# Mathematics Essential Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Task 2.2 – Unit 2

**Assessment type:** Response - Skills

**Conditions:**

Time for the task: 30 minutes

In class, calculator permitted

**Marks:**  \_\_\_\_\_\_/25

**Task weighting:**

2% of the school mark for this unit

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Question 1:**

(5 Marks)

1. Write 8.3% as a decimal
2. Round 12456 to the nearest 100
3. 22mL = \_\_\_\_\_\_ L
4. Calculate the area of a 4m by 50cm rectangular window
5. If someone ran 1500m in 5 minutes what is their average speed?

**Question 2:** (3 Marks)

Write the missing word.

1. The mode is the most \_\_\_\_\_\_\_ value.
2. The median is the \_\_\_\_\_\_\_\_ value.
3. To calculate the \_\_\_\_\_\_\_, you add up all the values and divide by the number of values.

**Question 3:**

**Find the mean, median, mode and range of the following data set.** (2,2,1,1, marks)

**10,66,23,45,78,9,86,32,11,66**

1. Mean:
2. Median:
3. Mode:
4. Range:

**Question 4:** (1,1, 6 Marks)

The running time, in minutes, of 16 movies at the cinema were as follows:

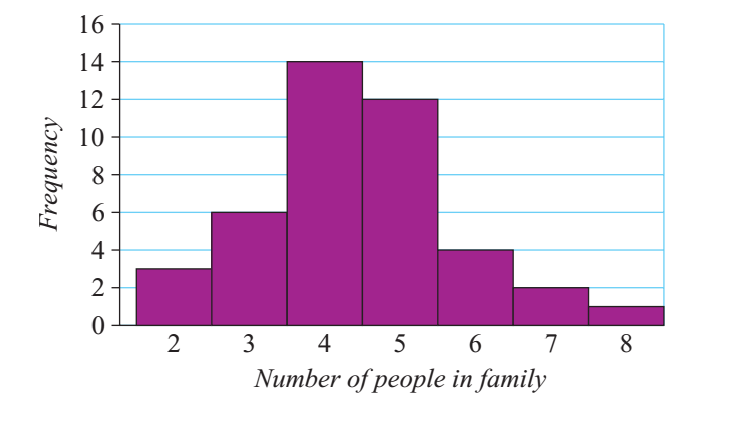
**123 110 98 120 102 132 112 140 120 139 42 96 152 115 119 12**

1. Order the above data set on the line below
2. Find the range. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Find and label under the line above the:
4. the median (Q2) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. the lower quartile (Q1) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. the upper quartile (Q3) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. the interquartile range (IQR). \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Question 5:**

A survey is conducted of the number of people in different families. The results are shown.

(3 marks)



1. What is the most likely number of people in a family, on the basis of this survey?
2. How many people responding to the survey said they had a family of 6?
3. What is the least likely number (from 2 to 8) of people in a family, on the basis of this survey?