College Preparatory Mathematics Chapter 9 Sample Argumentation Task

9-4. George was working with Building 1 from problem 9-1. The floor plan is reprinted at right. He built the first floor using cubes and found that the volume was 10 cubic units.



"Wait," he said. "Looking at the floor plan, I can see that the area is 10 square units. Why are the area and volume both equal to 10 units?"

Is this a coincidence? Investigate this with your team. Will the area of the floor plan always have the same numerical value as the volume of the first floor? Explain why your answer makes sense.

This is a HIGH QUALITY argument task. It asks students to critique the reasoning of the character as well as dispel common **misconceptions** and **explain** their answer and provides them with a visual representation to help get started with their evidence.

"George was working with building 1 from problem 9-1. The floor plan is reprinted at the right. He built the first floor using cubes and used 10 cubes. George thinks that *the area* of the floor plan of a building will always be equal to the volume of the first floor. Do you agree with George? Explain your reasoning and support your answer with sufficient evidence."