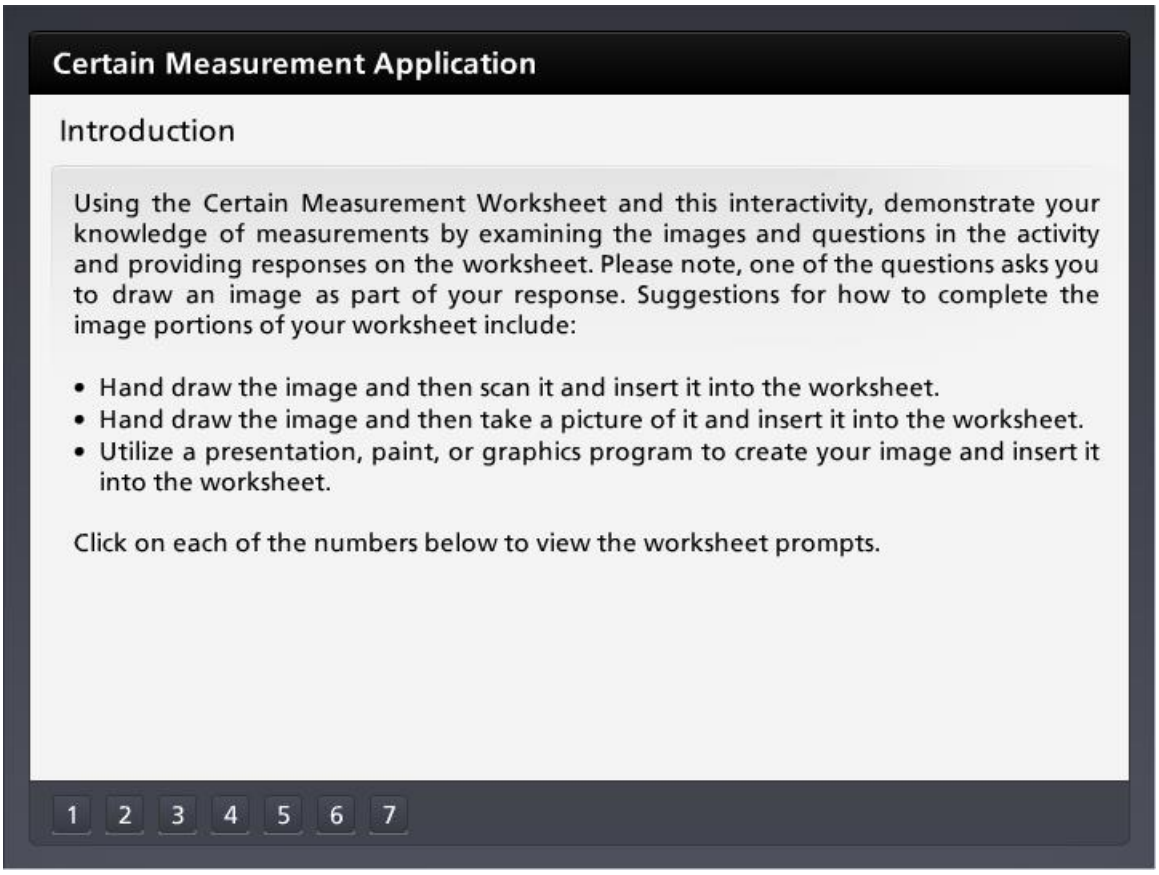
Introductory Module: Fundamentals of Science
Topic 2 Application: Certain Measurement Application

