

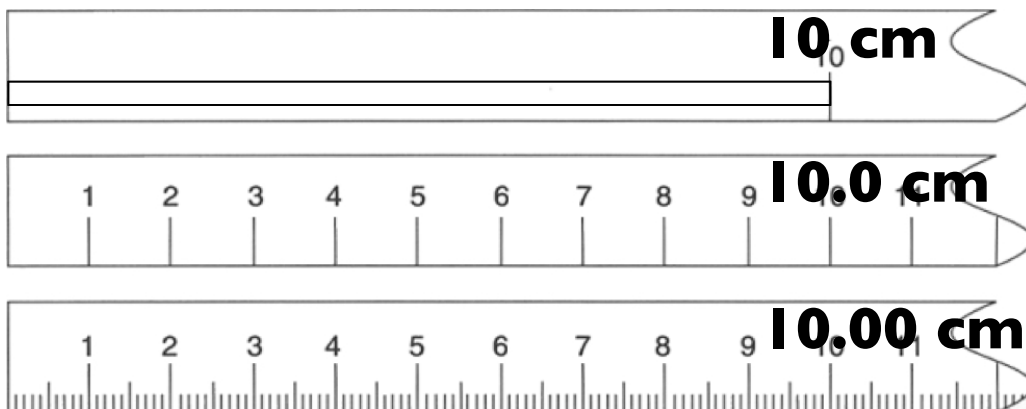
Representing Accuracy

5	Ring Stand		10.4 N		
6	Al Block		44.34 g		
7	Whistle		6.45 s		
8	Graduated Cylinder		24 cm		
9	Graduated Cylinder		24.6 cm		
10	Graduated Cylinder		24.58 cm		
11	Graduated Cylinder		244.43 mm		
12	Alcohol		34.2 ml		
13	Acetone		43.1 ml		

Data and Measurements

Communicating Accuracy in Measurements

Dealing with Zeros



Data and Measurements

Communicating Accuracy in Measurements

- Significant Digits
 - Numbers that communicate **ACCURACY**
- Rules:
 1. Non-zeros
 - 96 g
 - 61.4 m
 - 0.52 kg
 2. **Final** zeros **after** the decimal
 - 10 cm
 - 10.0 cm

Data and Measurements

Communicating Accuracy in Measurements

- Rules for Identifying Significant Digits:
 - 3. Trapped zeros
 - 10.0 cm
 - 8.00035 meters
 - 4. No other zeros count
- Let's Practice
 - <http://science.widener.edu/svb/tutorial/sigfigures.html>

Data and Measurements

Rounding to Significant Figures

314.721 (four)

0.001775 (two)

8092 (two)