



**Grade 5 Unit 1**

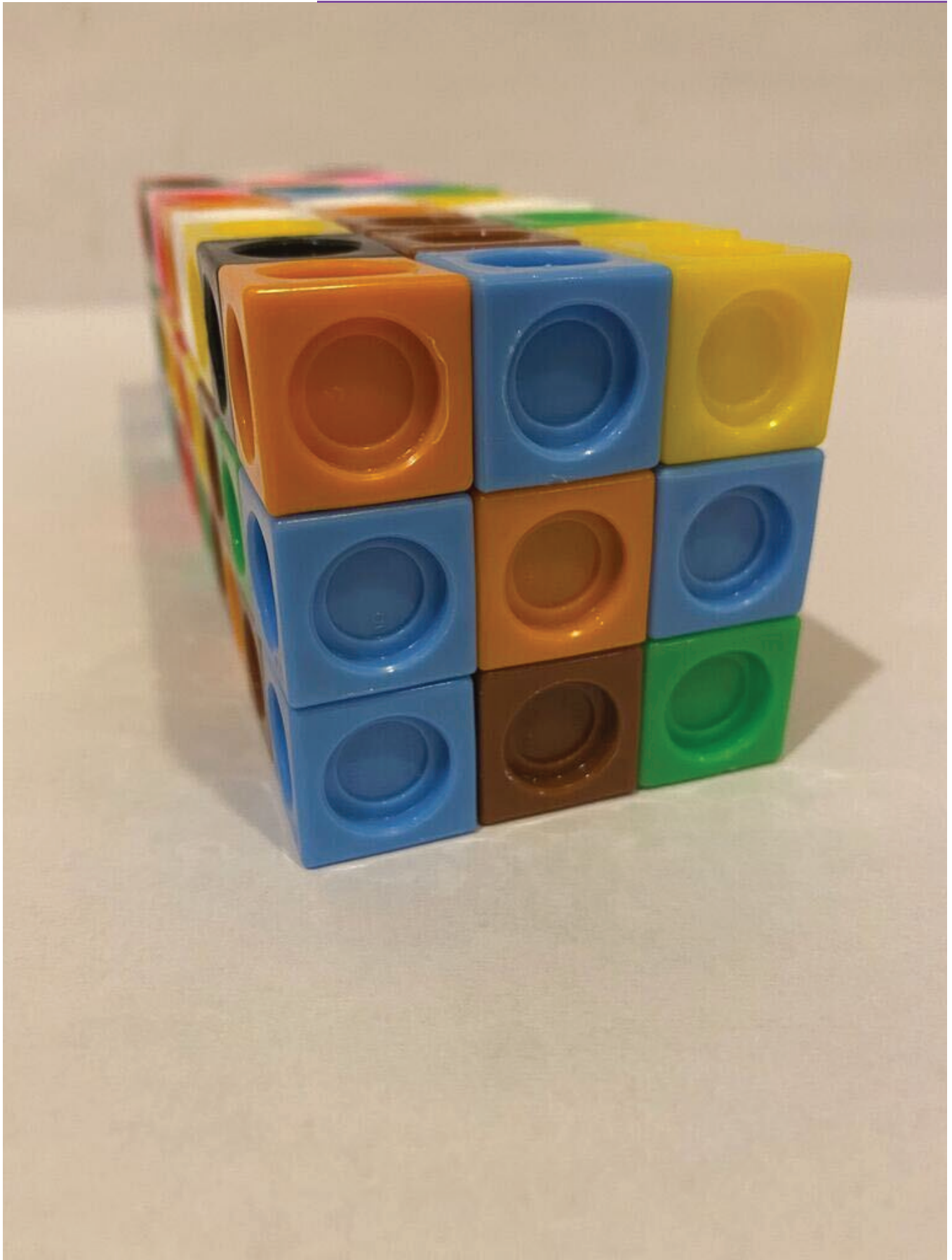
Lesson 4

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## **Unit 1 Lesson 4: Use Layers to Determine Volume**