Introduction

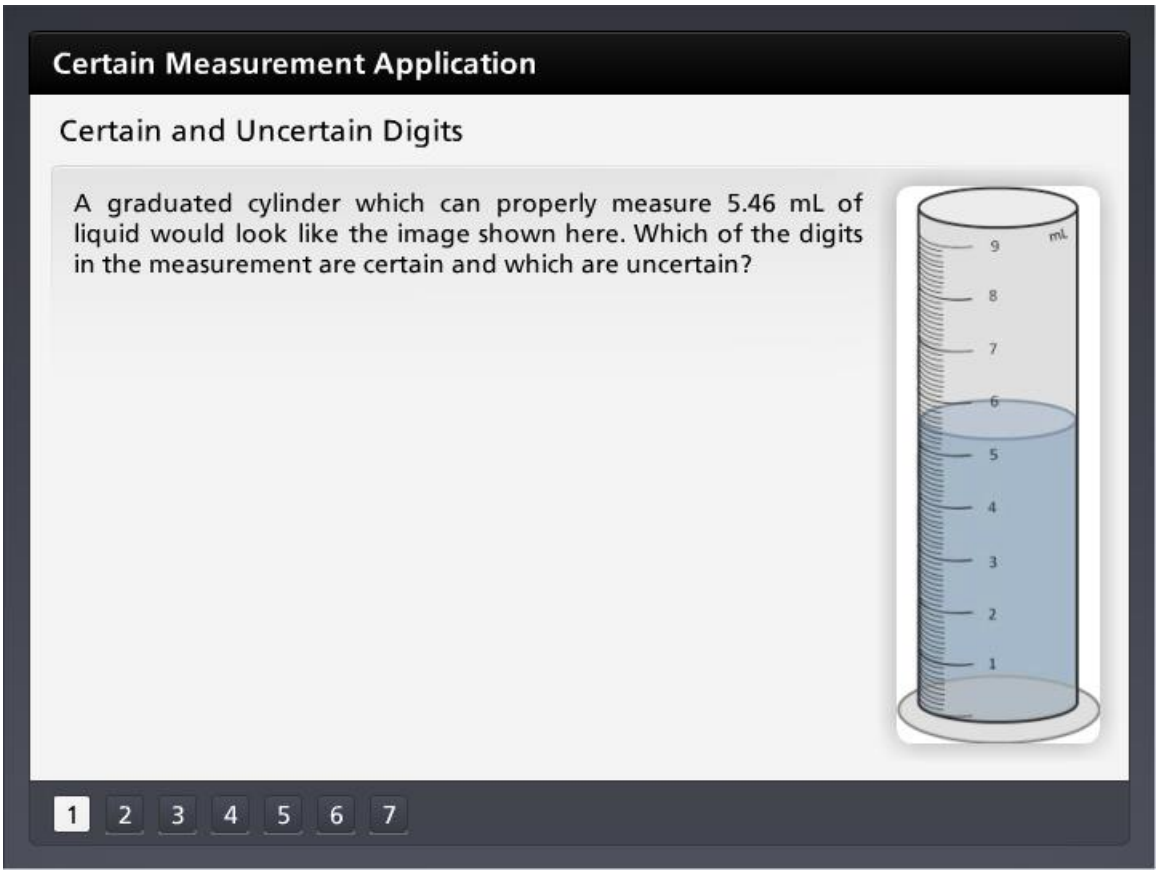


Using the Certain Measurement Worksheet and this interactivity, demonstrate your knowledge of measurements by examining the images and questions in the activity and providing responses on the worksheet. Please note, one of the questions asks you to draw an image as part of your response. Suggestions for how to complete the image portions of your worksheet include:

- Hand draw the image and then scan it and insert it into the worksheet.
- Hand draw the image and then take a picture of it and insert it into the worksheet.
- Utilize a presentation, paint, or graphics program to create your image and insert it into the worksheet.

