

Measurement Data Sheet		
Student Name:		
Partner(s) Name(s):		
Date	Instructor's Initials	Grade

Name	Picture	Decimal Places	TD or TC
Buret		2	TD
Volumetric Pipet		3	TD
Graduated Pipet		2	TD
Graduated Cylinder		2	TD
Beaker		0	TD
Volumetric Flask		3	TC

Measurement Data Sheet

Mass of Beaker =	27.759 g
Mass of Volumetric Flask =	15.858 g
Water Temperature =	24.9 °C
Water Density =	

Buret (Intended Volume 10.00 mL)		
Trial Number	Mass of Water and Beaker	Mass of Water
1	37.678 g	
2	37.855 g	
3	37.829 g	
Average mass =		
Mass Standard Deviation (σ) =		
Average Volume =		
Volume Standard Deviation (σ) =		
Show an example of how you calculated the Mass of water.		

Volumetric Pipet (Intended Volume 5.000 mL)		
Trial Number	Mass of Water and Beaker	Mass of Water
1	32.740 g	
2	32.743 g	
3	32.757 g	
Average mass =		
Mass Standard Deviation (σ) =		
Average Volume =		
Volume Standard Deviation (σ) =		

Measurement Data Sheet

Graduated Pipet (Intended Volume 9.00 mL)		
Trial Number	Mass of Water and Beaker	Mass of Water
1	36.656 g	
2	36.660 g	
3	36.869 g	
Average mass =		
Mass Standard Deviation (σ) =		
Average Volume =		
Volume Standard Deviation (σ) =		
<p>Show an example of how you calculated the average mass of water.</p>		

Measurement Data Sheet

Graduated Cylinder (Intended Volume 10.00 mL)		
Trial Number	Mass of Water and Beaker	Mass of Water
1	37.688 g	
2	37.640 g	
3	37.746 g	
Average mass =		
Mass Standard Deviation (σ) =		
Average Volume =		
Volume Standard Deviation (σ) =		

Beaker (Intended Volume 10 mL)		
Trial Number	Mass of Water and Beaker	Mass of Water
1	38.721 g	
2	37.842 g	
3	38.423 g	
Average mass =		
Mass Standard Deviation (σ) =		
Average Volume =		
Volume Standard Deviation (σ) =		
Show an example of how you calculated the average volume of water.		

Measurement Data Sheet

Volumetric Flask (Intended Volume 25.00 mL)		
Trial Number	Mass of Water and Volumetric Flask	Mass of Water
1	40.863 g	
2	40.848 g	
3	40.862 g	
Average mass =		
Mass Standard Deviation (σ) =		
Average Volume =		
Volume Standard Deviation (σ) =		
<p>Why is not appropriate to use the mass of the beaker when calculating the mass of the water contained in the volumetric flask?</p>		
<p>Which of your pieces of glassware had the lowest standard deviation? Which had the highest? What does this tell you about the precision of this glassware?</p>		

Measurement Data Sheet

Glassware	Intended Volume	Average Volume	% Error (3 Decimal Places)

Show an Example of one of your %Error calculations.

Which piece of glassware had the lowest %Error? Which had the highest? What does this tell you about the accuracy of this glassware?