**Significant Figures**

1. Any number that represents a numerical count or an exact definition has an unlimited number of significant figures. For example, by definition 1 in = 2.54 cm and 1 m = 100 cm so these have an unlimited number of significant figures. In all other cases, when recording data, only the significant figures are recorded.

2. Rounding to the most significant figure. When a superfluous digit is less than 5, the preceding figure is retained without change. When the digit to be dropped is greater than 5, the last figure retained is increased by 1. When the digit to be dropped is 5 exactly, round off so that the last retained digit is an even number.

3. When adding or subtracting numbers, you keep only the number of significant figures in the least number of significant figures.

4. In multiplication and division, the result should have no more significant figures than the factor having the least number of significant figures.

5. The root of a number should have as many and no more significant figures as the number itself.

6. The power of a number should have as many and no more significant figures as the number itself.