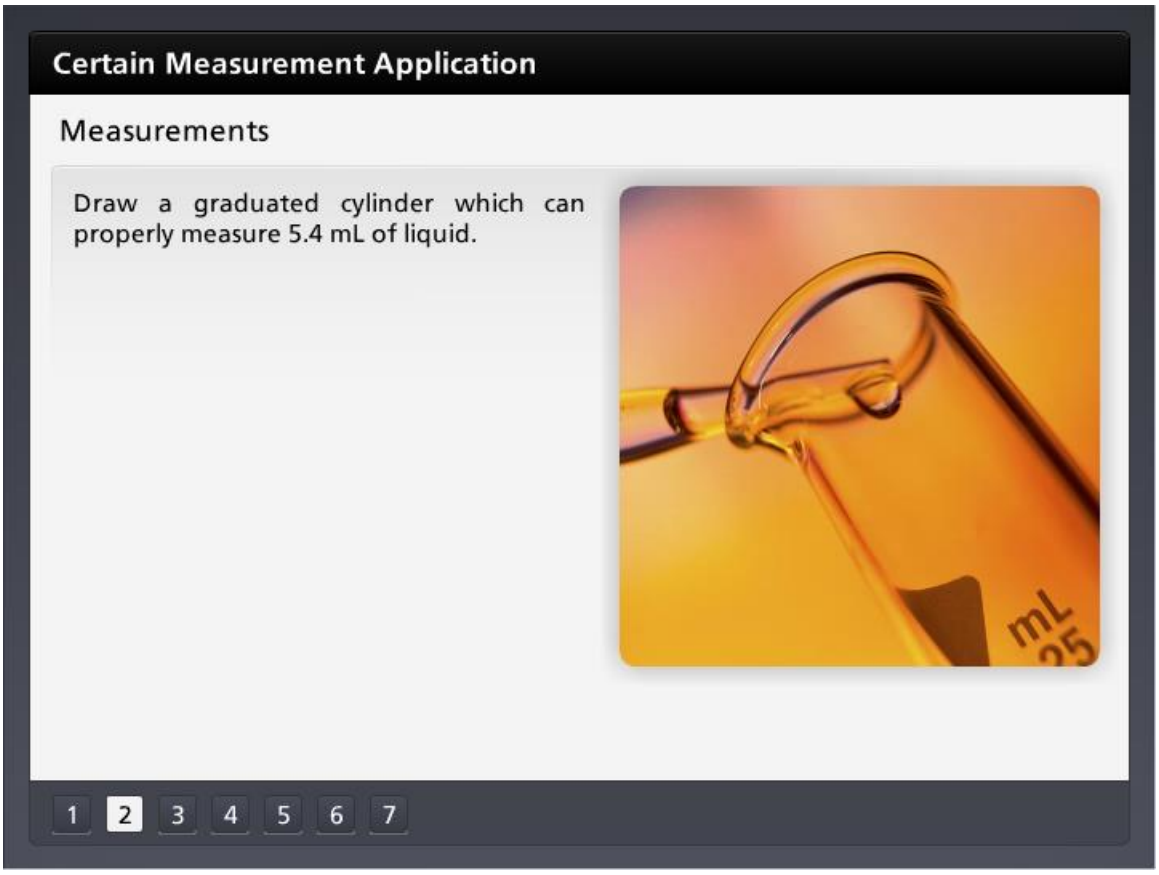
Click on each of the numbers below to view the worksheet prompts.

