## Dear Friends

The moment has arrived to ask for your valued advice for the testing in which we mentioned to you in the previous letter.
Are you ready?
This year a researcher from the Department of Mathematics has found some identical cubes of wood, in his daughter's backpack and has created an exercise. Some colleagues, after they read it, believed it is not suitable for children of your age.
What do you say? We have copied it for you below. Do you want to try and solve it and ascertain who is right?
We are certain that you will accept this challenge with drive and enthusiasm.
We await your responses and in the meantime ..... keep up the good work!

## Donatella <br> dal Dipartimento di Matematica

Here is the problem. Observe the following drawing:


- How many small cubes are missing to build a whole cube?
- If we want to build a smaller cube, how many little cubes will be left over?
- Do you know how to build another shape with all the cubes from the first shape? Do you know how to draw it?
- Which of the two shapes between the finished cube and the new shape that you have built occupies more space in your class? Why?

