

Class: Chemistry

Unit: 02 Chapter 2: Measurements and Calculations

Target:02 - 03 The student will collect quantitative and qualitative data with accuracy and precision.

Score	Description	Student Score
Exceeds Target (Exemplary) • Deeper more rigorous thinking • Application to real world use, teach another person, use information to solve problems in a different context, explain connections between ideas, demonstrate a unique insight and/or creative application of skills.	Determine the uncertainty in a measurement.	
Mastery of Target (Application) Can apply target to new information.		
Proficient in Target • Expected level of performance for all students • Consistent and Independent	• Use significant digits to express precision in measurement. • Measure and express accurate answers using SI. • Use scientific notation to express answers when appropriate. • Perform calculations using correct significant digits. • Use descriptive vocabulary to describe a material or change.	
Approaching Proficiency • Basic learning necessary for foundation of target. • Recall questions, fact-based skills, basic applications • Independent, not consistent	Differentiate between: accuracy precision of measurement precision of an instrument Identify numbers correctly written in scientific notation. Name and use SI units for length, mass, time, volume, and density. Convert metric prefixes	
Needs Development • With help, can demonstrate some understanding of target		
No Evidence to Measure		

I can make conversions between metric units.

I can complete density calculations.

I can use a graph to determine the density of a material.

I can determine the number of significant digits in a measurement.

I can measure and represent my answer with the correct number of significant digits.

I can perform addition and subtraction calculations and give an answer with the correct number of significant digits.

I can perform multiplication and division calculations and give an answer with the correct number of significant digits.

I can express numbers in scientific notation and write standard notation for numbers expressed in scientific notation.