Accuracy vs. Precision

Experimental Design Unit
Day 25
September 21st, 2006

Objectives for Day 25
Thursday, 09/21/06

- *Define* the terms "accuracy" and "precision"
- *Diagram* several examples of good & poor accuracy & precision
- *Review* the rules of scientific notation and significant figures

Precision

1. The degree of *exactness* of a measurement
2. Does not consider the *accuracy*, only how *exact* a value is
3. Think: How much *detail* does the value have?
4. Reflected by the number of *significant figures*

Accuracy

1. The extent to which a measurement approaches the *real value*
2. Does not consider *precision*
3. Think: How close *to the real value* is it?

Let's draw some pictures!

Let's make some changes…

	Good Precision ~~Accuracy~~	**Bad** Precision
Good **Accuracy**		
Bad **Accuracy**		

Remember the **Ring Toss** Game?

	Good Precision	**Bad Precision**
Good Accuracy		
Bad Accuracy