

4. "All measurements of quantities that can assume a continuous range of values (lengths, masses, volumes, etc.) consist of two parts: the reported value itself (never an exactly known number), and the uncertainty associated with the measurement."

5. "All measurements are subject to error which contributes to the uncertainty of the result."

6. "Whether we are conscious of it or not, all measured values contain an element of random error."

7. "Unlike random error, which is impossible to eliminate, *systematic errors* are usually quite easy to avoid or compensate for."

8. "If you run a number of replicate (that is, identical in every way) determinations, you will probably obtain a scatter of results."

