Unit 5 Test Form B

Show your work.

Fill in the circle for the correct answer.

- Marcus rode his mountain bike on a 3-kilometer dirt trail. He completed the trail 2 times. How many meters did Marcus ride his bike?
 - (A) 60 meters (C) 6,000 meters
 - (B) 600 meters (D) 60,000 meters
- 2. Which describes the relationship between an hour and a second of time?
 - ① 1 hour is 60 times as long as 1 second.
 - **(G)** 1 hour is 120 times as long as 1 second.
 - (H) 1 hour is 1,200 times as long as 1 second.
 - I hour is 3,600 times as long as 1 second.
- **3.** Which table shows kilometers correctly converted to meters?

A	Kilometers	Meters		
	2	20		
	3	30		
	4	40		

B Kilometers		Meters
	2	200
	3	300
	4	400

© Kilometers		Meters		
	2	2,000		
	3	3,000		
	4	4,000		

D Kilometers		Meters		
	2	20,000		
	3	30,000		
	4	40,000		

- 4. What is the area of the rectangle?
 - (E) 192 sq mi
 - **(G)** 162 sq mi
 - (H) 64 sq mi
 - 🛞 32 sq mi



Name

5. What is the p	erimeter of the recta	ngle?	6 cm
(A) 48 cm		© 22 cm	
B 28 cm		D 14 cm	8 cm
Convert.			
6. 66 ft			
🕑 69 yd		(H) 33 yd	
⑤ 63 yd		🕲 22 yd	
7. 52 m			
A 520 cm		© 52,000 cr	n
® 5,200 cm		D 520,000 c	m
8. 80 cL			
🕑 800 mL		(H) 80,000 m	۱L
⑤ 8,000 mL		800,000 n	٦L
9. 8 kg			
A 80,000 g		© 800 g	
B 8,000 g		D 80 g	
10. 15 yd			
(F) 3 ft		(H) 45 ft	
⑤ 5 ft		Ҝ 60 ft	
11. 4 lb			
(A) 64 oz		© 32 oz	
B 48 oz		D 16 oz	
12. 6 gal			
🕑 12 qt		🕀 24 qt	
⑥ 18 qt		🛞 48 qt	

13. 48 months	
A years	© 5 years
B 6 years	D 4 years
14. 7 hours	
④ 42 minutes	H 422 minutes
⑤ 420 minutes	🛞 4,200 minutes

Find the perimeter and area of the rectangle.



- A Perimeter = 22 cm; Area = 112 sq cm
- **B** Perimeter = 44 cm; Area = 112 sq cm
- © Perimeter = 44 cm; Area = 44 sq cm
- **(D)** Perimeter = 112 cm; Area = 44 sq cm



- (G) Perimeter = 62 in.; Area = 62 sq in.
- \oplus Perimeter = 31 in.; Area = 240 sq in.
- K Perimeter = 31 in.; Area = 62 sq in.

Solve.

Show your work.

17. A crate of watermelons weighs 12 pounds. After Nick adds two extra watermelons, the crate weighs 18 pounds. How much do the two extra watermelons weigh in all?

left A pounds	© 20 pounds
B 9 pounds	② 30 pounds

18. A rectangular rug has an area of 88 square feet. The short sides of the rug are each 8 feet long. What is the length of one of the long sides?

④ 36 feet	(H) 18 feet
© 22 feet	11 feet

19. A rectangle on a mobile measures 9 centimeters long on the long sides. It measures 3 centimeters long on the short sides. What is the perimeter of the rectangle?

A 12 centimeters	© 27 centimeters
B 24 centimeters	④ 48 centimeters

20. Regina ships 15 boxes of games. Each box has a mass of 6 kilograms. What is the total mass of the boxes in grams?

F	900,000	grams	H 9	,000 grams
G	90,000	grams	K	900 grams



Measurement

What Is Assessed?

- Solve problems involving perimeter.
- Solve problems involving area.

Explaining the Assessment

- **1.** The assessment will require students to apply content learned in the unit involving perimeter and area.
- **2.** Talk with students about shapes of patios and decks. Ask them to sketch the shape of possible rectangular floor plans for a patio identifying terms of length, width, area, and perimeter.
- **3.** Discuss how changing the length and width of the patio affects both area and perimeter.
- 4. Read the activity aloud with the class.

Possible Responses

- **1.** 1 ft \times 36 ft, 2 ft \times 18 ft, 3 ft \times 12 ft, 4 ft \times 9 ft, 6 ft \times 6 ft, 9 ft \times 4 ft, 12 ft \times 3 ft, 18 ft \times 2 ft, 36 ft \times 1 ft; 36 sq ft
- **2.** 74 ft, 40 ft, 30 ft, 26 ft, 24 ft, 26 ft, 30 ft, 40 ft, 74 ft; Possible answer: The perimeter is the same when the order of lengths and the widths are the same values reversed; for example, the perimeter of both (1 ft \times 36 ft) and (36 ft \times 1 ft) is 74 ft.
- 3. Possible answer: None of the floor plans will work if Gio chooses the fencing that costs \$9 per foot. Gio could choose the 4 ft × 9 ft, 6 ft × 6 ft, or 9 ft × 4 ft floor plan if he uses the fencing that costs \$7 per foot. The cost of the fence for the 4 ft × 9 ft or the 9 ft × 4 ft floor plan is \$182. The cost of the fence for the 6 ft × 6 ft floor plan is \$168. The 6 ft × 6 ft floor plan is the least expensive.
- **4.** Answers will vary, but should indicate an understanding that using a combination of rectangular shapes may increase the options Gio has for keeping the cost of the fence under \$200 but will not change the least expensive choice.

Mathematical Practices CC.K–12.MP.1 CC.K–12.MP.2 CC.K–12.MP.4 CC.K–12.MP.6