**Geometry Team Challenge – 6.G.2**

**Computing Volume Progression 1**

a. Amy wants to build a cube with 3 *cm* sides using 1 *cm* cubes. How many cubes does she need?



b. How many 1 *cm* cubes would she need to build a cube with 6 *cm* sides?

**Computing Volume Progression 2**

1. Amy has a fish tank shaped like a rectangular prism that is 20 cm by 20 cm by 16 cm. What is the volume of the tank?



1. If Amy only fills the tank 3/4 of the way, what will be the volume of the water in the tank?

**Computing Volume Progression 3**

A rectangular tank is 50 cm wide and 60 cm long. It can hold up to 126 ℓ of water when full. If Amy fills 2/3 of the tank as shown, find the height of the water in centimeters. (Recall that 1 ℓ=1000 cm3.)

**Computing Volume Progression 4**

A rectangular tank is 24 cm wide, and 30 cm long. It contains a stone and is filled with water to a height of 8 cm. When Amy pulls the stone out of the tank, the height of the water drops to 6 cm. Find the volume of the stone.

