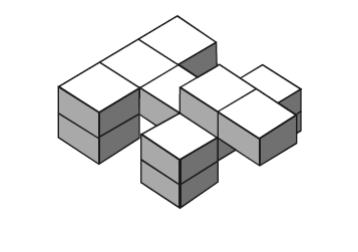
** Unit Dog **

**Step 1**: Build a dog using 13 cubes as shown below. 

**Step 2**: 1. What is the surface area of the dog?

2. What is the volume of the dog?

**Step 3**: Draw the following views/perspectives of the dog:

Front: Side/lateral: Top/aerial:

**Step 4**: On a piece of grid paper, draw a net for the dog. You can draw separate nets for the legs, head, and body. (attach the grid paper to this assignment)

**Step 5**: Choose one of the following to construct: a double dog, a triple dog, a quadruple dog, a half dog. You must double/triple/quadruple/half every dimension.

**Step 6**: 3. What is the surface area of your new dog?

4. What is the volume of your new dog?

**Step 7**: Make a net for your new dog. Cut this net out and actually construct a paper dog.

**Step 8**: Complete the chart below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Dimensions increased by a factor of… | Surface area of dog | Area increased by a factor of.. | Volume of dog | Volume increased by a factor of… |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  |  |
| 10 |  |  |  |  |

**Step 9**: Answer the following questions using what you have learned: