

The Aquarium Builder Quest

Volume of Rectangular Prisms

Name: _____ Date: _____

Circle the best answer for 1 and 2. Answer 3 in complete sentences.

1. A tank has 8 cubes in each layer and 5 layers. What is its volume?

- (A) 13 cubic units
- (B) 40 cubic units
- (C) 85 cubic units
- (D) 58 cubic units

2. Which box does NOT have a volume of 36 cubic units?

- (A) $3 \times 3 \times 4$
- (B) $2 \times 3 \times 6$
- (C) $6 \times 6 \times 1$
- (D) $4 \times 4 \times 2$

Read: A planter box is 6 feet long, 2 feet wide, and 3 feet tall. A bag of soil fills 4 cubic feet.

3. How many bags of soil are needed to fill the planter?

Use Solve-Show-Explain: Solve, Show, Explain.

The Aquarium Builder Quest: Exit Ticket

Total: 5 points. Mastery: 4 or more.

#	Answer	Points
1	(B) 40 cubic units	1 point
2	(D) $4 \times 4 \times 2$	1 point
3	Solve: 9 bags. Show: $V = 6 \times 2 \times 3 = 36$ cubic feet; $36 \div 4 = 9$. Explain: First I found the volume by multiplying length, width, and height because volume tells how much space is inside. Then I divided by 4 because each bag fills 4 cubic feet. (Answer: 9 bags)	3 points: Correct answer 9 bags; Volume 36 ft ³ shown; Explains why multiply then divide.