

WA5MNAUN1

Understanding number

Core + Challenge

NAPLAN-style

Reading and Ordering Large Numbers — Marking Key

I can read, write and order numbers with seven or more digits, and place them on a number line.

For tutors and parents. Award method marks for correct working even if the final answer is wrong.

Marks summary

A Warm up: 16 B Practise: 21 C Think it through: 10 D Challenge: 9 **Total: 56**

Gold shading in this key shows what the child should have shaded or drawn. Accept any correct arrangement unless the question fixes it.

A

Warm up *answers*

/ 16 marks

Q	Answer	Model answer / notes	Marks
1	2 450 106	2 millions, 450 thousands, 106 ones.	1
2	5 030 008	5 millions, 30 thousands, 8 ones: zeros hold the empty places.	1
3	1 200 000	1 million and 200 thousands.	1
4	7 006 050	7 millions, 6 thousands, 50 ones.	1
5	4 850 120	4 580 210 4 508 210 4 850 120 4 805 210 All have 4 millions; compare hundred thousands: 8 is the biggest.	1
6	999 999	1 000 001 999 999 1 000 010 1 001 000 999 999 has only six digits, so it is the smallest.	1
7	6 050 009	6 050 009 6 509 000 6 005 009 6 050 900 6 millions, 50 thousands (50 000) and 9 ones.	1
8	3 450 000	3 045 000 3 540 000 3 450 000 4 350 000 3 450 000 has 3 millions and 4 hundred thousands.	1
9	700 000	10 steps from 0 to 1 000 000, so each step is 100 000. A is 7 steps.	1
10	2 400 000	Each step is 100 000. A is 4 steps past 2 000 000.	1
11	750 000	Only 4 steps, so each step is 250 000. A is 3 steps: 750 000.	1
12	5 600 000	5 steps of 200 000. A is 3 steps past 5 000 000.	1

Reading and Ordering Large Numbers · WA5MNAUN1

Q	Answer	Model answer / notes	Marks
13	A at 2 000 000	 Each small step is 500 000. 2 000 000 is 4 small steps from 0.	1
14	B at 6 500 000	6 500 000 is 13 small steps from 0.	1
15	C at 9 000 000	9 000 000 is 18 small steps from 0.	1
16	D at 500 000	500 000 is 1 small step from 0.	1

B Practise *answers and working*

/ 21 marks

Q	Answer	Working / sample response	Marks												
1	See table	<table><tr><th>Numeral</th><th>Words</th></tr><tr><td>4 062 900</td><td>four million, sixty-two thousand, nine hundred</td></tr><tr><td>8 400 017</td><td>eight million, four hundred thousand and seventeen</td></tr><tr><td>1 010 010</td><td>one million, ten thousand and ten</td></tr></table>	Numeral	Words	4 062 900	four million, sixty-two thousand, nine hundred	8 400 017	eight million, four hundred thousand and seventeen	1 010 010	one million, ten thousand and ten	3				
		Numeral	Words												
		4 062 900	four million, sixty-two thousand, nine hundred												
		8 400 017	eight million, four hundred thousand and seventeen												
1 010 010	one million, ten thousand and ten														
4 062 900 = four million, sixty-two thousand, nine hundred. eight million, four hundred thousand and seventeen = 8 400 017. 1 010 010 = one million, ten thousand and ten. Accept words without “and”. <i>1 mark for each correct row.</i>															
2	Room 3, 5, 1, 2, 4	<table><tr><th>Class</th><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th></tr><tr><td>Place</td><td>3rd</td><td>4th</td><td>1st</td><td>5th</td><td>2nd</td></tr></table>	Class	1	2	3	4	5	Place	3rd	4th	1st	5th	2nd	2
		Class	1	2	3	4	5								
Place	3rd	4th	1st	5th	2nd										
2 540 018 > 2 504 108 > 2 450 180 > 2 405 810 > 2 045 810. All have 2 millions. Then compare the hundred thousands: 5, 5, 4, 4, 0. Then the ten thousands. <i>2 marks: all five places correct. 1 mark: three correct.</i>															
3	A = 500 000 B = 1 250 000 C = 1 750 000	There are 8 steps from 0 to 2 000 000. Half-way (4 steps) is 1 000 000, so each step is 250 000. A is 2 steps = 500 000. B is 5 steps = 1 250 000. C is 7 steps = 1 750 000. <i>1 mark for each correct number.</i>	3												

