



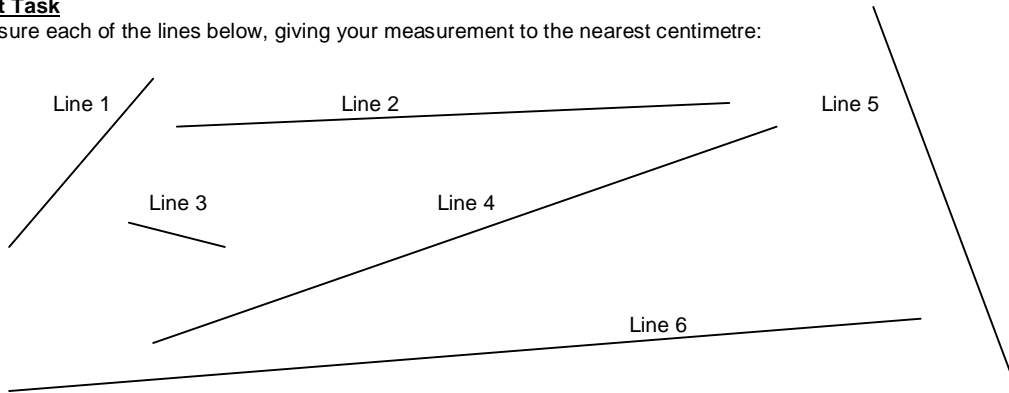
ROUNDING NUMBERS 1

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:

**Task A**

Round each of these numbers to the nearest integer:

- 7.8
- 15.1
- 17.2
- 11.8
- 0.6
- 1.9
- 3.5
- 9.9
- 0.3
- 8.01
- 12.32
- 16.45
- 120.31
- 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:

- 0.66
- 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%

- The actual mark Ahmed achieved in one of his exams was 77%. Which subject was this mark in?
- 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?
- One of Ahmed's actual marks was 65%. Which subject was this mark in?
- 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?
- Write a list of all the possible marks Ahmed could have got in music.
- Using the values above, find the lowest and highest possible marks Ahmed could have achieved in total in all of his exams.

Extension

- 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.
- 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.
- 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:

- To round a number to the nearest integer...
- To round a number to the nearest ten...
- To round a number to the nearest hundred...
- To round a number to the nearest thousand...
- A significant figure is...
- To round a number to 1 significant figure...