Lesson 1 Problem Set

Name ___________________________________________ Date ______________________

1. Use your centimeter cubes to build the figures pictured below on centimeter grid paper. Find the total volume of each figure you built, and explain how you counted the cubic units. Be sure to include units.

   A.  
   
   B.  
   
   C.  
   
   D.  
   
   E.  
   
   F.  

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<tr>
<th>Figure</th>
<th>Volume</th>
<th>Explanation</th>
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2. Build 2 different structures with the following volumes using your unit cubes. Then, draw one of the figures on the dot paper. One example has been drawn for you.

a. 4 cubic units

![Diagram of 4 cubic units]

b. 7 cubic units

![Diagram of 7 cubic units]

c. 8 cubic units

![Diagram of 8 cubic units]

3. Joyce says that the figure below, made of 1 cm cubes, has a volume of 5 cubic centimeters.
   a. Explain her mistake.

![Diagram of Joyce's figure]

b. Imagine if Joyce adds to the second layer so the cubes completely cover the first layer in the figure above. What would be the volume of the new structure? Explain how you know.