

Name:



Maths Assessment Year 5: Number and Place Value

1. Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit.
2. Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.
3. Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.
4. Round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000.
5. Solve number problems and practical problems.
6. Read Roman numerals to 1000 and recognise years written in Roman numerals.

Name:

Date:

Maths Assessment Year 5: Number and Place Value

1. Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit.

a) Fill in the missing boxes:

Number in digits	Number in words
	Thirty thousand, three hundred and five
370,350	
12,009	
	Sixty two thousand, five hundred and eleven
101,220	

b) Order these numbers from largest to smallest:

23,004	16,210	10,050	42,901	42,781	18,656
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c) Compare the numbers below using $<$ or $>$.

	$<$ or $>$	
12,451		12,541
45,007		43,091
123,432		121,445

d) In each number say the value of the underlined digit:

number	value of the underlined digit
123, <u>4</u> 53	
<u>5</u> 40,238	
54,8 <u>9</u> 1	
7 <u>4</u> 3,211	



5 marks



1 mark



3 marks



4 marks



Total for this page

2. Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.

a) Count forwards in the steps shown from each number:

count on in steps of	starting number				
10	12,458				
100	123,434				
1000	321,212				



3 marks

b) Count backwards in the steps shown from each number:

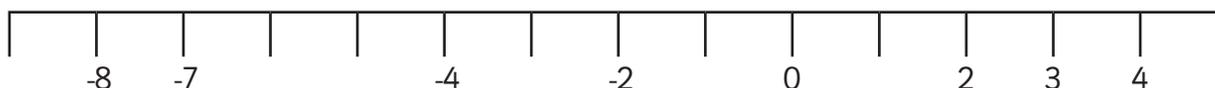
count back in steps of	starting number				
10	21,482				
100	451,671				
1000	219,398				



3 marks

3. Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.

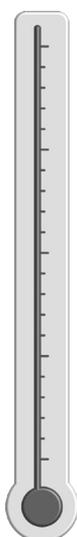
a) Fill in the missing numbers on this number line:



1 mark

b) This chart shows the temperatures of different cities around the world. Order the cities from coldest to warmest:

City	maximum temperature
Palma	21° C
London	13° C
Vostok	-3° C
Mumbai	30° C
Calgary	-11° C
Moscow	5° C



coldest	
warmest	



1 mark



Total for this page

c) How much colder is it in Calgary than London?

1 mark

4. Round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000.

a) Round these numbers to the nearest 10

41,236	
876,212	

2 marks

b) Round these numbers to the nearest 100:

32,134	
174,865	

2 marks

c) Round these numbers to the nearest 1,000:

42,379	
812,532	

2 marks

d) Round these numbers to the nearest 10,000:

78,890	
321,432	

2 marks

e) Round these numbers to the nearest 100,000:

524,100	
669,210	

2 marks

Total for this page

5. Solve number problems and practical problems.

This table shows information about some of the planets:

Planet	Diameter	Time taken to orbit the Sun	Time taken to rotate on its axis
Mercury	4 876 km	88 days	33,408 minutes
Venus	12 107km	225 days	349,920 minutes
Earth	12 755 km	365 days	1,440 minutes
Mars	6 794 km	687 days	1,440 minutes
Saturn	120 536 km	10,759 days	240 minutes
Neptune	49 527 km	60,190 days	384 minutes

Answer these problems about the planets:

a) Order the planets by diameter size, starting with the smallest:

smallest in diameter	
largest in diameter	

b) Circle True or False for each planet, when rounded to the nearest 100 days to orbit the Sun:

Mercury: 100 days	True or False
Venus: 220 days	True or False
Earth: 360 days	True or False
Mars: 700 days	True or False
Saturn: 10,700 days	True or False
Neptune: 60,200 days	True or False



1 mark



3 marks



Total for this page

- c) Jassi says that it takes Venus 31,512 more minutes to rotate on its axis than Mercury. Do you think this seems a sensible answer? Don't do the actual calculation but show an approximation to show whether this is a sensible answer or not.

