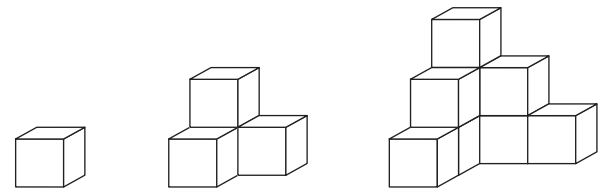
Family Letter

Dear Student and Family Members,

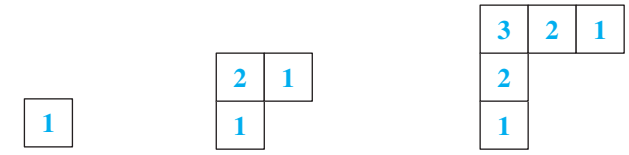
In Chapter 2, our class will begin studying three-dimensional geometry, including the measurement of surface area and volume. We will build three-dimensional patterns and use words or algebraic expressions to describe them. We will also use blocks to build complex structures that match two-dimensional drawings, as well as make drawings to describe structures we build.

Here is one example of a geometric block pattern that we will build. We will be identifying the pattern and deciding how many cubes there will be in Stage 4, Stage 5, and so on.



Stage 1 Stage 2 Stage 3

Another way to draw this pattern is called a *top-count* view. Imagine the view as you are looking down on the block patterns from the top. The first three *top-count* views look like this. The numbers in the drawings show how many blocks are in each stack.



Stage 1 Stage 2 Stage 3

Eventually we will try to determine how many blocks are in Stage 93 if there are 8,464 blocks in Stage 92.

Vocabulary Along the way, we'll be learning about these new vocabulary terms:

base	**prism**
cylinder	**surface area**
net	**volume**

What can you do at home?

As we near completion of Chapter 2, you and your student might enjoy collecting cans with each of you predicting the volumes of the cans. Then find the actual volume of each can and check to see how close each prediction was to the actual volume. Who was the better predictor?