Certain and Uncertain Digits



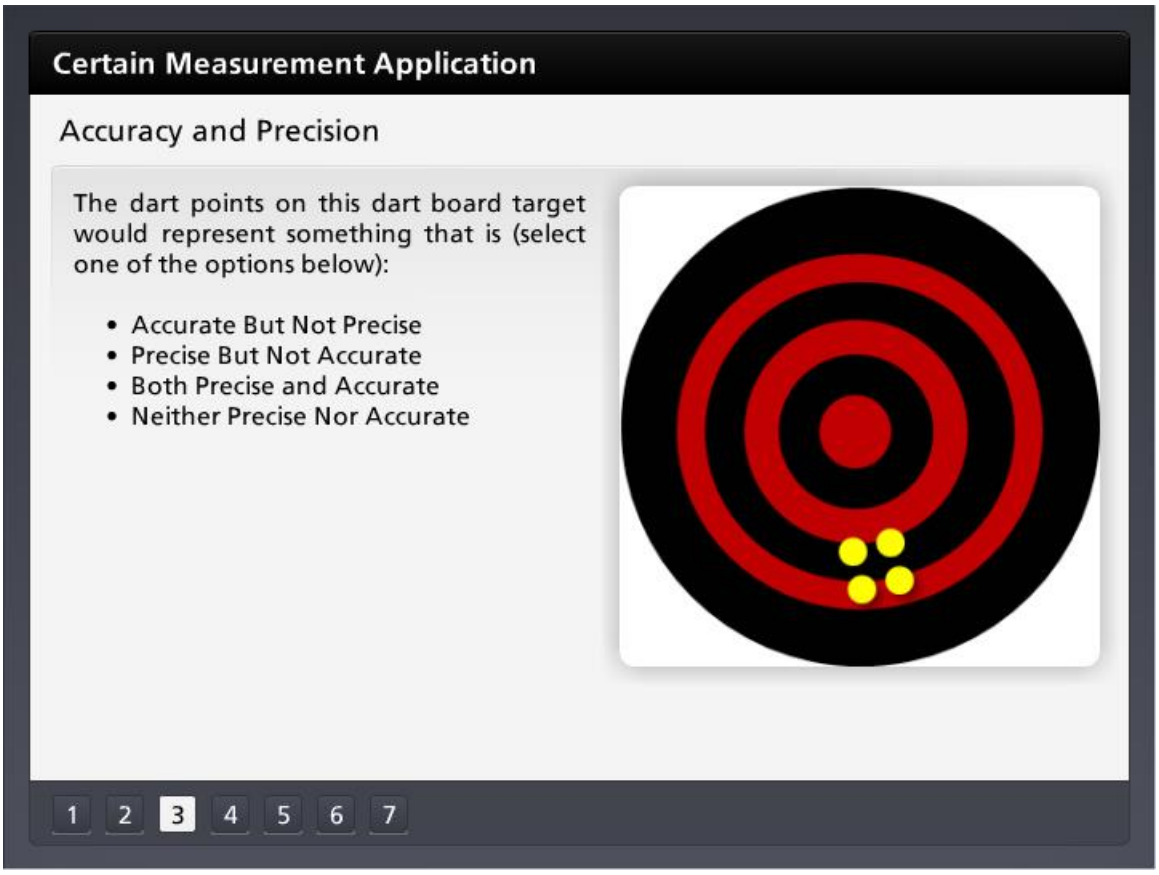
A graduated cylinder which can properly measure 5.46 mL of liquid would look like the image shown here. Which of the digits in the measurement are certain and which are uncertain?

Measurements



Draw a graduated cylinder which can properly measure 5.4 mL of liquid.

