Round 7,319 to the nearest 10.		
86,000 ÷ 1,000		
Which is the greatest number? 1,342 1,319 1,309 1,099		
6 5 9 0 + 2 6 2 7		
4,999 + 4,999 =		
What is the difference between –6 and 2?		
0.34 x 100		
1 6 7 5 - 8 5 4		
What is the Roman Numeral CVI as a number?		
Which number is a prime number? 22 41 36 55		
7 ² =		

Question	Answer	Letter
1 5 4 8 - 7 1 2		
Half of 29,000		
What is the difference between -2 and 4?		
Which number is a prime number? 18 23 35 49		
10,000 + 3,000 + 200		
27,000 ÷ 1,000		
What is the Roman Numeral XLVIII as a number?		
Round 4,554 to the nearest 10.		
1 2 0 9 + 5 9 9		
4.2 × 100		
Which is the greatest number? 2,687 2,778 2,789 2,750		

Year 5 Codebreaker Challenge ANSWERS

Answer a question then try to find your answer on a card.

Write down the letter next to the answer to crack the code.

Activity 1

Question	Answer	Letter
Round 7,319 to the nearest 10.	7,320	Р
86,000 ÷ 1,000	86	A
Which is the greatest number? 1,342 1,319 1,309 1,099	1,342	R
6 5 9 0 + 2 6 2 7	9,217	Α
4,999 + 4,999 =	9,998	S
What is the difference between –6 and 2?	8	Α
0.34 x 100	34	I
1 6 7 5	821	L
What is the Roman Numeral CVI as a number?	106	I
Which number is a prime number? 22 41 36 55	41	N
7 ² =	49	G

Question	Answer	Letter
1 5 4 8 - 7 1 2	836	н
Half of 29,000	14,500	0
What is the difference between -2 and 4?	6	R
Which number is a prime number? 18 23 35 49	23	S
10,000 + 3,000 + 200	13,200	E
27,000 ÷ 1,000	27	R
What is the Roman Numeral XLVIII as a number?	48	A
Round 4,554 to the nearest 10.	4,550	С
1 2 0 9 + 5 9 9	1,808	I
4.2 × 100	420	N
Which is the greatest number? 2,687 2,778 2,789 2,750	2,789	G

Year 6 Codebreaker Challenge

Answer a question then try to find your answer on a card.

Write down the letter next to the answer to crack the code.

Activity 1

Question	Answer	Letter
Round 14,549 to the nearest hundred.		
3³ =		
3,500 ÷ 7 =		
Which is a prime number? 61 62 63 64 65		
5 + 5 × 5		
1 3 8 2 x 5		
3 x 4,999 =		
9.5 x 2 =		
What is the missing number?		
750 675 600 525		
30 – 17.5 =		
What is the smallest number? 18,686 18,668 18,680		
2 9 6 7 5 - 8 9 5 6		

Question	Answer	Letter
3 + 2 x 50		
5 x 399 =		
Half of 96		
50 – 9.5 =		
What is the missing number?		
130 170 210 290		
What is the greatest number? 1,089 1,808 1,800		
1,600 ÷ = 8		
4 6 6 7 x 4		
1 6 2 8 6 - 6 2 8 8		
4 ³ =		
Round 21,669 to the nearest hundred.		
Which is a prime number? 51 52 53 54 55		

Year 6 Codebreaker Challenge ANSWERS

Answer a question then try to find your answer on a card.

Write down the letter next to the answer to crack the code.

Activity 1

Question	Answer	Letter
Round 14,549 to the nearest hundred.	14,500	0
3³ =	27	R
3,500 ÷ 7 =	500	I
Which is a prime number? 61 62 63 64 65	61	E
5 + 5 × 5	30	N
1 3 8 2 x 5	6,910	Т
3 x 4,999 =	14,997	E
9.5 x 2 =	19	E
What is the missing number? 750 675 600 525	450	R
30 – 17.5 =	12.5	I
What is the smallest number? 18,686 18,668 18,680	18,668	N
2 9 6 7 5 - 8 9 5 6	20,719	G

Question	Answer	Letter
3 + 2 × 50	103	С
5 x 399 =	1,995	н
Half of 96	48	A
50 – 9.5 =	40.5	М
What is the missing number? 130 170 210 290	250	Р
What is the greatest number? 1,089 1,808 1,800	1,808	I
1,600 ÷ = 8	200	0
4 6 6 7 x 4	18,668	N
1 6 2 8 6 - 6 2 8 8	9,998	S
4 ³ =	64	Н
Round 21,669 to the nearest hundred.	21,700	I
Which is a prime number? 51 52 53 54 55	53	Р