**WU Estimation Exploration: How Many Cubes? (Warm up)**

Student Task Statement



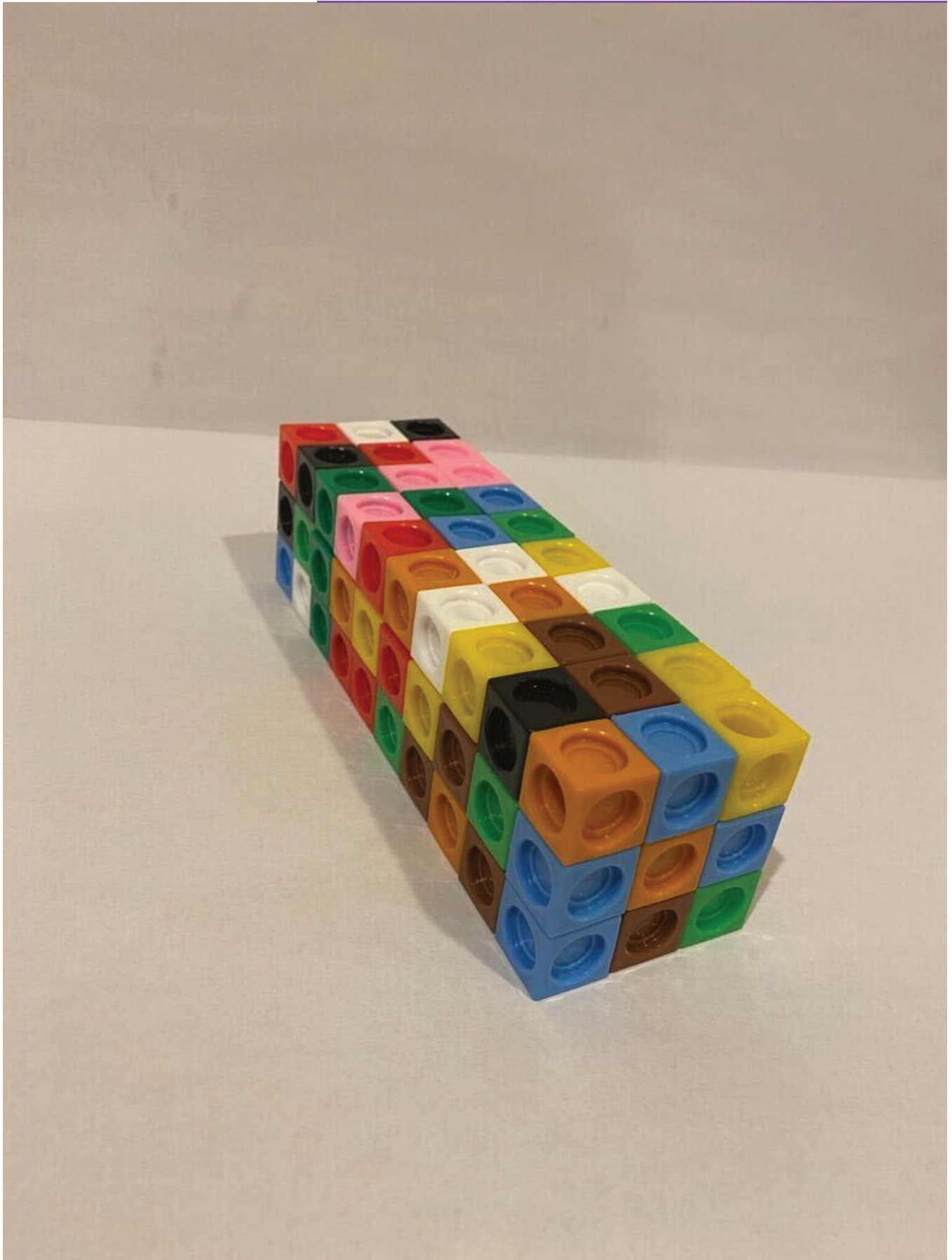
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About how many cubes were used to build this prism?

Record an estimate that is:

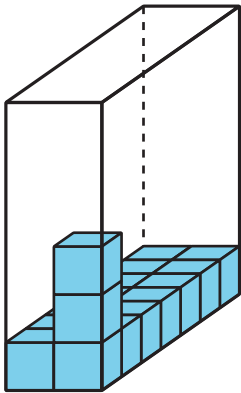
too low	about right	too high

Activity Synthesis



# 1 Layers in Rectangular Prisms

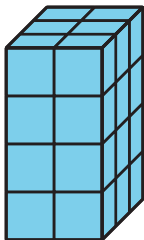
## Student Task Statement



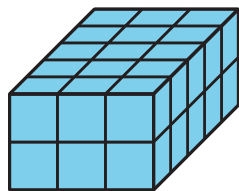
1. Complete the table. Be prepared to explain your reasoning.

prism	number of cubes in one layer	number of layers	volume
A			
B			
C			
D			

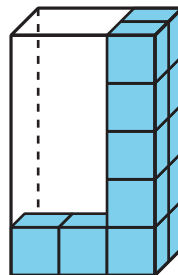
**Prism A**



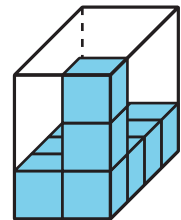
**Prism B**



**Prism C**

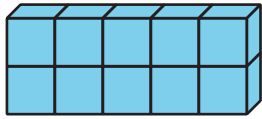


**Prism D**

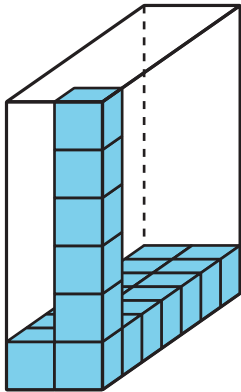


2. Find the volume of each prism. Explain or show your reasoning.

**Prism E**



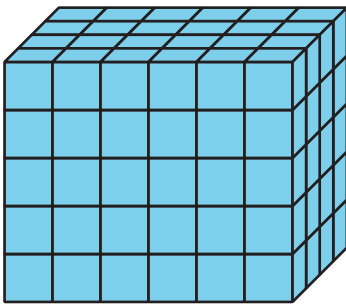
**Prism F**



3. How can you find the volume of any rectangular prism?

## 2 Finding Volume in Different Ways

### Student Task Statement



1. Explain or show how the expression  $5 \times 24$  represents the volume of this rectangular prism.
2. Explain or show how the expression  $6 \times 20$  represents the volume of this rectangular prism.
3. Find a different way to calculate the volume of this rectangular prism. Explain or show your thinking.
4. Write an expression to represent the way you calculated the volume.