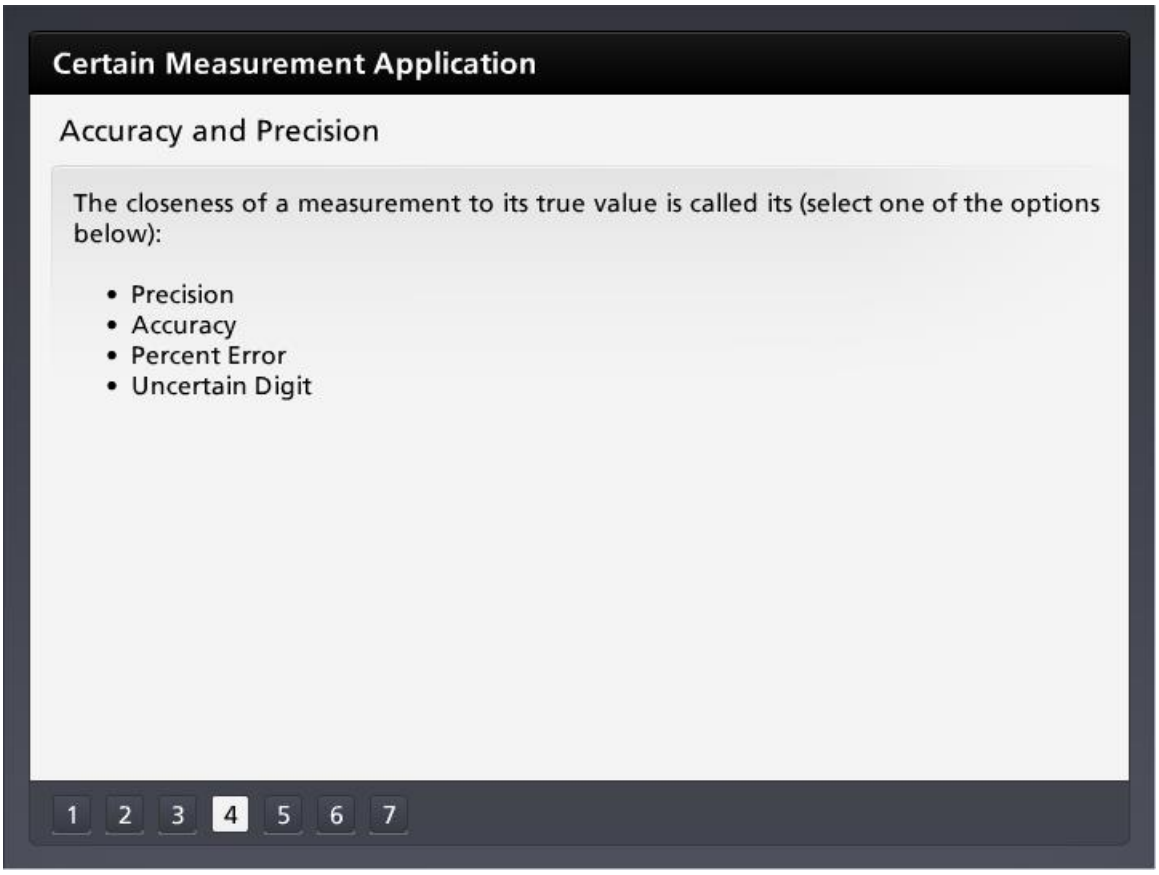
Accuracy and Precision



The dart points on this dart board target would represent something that is (select one of the options below):

- Accurate But Not Precise
- Precise But Not Accurate
- Both Precise and Accurate
- Neither Precise Nor Accurate

