

3-D Models of Tempel 1

Part 3 of 3

Tempel 1 Models



These models are used in conjunction with the tactile cards of Tempel 1. Actual pictures of Comet Tempel 1 can be found at the Deep Impact web site

http://deepimpact.umd.edu/gallery/jpg/Making_Composite3.jpg

to follow as you make your 3-D tactile model. Use the descriptions found in the teacher's guide for creating the surface

features that will coincide with the tactile card narrative. For this model you will need at least one six- inch and a four-inch diameter Styrofoam ball, wooden tooth picks, Elmer's Glue, and a little imagination. I didn't use it, but looking back modeling



clay would have been handy to fill in and smooth out the joint areas.

Start by carving out an area in the six inch diameter ball and anchor the four inch ball with tooth picks onto the larger ball. Use the material you took out of the large ball to fill in the joint area between the two



balls. Having done this, the modeling clay could be used to smooth these areas. If you wish to make a larger model, the same process can be done using eight, six, and four inch diameter balls.



When the basic shape you want has been achieved, form the surface features seen in the pictures and described on the tactile cards.



Be sure to put in a number of small impact craters as well as the main features. Now you are ready to cover the model with paper mache paste. It will take several coats to cover the Styrofoam texture and make the surface appear comet like.

Use Elmer's Glue to create the smooth ice regions that were found on the top of the comet. Similarly glue can be put along the side to represent the smooth area under the escarpment. If your model does not look just like this, don't worry. No one is really sure what Tempel 1 exactly looks like.

