

Measurement and Scientific Tools

Directions: Use your textbook to respond to each statement.

- 1. Part of the process of scientific inquiry is making and discussing observations. Descriptions and explanations are used to tell about observations, but descriptions and explanations contain different information.**

Contrast the information in a description and the information in an explanation.

- 2. The International System of Units is a set of base units and prefixes that can be used to express measurements.**

Explain why the International System of Units is important in scientific communication.

- 3. SI units and prefixes make it possible to convert from one SI unit to another.**

Set up and solve a proportion calculation to convert 1,892 grams to kilograms.

- 4. Measurements can be evaluated to determine their accuracy and their precision.**

Define *accuracy* and *precision* in your own words.

- 5. Scientists use significant digits to show the precision of measurements.**

Identify the number of significant digits in the number 3,092.01. Explain your response.
