University of Brighton
School of Health Sciences
Westlain House
Village Way
Falmer
Brighton
BN1 9PH

Maths Test Information

- Please ensure that you put your name on the test paper and any other papers that you use.
- Please inform the invigilator if you have any special needs
- Please complete the test in pen
- You are not allowed to use calculators in this test
- You may use the space provided to work out the answer but please ensure your answer is clearly stated.
- Attempt all questions.
- You may have to use the information given in one question, to answer other questions.
- The pass mark for the test is 50%

NAME: **DATE:**

(**For office use only:** **SCORE:**)

1. 2 176 x 100 = _____

2. 152.7 ÷ 1000 = _____

3. If there are 1000 millilitres (ml) in a litre (l), how many millilitres in 2.02 litres?

4. If one milligram (mg) is 1000 micrograms (mcg), how many milligrams is 646 micrograms?

5. Convert 280 millilitres (ml) to litres (l).

6. In *Statistics* the mean is the total of the numbers divided by how many numbers there are. What is the mean value in the list of numbers below:

   5 5 6 6 6 9 10 13

7. There are 9400 students, in total, in the University: 27 % of them smoke. How many smokers are there?

8. If 1598 of the 9400 students are married what percentage of the total is this?

9. For drug calculations it may be helpful to apply this formula:
   dose prescribed ÷ dose per measure = what you give.
   If dose prescribed is 7.5 mg of Enalapril and the dose in each tablet is 1.25 mg. How many tablets should be given?

10. A breakfast cereal contains Carbohydrate and Fat. The energy content of Carbohydrate is about 4 Calories per gram; Fat contains about 9 Calories per gram.

    Calculate how many Calories there are in

    a) 24 grams of fat

    b) 76 grams of carbohydrate

    c) the total 100 grams of cereal

11. Mrs. Gregg has a cup of tea (150ml) at 8.00; another at 11.00; a glass of orange juice (180ml) at 12:00 and at both 15.00 and 19:00 she has a cup of tea. How much fluid has Mrs. Gregg taken orally?

12. Give the answer to this in ***litres***: how much more fluid should Mrs. Gregg have had on that day, in order to meet her target fluid intake of 2.5 litres?

13. a) A child weighing 24 kg requires Epilim at a dose of 20 mg per kg. How much should be given?

b) How much more of the drug would a child weighing 36 kg at the same dosage (20 mg per kg) need to be given?

14. $\frac{96}{144}$ could be simplified to $\frac{2}{3}$ because $96 \div 12 \div 4 = 2$ and $144 \div 12 \div 4 = 3$

Simplify the following:

a) $\frac{48}{72}$

b) $\frac{49}{77}$

15. Simplify these ratios:

a) 12 : 168

b) 13 : 156