LEVEL 5 WORKSHEET 2 – ROUNDING

Objectives

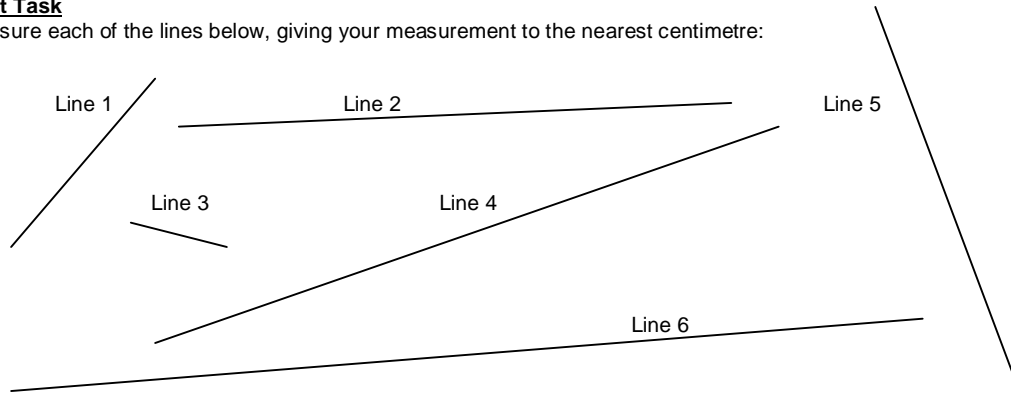|	
You MUST:	*Be able to round numbers to the nearest integer (whole number)*
You SHOULD:	*Be able to round numbers to the nearest 10, 100, 1000, etc…*
You COULD:	*Be able to round numbers to 1 significant figure*

Start Task

Measure each of the lines below, giving your measurement to the nearest centimetre:

Line 1

Line 2

Line 5

Line 3

Line 4

Line 6

Task A

Round each of these numbers to the nearest integer:

1. 7.8
2. 15.1
3. 17.2
4. 11.8
5. 0.6
6. 1.9
7. 3.5
8. 9.9
9. 0.3
10. 8.01
11. 12.32
12. 16.45
13. 120.31
14. 99.99

Task B

Fill in the table to round each of these numbers:

	Nearest integer	Nearest 10	Nearest 100	Nearest 1000
46.1				
33.9				
125.7				
546.2				
100.8				
7.87				
5982.4				
8673				
8000.2				
432.778				
555.5				
909.4				

Task C

For each of the numbers in Task A, write down how many significant figures the number has.

Task D

Round each of the numbers in task B to 1 significant figure.

Task E

Round to 1 significant figure:

1. 0.66
2. 0.0108

Problem Solving

Ahmed has written down a list of his exam marks from last year. He has rounded each value to the nearest 10:

English	80%
History	70%
Spanish	70%
Science	90%
Music	40%

1. The actual mark Ahmed achieved in one of his exams was 77%.
   Which subject was this mark in?
2. Ahmed had to round down his mark in history.
   He could have rounded down from 71%.
   What other values could he have rounded down from?
3. One of Ahmed's actual marks was 65%.
   Which subject was this mark in?
4. Ahmed had to round up his mark in science.
   He could have rounded up from 87%.
   What other values could he have rounded up from?
5. Write a list of all the possible marks Ahmed could have got in music.
6. Using the values above, find the lowest and highest possible marks Ahmed could have achieved in total in all of his exams.

Extension

1. Find a number with the following properties:
   * When you round it to the nearest 100, you get the number 300.
   * When you round it to the nearest 10, you reduce it by 2.

2. Find a number with the following properties:
   * When you round it to the nearest 100, you get the number 3500.
   * When you round it to the nearest 1000, you increase the number by 456.

3. Find a number with the following properties:
   * When you round it to the nearest 1000, you get the number 1000.
   * When you round it to the nearest 10, then round it to the nearest 100, you get the number 2000.
   * When you round it to the nearest 10, you change the number by 5.

Summary

Finish each of the following sentences in your own words:

1. To round a number to the nearest integer…
2. To round a number to the nearest ten…
3. To round a number to the nearest hundred…
4. To round a number to the nearest thousand…
5. A significant figure is…
6. To round a number to 1 significant figure…