Conquesta 2014

SAMPLE

Mathematics 2 – Grade 5

Welcome to your Conquesta Olympiad. When you have decided which of the answers is correct, scratch out the letter in the matching square on your answer sheet using **ONLY** a **black or blue ballpoint or black khoki pen**. *(Do not use pencils, crayons, pencil crayons, highlighters, tippex or glue.)* If the answer to question 4 is c, then scratch out the letter c in the square containing c next to the number 4 *(see example 1 below)*. If you've made a mistake and b should have been the answer, neatly cross out the mistake and then scratch out b *(see example 2 below)*.

Example 1:- | 4. | a | b | ● | d |

Example 2:- | 4. | a | ✍ | ✕ | d |

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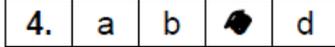
*Useful tip:– When you have number sentences using different operations, apply the rule of **BODMAS**, which is the order of operations:– Firstly, calculate whatever is in <u>B</u>rackets, then <u>O</u>ther (of, square roots, power of, etc), then <u>D</u>ivision and <u>M</u>ultiplication (from left to right as they rank equally), and lastly, <u>A</u>ddition and <u>S</u>ubtraction (also from left to right).*

1. What is the value of the underlined digit?

5<u>3</u>8 564

(a) 3 000   (b) 30 000   (c) 300 000   (d) 30

2. Six thousands = …… tens.

(a) 60   (b) 6   (c) 6 000   (d) 600

3. What number has 5 hundreds, 4 more tens than hundreds and 3 fewer ones than tens?

(a) 5 543   (b) 965   (c) 596   (d) 569

4. How is the number 23 thousand and 39 units written in standard notation?

(a) 23 039   (b) 2 339   (c) 23 390   (d) 23 099

5. 99 248 rounded to the nearest 100 is ……

(a) 99 000   (b) 99 100   (c) 99 150   (d) 99 200

6. Which of the following is the closest estimate of 8 898 x 6?

(a) 8 800 x 6   (b) 8 900 x 5

(c) 8 900 x 6   (d) 9 000 x 6

7. How many 10 thousands are equal to 800 000?

(a) 8   (b) 80   (c) 800   (d) 8 000

Did you know?
- *A factor is a number that divides exactly into another whole number, Eg, the factors of 12 are 1, 12, 2, 6, 3, 4 because they all divide exactly into 12.*
- *Dividend ÷ divisor = quotient.*
- *Sum is the answer to an addition.*
- *Product is the answer to a multiplication.*
- *Difference is the answer to a subtraction.*
- *When working with kilograms and grams, change them all to grams and then work out your answer. The same applies for km and m, cm and mm, etc.*
- *The lowest common multiple is the smallest multiple that is the same for two or more other numbers. First, make a list of the multiples for each number. Now make a list of the common (same) multiples appearing in each list. Now choose the smallest number.*
- *A line of symmetry is an imaginary line that halves a shape or picture, and each half is an exact mirror image (reflection) of the other.*
- *When identifying polygons, remember, tri=3, quad=4, penta=5, hexa=6, hepta=7, octa=8, nona=9, deca=10.*
- *Always read the x-axis first on a co-ordinate grid.*

- When he left the pizza restaurant, Anthony had 25 pizzas to deliver.
- At his first stop he delivered five pizzas.
- At his second stop he delivered half of the remaining pizzas.
- At each remaining stop he delivered one pizza.

8. How many stops did Anthony make to deliver 25 pizzas?

(a) 3   (b) 10   (c) 12   (d) 20

- Each hour, 17 or 18 aeroplanes take off from O.R. Tambo Airport.
- Each plane can carry 237 passengers.

9. Which of the following is the most accurate estimate of the number of passengers leaving each hour, if the planes are all full?

(a) Fewer than 3 700.
(b) Between 3 700 and 3 800.
(c) Between 4 000 and 4 300.
(d) More than 4 300.

10. What is the lowest common multiple of 6 and 9?
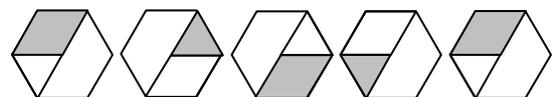
(a) 36   (b) 15   (c) 18   (d) 54

11. Which of the lists of numbers below shows all the factors of 36?

(a) 0, 1, 2, 3, 4, 6, 9, 12, 18
(b) 1, 2, 3, 4, 6, 9, 12, 18, 36
(c) 0, 1, 2, 3, 4, 6, 9, 12, 18, 36
(d) 1, 2, 3, 4, 6, 9, 12, 18, 36, 72

12. Which of the following is <u>not</u> correct?

(a) 49 x 12 = 49 x 2 x 6
(b) (49 x 2) x 2 x 3 = 49 x 12
(c) 49 x 12 = (98 x 2) x 3
(d) 49 x 12 = 2 x 2 x 2 x 49

Study the repeating pattern below.

13. Which shape should be drawn to continue the pattern?

(a)   (b)   (c)   (d)