**Significant Figures: Measuring**

There is some degree of uncertainty in every measurement. On the sample ruler, the 2 and 0 are certain (there is no doubt that the length is “20” something). The 7 is uncertain – it is an **estimate**, and may be a *little* less or more. The number of SIGNIFICANT FIGURES in a measurement indicates the ***reliability*** of our measurement. **The number of significant figures in any measurement is reported as all of the certain digs and ONE uncertain/ estimated digit.**

For example, 20.7 has 3 significant figures, the 2 and 0 are the certain digits (read from the ruler) and the uncertain digit is the 7 (the estimate).

When using an *electronic device* (such as an electronic balance for measuring mass) the measurement displayed on the screen is assumed to already have an estimated digit. In fact, you’ll often see the estimated digit changing rapidly because there is fluctuation in the estimate.

**Recording the lengths of the wooden splints to the proper number of significant figures:**