Sensible answer: Yes / No (Circle)

Approximation to show why you think this:

1 mark

6. Read Roman numerals to 1000 and recognise years written in Roman numerals.

- a) Fill in missing numbers

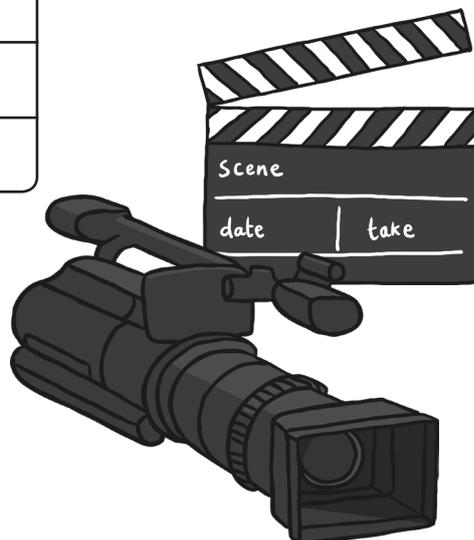
350	
	DLV
212	
	CCLIII
419	



5 marks

- b) The years these films were released are written in Roman numerals. Write the years how you would usually write them in digits:

Jetsons: the Movie	MCMXC	
Shrek	MMI	
Frozen	MMXIII	



3 marks

Total for this page

question	answer	marks	notes
1. Read, write, order and compare numbers to at least 1,000,000 and determine the value of each.			
a	30,305 Thirty thousand, three hundred and five	up to 5 marks	When writing numbers in words, accept incorrect spellings as long as it can be decoded but don't accept just the digits written eg three seven nine
	370,350 Three hundred and seventy thousand, three hundred and fifty		
	12,009 Twelve thousand and nine		
	62,511 Sixty two thousand, five hundred and eleven		
	101,220 One hundred and one thousand, two hundred and twenty		
b	42,901 42,781 23,004 18,656 16,210 10,050	1	
c	12,451 < 12,541	3	
	45,007 > 43,091		
	123,432 > 121,445		
d	123,453 4 hundred (s) or 400	4	
	540,238 500 thousand or 500,000		
	54,891 90 or 9 tens		
	743,211 40 thousand(s) or 40,000		
2. Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.			
a	12,468 12,478 12,488 12,498	3	
	123,534 123,634 123,734 123,834		
	322,212 323,212 324,212 325,212		
b	21,472 21,462 21,452 21,442	3	
	451,571 451,471 451,371 451,271		
	218,398 217,398 216,398 215,398		
3. Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.			
a		1	
b	coldest Calgary	1	
	Vostok		
	Moscow		
	London		
	warmest Mumbai		
c	24 °	1	

question	answer	marks	notes
4. Round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000.			
a	41,236	41,240	2
	876,212	876,210	
b	32,134	32,100	2
	174,865	174,900	
c	42,379	42,000	2
	812,532	813,000	
d	78,890	80,000	2
	321,432	320,000	
e	524,100	500,000	2
	669,210	700,000	
5. Solve number problems and practical problems that involve all of the above.			
a	smallest in diameter	Mercury	1
		Mars	
		Venus	
		Earth	
		Neptune	
	largest in diameter	Saturn	
b	Mercury	True	up to 3 marks
	Venus	False	
	Earth	False	
	Mars	True	
	Saturn	False	
	Neptune	True	
c	Circle around No, with a sensible estimate of the actual calculation Eg $350\ 000 - 33\ 000 = 317\ 000$		1
6. Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.			
a	350	CCCL	5
	555	DLV	
	212	CCXII	
	253	CCLIII	
	419	CDXIX	

question	answer	marks	notes
b	Jetsons: the Movie	1990	
	Shrek	2001	
	Frozen	2013	
		Total 45	