

K EDUCATION CENTRE

Year 5 Mathematics

PLACE VALUE & NEGATIVE NUMBERS

Assignment

Student name		Date	
Teacher		Score	/ 86

ASSIGNMENT FOCUS

- Read, write, partition and understand whole numbers up to 1,000,000.
- Compare and order numbers using place value.
- Round numbers to the nearest 10, 100, 1,000, 10,000 and 100,000.
- Recognise and continue number patterns.
- Read, compare and calculate with negative numbers in familiar contexts.

Time: 70 minutes	Total marks: 86	Calculator: Not needed
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Instructions: Answer every question. Show your working where needed. Check your answers carefully.

SECTION A - PLACE VALUE FOUNDATIONS

Use the value of each digit carefully.

1. The place-value chart shows the number 463,728.

Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
4	6	3	7	2	8

1a. What is the value of the digit 6? [1]

1b. What is the value of the digit 7? [1]

1c. Which digit is in the hundred-thousands place? [1]

2. Write 507,042 in words. [2]

3. Write this number in digits: eight hundred and twenty-three thousand, one hundred and six. [2]

4. Partition 684,309 into the value of each non-zero digit. [3]

5. What number is made from $700,000 + 40,000 + 2,000 + 90 + 5$? [2]

SECTION B - COMPARE & ORDER

Use $<$, $>$ and $=$ correctly, then order numbers by place value.

6. Insert $<$, $>$ or $=$: 405,090 ____ 405,900 [1]

7. Insert $<$, $>$ or $=$: 670,001 ____ 669,999 [1]

8. Put these numbers in ascending order: [3]

398,405 389,450 398,045 390,845

9. Put these numbers in descending order: [3]

705,600 750,060 705,060 750,600

10. Use the digits 2, 4, 5, 7, 8 and 9 once each. [2]

a) Make the greatest possible 6-digit number.

b) Make the smallest possible 6-digit number.

11. A number has 5 in the hundred-thousands place, 2 in the thousands place, 8 in the tens place and 3 in the ones place. All other digits are 0. Write the number. [2]

12. Explain why 460,999 is greater than 459,999. [2]

SECTION C - ROUNDING

Round by looking at the digit immediately to the right of the place you are rounding to.

13. Round 48,736 to the nearest 10. [1]

14. Round 48,736 to the nearest 100. [1]

15. Round 48,736 to the nearest 1,000. [1]

16. Round 264,981 to the nearest 10,000. [1]

17. Round 749,999 to the nearest 100,000. [1]

18. A stadium recorded 63,482 visitors in one month. Round this number to the nearest 1,000. [2]

19. A number rounds to 50,000 when rounded to the nearest 10,000. [2]
Write one possible number.

20. Circle every number that rounds to 300,000 to the nearest 100,000: [3]

249,999 250,001 349,999 350,000 301,250

21. Maya says, "154,500 rounds to 150,000 to the nearest 10,000." Is Maya correct? [2]
Explain.

SECTION D - NUMBER PATTERNS & PLACE-VALUE CHANGES

Look for how the value changes each time.

22. Continue the sequence for the next three terms: [3]

125,000, 135,000, 145,000, _____, _____, _____

23. Continue backwards for the next three terms: [3]

502,000, 501,000, 500,000, _____, _____, _____

24. Complete: [2]

a) 10,000 more than 286,450 = _____

b) 100,000 less than 704,200 = _____

25. What is the difference in value between the digit 4 in 245,610 and the digit 4 in [2]

524,106?

26. A number increases by 100 each time. The fourth number is 12,450. What are the [2]
first three numbers?

SECTION E - NEGATIVE NUMBERS

Use the number line and familiar contexts to reason through zero.

27. Use the number line below.

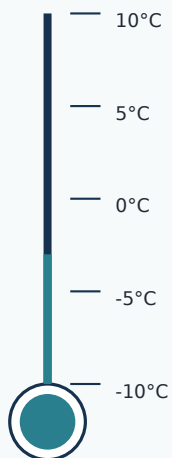


27a. What number is 3 steps to the left of 0? [1]

27b. What number is 6 steps to the right of -4? [1]

28. Write these temperatures from coldest to warmest: [2]

4°C, -3°C, 0°C, -8°C, 2°C



29. The thermometer shows a temperature of -3°C.

The temperature rises by 7°C.

What is the new temperature? [2]

Answer: _____

30. At 6 a.m. the temperature is -5°C. By midday it is 3°C. By how many degrees has the temperature risen? [2]

31. A lift is on floor -2. It goes up 6 floors. Which floor does it stop at? [2]

32. Complete the sequence:

[2]

5, 2, -1, -4, _____, _____

33. Which is greater: -4 or -9? Explain how you know.

[2]

SECTION F - MIXED REASONING CHALLENGE

Use more than one skill. Show clear reasoning.

34. I am a 6-digit number.

[3]

- My hundred-thousands digit is 6.
- My ten-thousands digit is half of 6.
- My thousands digit is 1 more than my ten-thousands digit.
- My last three digits are 205.

What number am I?

35. A school has 287,650 books recorded across all its digital and physical collections.

[2]

- a) Round this to the nearest 10,000.
b) Round it to the nearest 100,000.

36. The temperature changes from -7°C to 5°C .

[2]

How many degrees warmer is it?

37. A number rounds to 420,000 to the nearest 10,000.

[3]

What is the smallest whole number it could be?

38. Sam writes: $601,050 < 600,950$.

[3]

Explain Sam's mistake and write the correct comparison.

39. Start at -6. Add 4, then add 7, then subtract 3.
What number do you finish on?

[3]

40. A number has exactly six digits. When rounded to the nearest 100,000 it becomes 500,000.
Write the smallest and greatest possible whole numbers.

[4]

END OF ASSIGNMENT**Check that you have answered every question and that your working is clear.**