Reading and Ordering Large Numbers · WA5MNAUN1

Q	Answer	Working / sample response	Marks
4	P = 4 320 000 Q = 4 370 000 R marked	 From 4 300 000 to 4 400 000 there are 10 steps, so each step is 10 000. P is 2 steps: 4 320 000. Q is 7 steps: 4 370 000. R is half-way between 4 390 000 and 4 400 000. <i>1 mark: P.</i> <i>1 mark: Q.</i> <i>1 mark: R marked half-way between the last two ticks.</i>	3
5	a) 9 754 310 b) 1 034 579	a) Put the digits in order from biggest to smallest: 9 754 310. b) Smallest to biggest, but a number cannot start with 0, so start with 1, then 0: 1 034 579. <i>1 mark each part. Part b) must not start with 0.</i>	2
6	a) see working b) the first house, by \$27 000	a) one million, eighty-five thousand dollars. b) Both have 1 million. 85 thousand is more than 58 thousand, so the first house sold for more. $85\,000 - 58\,000 = 27\,000$, so \$27 000 more. <i>1 mark: words.</i> <i>1 mark: first house and \$27 000.</i>	2
7	See lines	six million, sixty thousand = 6 060 000. six million, six thousand = 6 006 000. six million, six hundred thousand = 6 600 000. sixty million, six hundred = 60 000 600. <i>2 marks: all four. 1 mark: two or three.</i>	2
8	a) Mercury, Venus, Earth, Mars b) see working	a) $57\,900\,000 < 108\,200\,000 < 149\,600\,000 < 227\,900\,000$. The 8- and 9-digit numbers: compare the number of digits first. b) one hundred and forty-nine million, six hundred thousand kilometres. <i>1 mark: correct order.</i> <i>1 mark: words.</i>	2
9	a) 3 000 000, 3 010 000 b) 500 000, 250 000	 a) Counting up in 10 000s: $2\,990\,000 + 10\,000 = 3\,000\,000$, then 3 010 000. b) Counting down in 250 000s: 750 000, 500 000, 250 000. <i>1 mark for each row.</i>	2

C

Think it through *sample answers and criteria*

/ 10 marks

Q	Answer	Working / sample response	Marks									
1	No	Both have 4 millions. Next compare the hundred thousands: 0 in 4 099 999 and 1 in 4 100 000. So 4 100 000 is bigger (it is 1 more than 4 099 999). The number of nines does not matter. <i>1 mark: disagrees.</i> <i>1 mark: compares place by place from the left (or says 4 100 000 is one more).</i>	2									
2	True	The smallest seven-digit number is 1 000 000. The largest six-digit number is 999 999, which is 1 less. So every seven-digit number is bigger. <i>1 mark: True.</i> <i>1 mark: compares 1 000 000 with 999 999 (or explains that the millions place is worth more).</i>	2									
3	Sometimes	3 400 125 is three million, four hundred thousand, one hundred and twenty-five: it has “thousand”. 3 000 125 is three million, one hundred and twenty-five: no “thousand”, because the thousands group is all zeros. <i>1 mark: Sometimes.</i> <i>1 mark: one example each way.</i>	2									
4	2 500 000	2 050 000 two million, fifty thousand 2 000 000 + 50 000 2 500 000 2 050 000, two million, fifty thousand and 2 000 000 + 50 000 are all the same number. 2 500 000 is two million, five hundred thousand, so it is different. <i>1 mark: 2 500 000.</i> <i>1 mark: shows the other three are equal.</i>	2									
5	See table	<table><tr><th></th><th>Seven digits</th><th>Not seven digits</th></tr><tr><td>Less than 4 million</td><td>3 950 000, 3 999 999</td><td>400 000</td></tr><tr><td>4 million or more</td><td>4 050 000, 4 000 000</td><td>40 000 000</td></tr></table> 4 000 000 goes in “4 million or more” and “Seven digits”: it is equal to 4 million and has 7 digits. <i>1 mark: all six sorted correctly.</i> <i>1 mark: explains 4 000 000 (equal to 4 million counts as “or more”).</i>		Seven digits	Not seven digits	Less than 4 million	3 950 000, 3 999 999	400 000	4 million or more	4 050 000, 4 000 000	40 000 000	2
	Seven digits	Not seven digits										
Less than 4 million	3 950 000, 3 999 999	400 000										
4 million or more	4 050 000, 4 000 000	40 000 000										

D

Challenge *solutions and criteria*

/ 9 marks

Q	Answer	Working / sample response	Marks
1	6 numbers	5 000 005, 5 000 050, 5 000 500, 5 005 000, 5 050 000, 5 500 000. The first digit must be 5 (a number cannot start with 0). The other 5 can go in any of the 6 other places, so there are 6 numbers. <i>2 marks: all six numbers in order (1 mark for four or five).</i> <i>1 mark: explains why there are no more.</i>	3
2	a) 50 000 b) 2 800 000	 a) From 2 400 000 to 2 600 000 is 200 000 in 4 steps: $200\,000 \div 4 = 50\,000$. b) 8 steps from 2 400 000: $2\,400\,000 + 400\,000 = 2\,800\,000$. c) 2 525 000 is half-way between 2 500 000 (tick 2) and 2 550 000 (tick 3). <i>1 mark each part.</i>	3
3	a) 4 804 555 c) 5 million	a) 4, then 8, then 0, then 4, then 5, 5, 5 ($5 + 5 + 5 = 15$): 4 804 555. b) four million, eight hundred and four thousand, five hundred and fifty-five. c) Half-way between 4 million and 5 million is 4 500 000. 4 804 555 is more than that, so it is closer to 5 million. <i>1 mark each part.</i>	3