



School:  
Name of Student:  
Sets:  
Further tools: computer  
Date:

**STUDENT**  
**PUSE Task Number**  
**BC**  
**521**

**Description of the task:**

Let's draw a "solid Poly-Universe" in GeoGebra 3D. Plot a regular tetrahedron, then draw smaller tetrahedrons the sides of which are half, quarter, eighth, sixteenth of the sides of the original tetrahedron at each vertex. Use GeoGebra's "dilate from point" command. Colour the tetrahedrons. How many different colours do we need in order to colour all the small tetrahedrons as well as the basic element differently? How many different tetrahedrons could we colour this way?

Take your 3D glasses and switch on 3D mode in the slideshow function of GeoGebra3D.

**Solution(s) of the task:**

**Remarks / Self-evaluation:**