The Edible Platonic Solids

Dana Creech

For my project I chose to be creative and make the five platonic solids out of food. Although my creations are not very appetizing, they are edible. I tried a number of different methods before I found five that would construct these models, but I am satisfied with my results.

First, I made the dodecahedron—the solid that I feared would be the most difficult—out of pentagonal gingerbread cookies and icing. This proved to be a difficult and time-consuming task. Making the ingredients was not hard, but setting the pieces so that they would stay until the icing dried was challenging. Although this model took the most time and attention, I feel that it is also the most impressive.

Second, I constructed the cube out of pound cake. I baked a rectangular cake then cut two square pieces that were half as tall as their width. I then iced the two pieces on top of one another and iced the edges so they would appear smoother. As I had anticipated, the cube proved to be less trouble than the dodecahedron.

Third, I made the octahedron out of triscuits and icing. I had hoped to glue them together using cheese sauce, but it did not have to strength to hold the crackers up. I ended up using the same icing that I had used for the dodecahedron, but I dyed it red to add a little color to the model.

Fourth, I made the tetrahedron out of rice crispy treats. After mixing a batch of the batter, I shaped the mixture into a tetrahedron before I put it in the refrigerator to harden. When the model hardened, I tried to improve the shape by shaving the sides with a cheese grater, which worked to some extent. However, I was a bit disappointed that I could not make sharp edges and vertices.

Last, I made the icosahedron. I tried to use pretzel sticks and cheese cubes, but the cubes crumbled when I placed multiple pretzels into them. I then used to tooth picks and marshmallows. This made a very sturdy model, but I felt that using toothpicks defeated my purpose of making a totally edible project. I then used larger marshmallows and pretzel sticks to construct the same shape. Although not as sturdy as the toothpicks, the second model is totally edible. I spent a good deal of time on all my models, and I feel that my work is reflected in the results.