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Chapter 1 Practice Test

Mathematics 10, pages 51–53

Suggested Timing

50–60 min

Materials

- SI ruler or measuring tape
- imperial ruler or measuring tape

Blackline Masters

BLM 1–8 Chapter 1 Test

For the Short Answer section, encourage students to show all of their reasoning and calculations. In particular, students should show the conversion factors they are using, as well as the steps in the method they choose to make conversions.

In the Extended Response section, students need to show their work and give explanations. In #9, there are many possible correct procedures. Students should be aware that the explanation of the procedure they choose is crucial to the answer. You may want them to answer as if they were explaining the solution to a friend that was absent from class that day. If time allows, you may wish to have students demonstrate or show their solutions to the class, to emphasize the breadth of possible approaches.

The practice test can be assigned as an in-class or take-home assignment. Provide students with the number of questions they can comfortably do in one class. These are the minimum questions that will meet the related curriculum outcomes: #1, 6, 8, and 10.

Planning Notes

Before students begin the Multiple Choice questions, you may want to discuss some test-taking strategies. For example, students should try to highlight key words in the stem, answer the questions without looking at the choices, and eliminate any multiple choice answers that are unreasonable. They should also try to estimate answers to the questions where possible, as they have in many situations in this chapter.

Study Guide

Question(s)	Section(s)	Refer to	The student can ...
#1	1.2	Investigate, Example 3	✓ use a referent to estimate a distance in imperial units
#2	1.3	Example 1	✓ verify a conversion between SI and imperial units for length
#3	1.1	Example 1	✓ estimate and compare distances in SI units
#4	1.3	Example 1	✓ convert and compare distances between SI and imperial linear units
#5	1.2	Example 1	✓ measure distances to the nearest fraction of an inch
#6	1.1 1.2 1.3	Example 1 Investigate Link the Ideas	✓ provide referents for linear measurements ✓ convert within and between SI and imperial units
#7	1.1	Investigate, Example 1	✓ visualize and estimate dimensions in SI units
#8	1.3	Link the Ideas	✓ solve a problem involving the conversion of units within and between SI and imperial systems
#9	1.1 1.2	Example 3 Example 1	✓ describe and explain a strategy for determining a linear measurement
#10	1.3	Example 2	✓ solve a problem involving the conversion of units between SI and imperial systems and justify the reasonableness of the solution

Answers

Chapter 1 Practice Test

1. D 2. B 3. B 4. C 5. B

6. a) Example: arm span, length of stride; metre, yard, foot

b) Example: centimetre, inch, 1 in. \approx 2.5 cm

7.



Estimate: 7 cm by 15 cm

8. 7 mm, 8 mm, 9 mm

9. Measure the height of the rectangular part of the archway. Set up a ratio comparing the horizontal and vertical measurements using the given width of 6 ft. Determine the circumference of the semicircle using the given diameter. Add the width of the archway for the bottom, two times the height for the sides, and the circumference of the semicircle. The perimeter of the archway is 40 ft 10 in.

10. a) 8

b) $3\frac{3}{4}$ yd



c) $403\frac{3}{4}$ yd

d) 32 yd. The answer seems reasonable because it is less than the distance run using yards and there is one less line to run to and back.

Assessment	Supporting Learning
Assessment as Learning	
<p>Chapter 1 Self-Assessment Have students review their earlier responses in the What I Need to Work On section of their Foldable.</p>	<ul style="list-style-type: none"> Have students use their responses on the practice test and work they completed earlier in the chapter to identify areas in which they may need to reinforce their understanding of skills or concepts. Before the chapter test, coach them in the areas in which they are having difficulties.
Assessment of Learning	
<p>Chapter 1 Test After students complete the practice test, you may wish to use BLM 1–8 Chapter 1 Test as a summative assessment.</p>	<ul style="list-style-type: none"> Consider allowing students to use their Foldable.