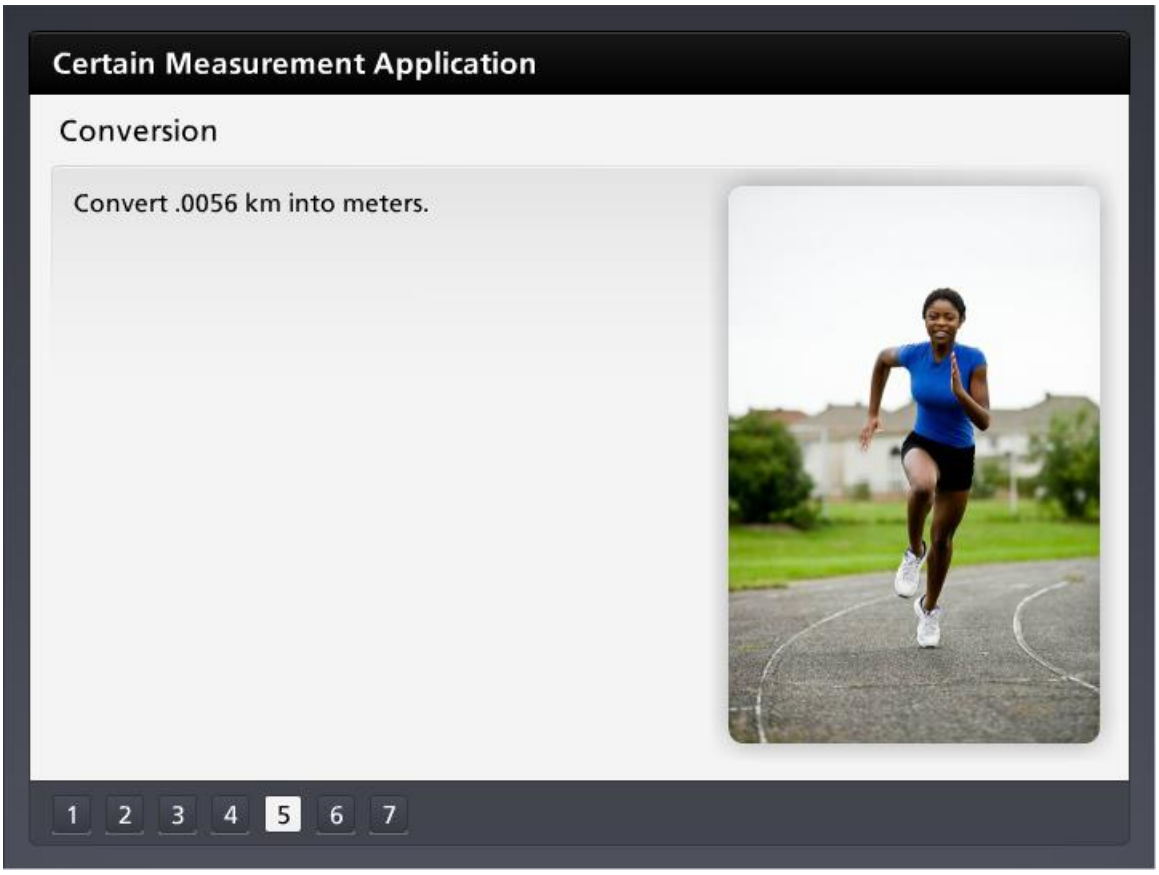
Accuracy and Precision



The closeness of a measurement to its true value is called its (select one of the options below):

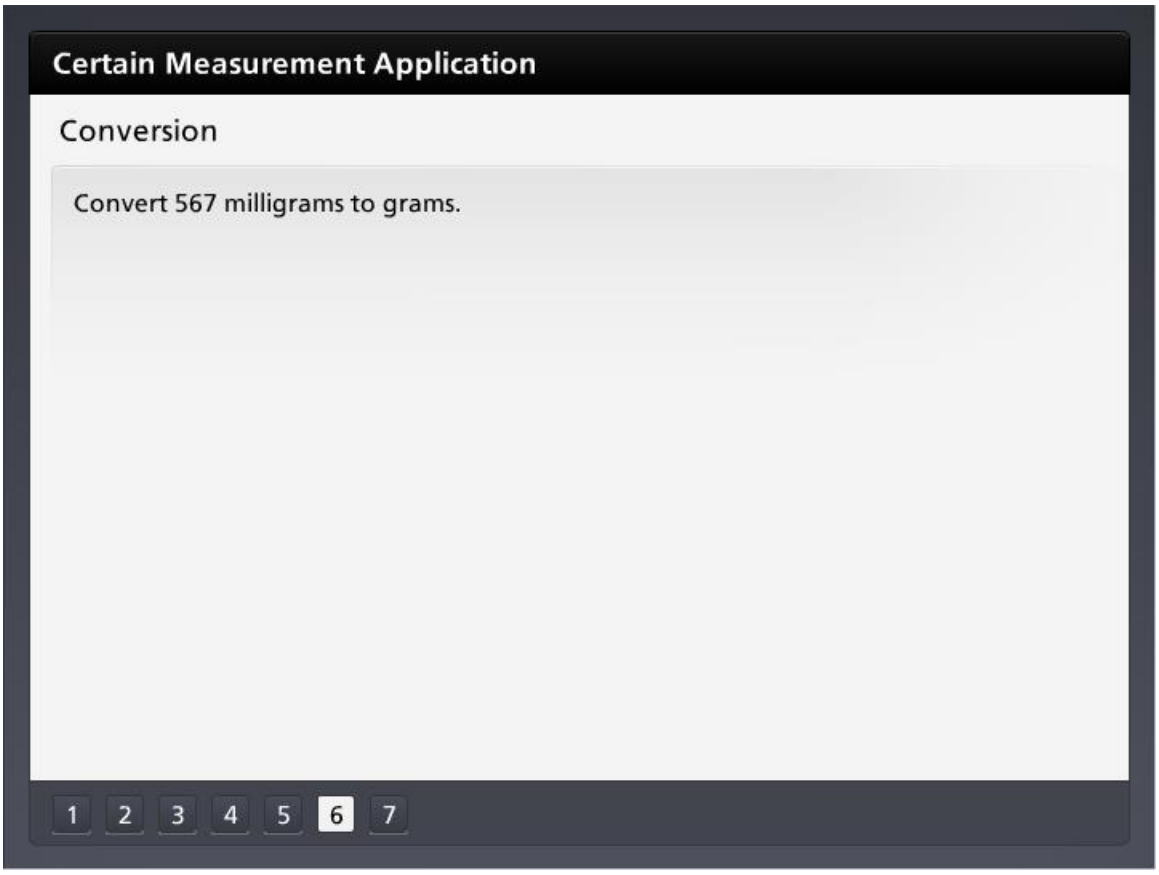
- Precision
- Accuracy
- Percent Error
- Uncertain Digit

Conversion



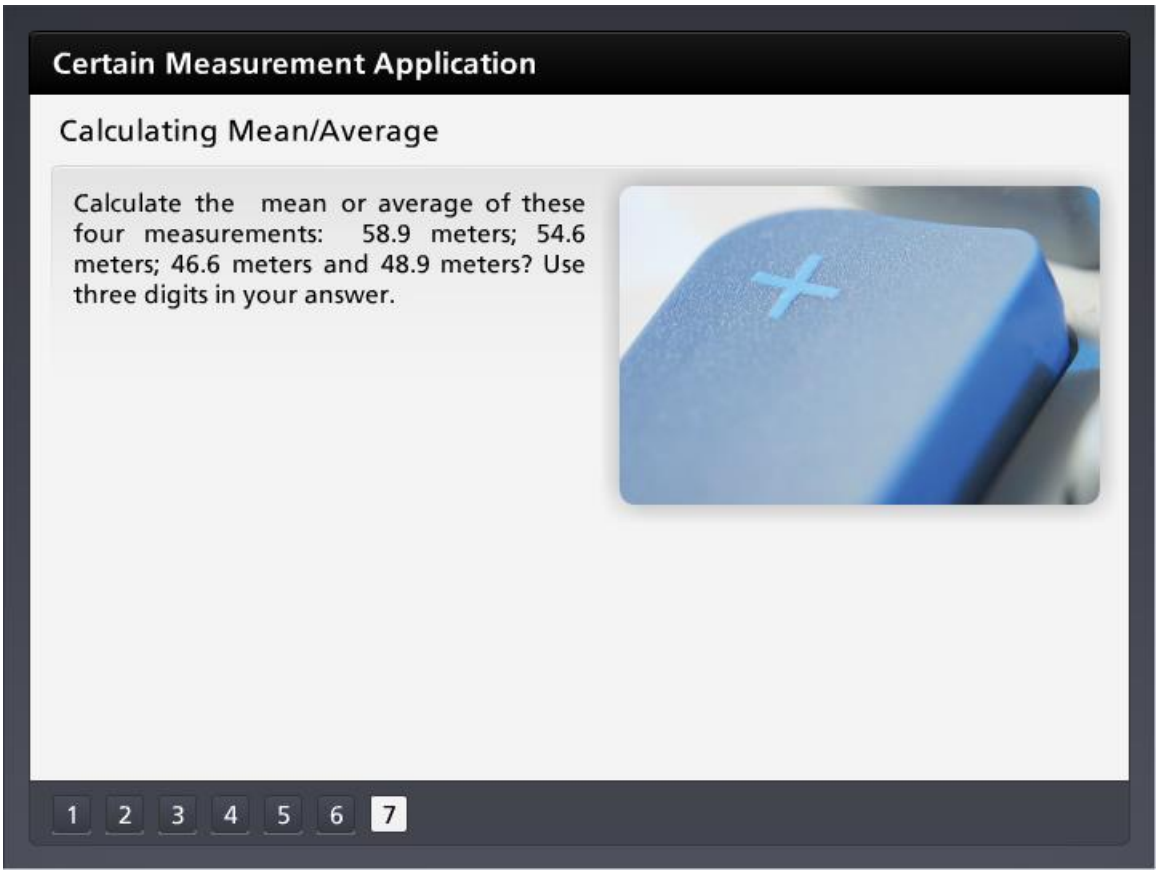
Convert .0056 km into meters.

Conversion



Convert 567 milligrams to grams.

Calculating Mean/Average



Calculate the mean or average of these four measurements: 58.9 meters; 54.6 meters; 46.6 meters and 48.9 meters? Use three digits in your answer.