Name:	Teacher Assessment		Topic 25 - F Approximations

Section A	**Rounding**	**Grade G → C**

1. (a) Write the number four thousand three hundred and sixty-seven in figures.

Answer ....

(1)

(b) Write the number 687 to the nearest 10.

Answer...

(1)

(c) The number 240 is divided by 10.

What is the value of the digit 2 in the **new** number?

....

Answer ....

(1)

(Total 5 marks)

2. (a) Write 7528 in words.

Answer ……………………………...

....

(1)

(b) Write 7528 to the nearest 100.

Answer …………………………………........

(1)

(Total 2 marks)

3. Write the number 2765 to the nearest 100.

Answer ....

(Total 1 mark)

4. (a) Write the number twenty thousand in figures.

Answer ....

(1)

(b) Write the number 5624

(i) to the nearest 100

Answer ....

(1)

(ii) to the nearest 1000.

Answer ....

(1)(Total 3 marks)

5.   Write 39.468

   (a)   to the nearest whole number,

Answer …………………………………..........
                                                                                          (1)

   (b)   to one decimal place.

Answer …………………………………..........
                                                                                          (1)
                                                                          (Total 2 marks)

6.   Write the number 2764

   (a)   to the nearest 10,

Answer ……………………………………….
                                                                                          (1)

   (b)   to the nearest 100.

Answer ……………………………………….
                                                                                          (1)
                                                                          (Total 2 marks)

7.   (a)   Write seven million in figures.

Answer ....
                                                                                          (1)

   (b)   Write seven thousand and eighty-four in figures.

Answer ....
                                                                                          (1)

   (c)   Write 8736 to the nearest 10.

Answer ....
                                                                                          (1)
                                                                          (Total 3 marks)

8.   Write 15.2864 to 2 decimal places.

Answer ....
                                                                          (Total 1 mark)
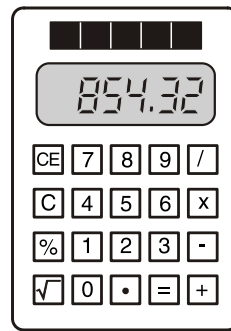
9. Pat works out the answer to 23.6×36.2 on a calculator. Her answer is shown on the calculator.

(a) Round her answer to the nearest 10.

Answer …………………………………………………

(1)

(b) Round her answer to the nearest 100.

Answer …………………………………………………

(1)

(c) Round her answer to one decimal place.

Answer …………………………………………………

(1)

(Total 3 marks)

10. Write 34.849 correct to 1 decimal place.

Answer ....

(Total 1 mark)

11. (a) Rearrange these cards to make the largest possible even number.

| **6** | **5** | **8** | **7** |
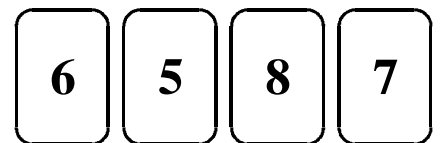
(2)
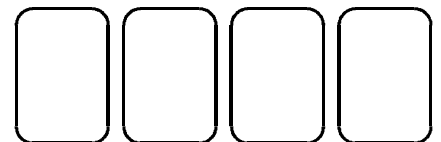
(b) Round your number to the nearest 100.

Answer ....

(1)

(Total 3 marks)

12. (a) Write eight thousand four hundred and thirty one in figures.

Answer ....

(1)

(b) The number in part (a) is divided by 100. What is the value of the digit 8 in the answer?

....

Answer ....

(1)

(c)   Write 37 258 to the nearest 100.

Answer ....

(1)

(d)   Write 37 258 to the nearest 1000.

Answer ....

(1)(Total 4 marks)

13.   (a)   (i) Write 86.3624 to 1 decimal place.

Answer ....

(1)

(ii)   Write 86.3624 to 3 decimal places.

Answer ....

(1)

(b)   Write 378 to 1 significant figure.

Answer ....

(1)(Total 6 marks)

14.   (a) Round to one significant figure

i.) 37.5   Answer ....

(1)

ii.) 34 320   Answer ....

(1)

iii.) 0.0851   Answer ....

(1)

(b) Round to two significant figures

i.) 18 320   Answer ....

(1)

ii.) 5.9641   Answer ....

(1)

(c) Round to three significant figures

i.) 740 923   Answer ....

(1)

ii.) 0.08029   Answer ....

(1)(Total 7 marks)

Success:	Target:

Teacher Assessment

Section B — **Estimating** — **Grade C**

1. Estimate the value of $\dfrac{505.3 \times 1.9}{43.93 + 58.2}$

....

....

....

Answer ....

(Total 2 marks)

2. Find an approximate value of $\dfrac{2987}{21 \times 49}$ You **must** show all your working.

....

....

....

....

Answer ....

(Total 2 marks)

3. Use approximations to estimate the value of $\dfrac{103.2 \times 32.6}{18.7}$

....

....

....

Answer ....

(Total 2 marks)

4. Use approximations to estimate the value of $\dfrac{59.2 \times 303.7}{21.7}$ You **must** show your working.

....

....

....

Answer ....

(Total 2 marks)

5. Estimate the value of $\dfrac{59 \times 192}{29}$

....

....

....

Answer ....

(Total 2 marks)

6. Find an approximate value of $\dfrac{48.8 \times 5.22}{(10.13)^2}$ You **must** show all your working.

....

....

....

Answer ....

(Total 3 marks)

7. Hannah, Gemma and Jo use their calculators to work out the value of

$$\dfrac{28.78}{4.31 \times 0.47}$$

Hannah gets 142.07, Gemma gets 14.207 and Jo gets 3.138

Use approximations to show which one of them is correct.   You **must** show your working.

....

....

....

Answer...

(Total 3 marks)

8. Use approximations to show which of the following calculations gives the bigger answer.

   (a) $59.4 \div 0.307$ (b) $80.16 \div 0.481$

   You **must** show your working.

....

....

....

....

Answer ……………………………………………

(Total 3 marks)

9. Use approximations to estimate the value of $\dfrac{316 \times 4.03}{0.198}$ You **must** show your working.

....

....

....

....

Answer ....

(Total 3 marks)

10. Use approximations to estimate the value of $\dfrac{8012}{48.61 \times 0.397}$

…………………………………………………………………………………...

…………………………………………………………………………………...

…………………………………………………………………………………...

…………………………………………………………………………………...

Answer ………………………………………………………….

(Total 3 marks)

11. Use approximations to estimate the value of $\sqrt{\dfrac{9.98}{0.203}}$

You **must** show your working.

....

....

....

....

Answer ....

(Total 3 marks)

Success:	Target: