We describe several projects that help students understand contour diagrams. Using laser cut sheets that form cones, paraboloids, and other shapes, students trace out the edges to create the contour diagram of the surface. Students also build their own simple 3D models based on a contour diagram or a function. These projects are useful at the start of a multivariate Calculus course, helping the students see the connections between the contour diagram and the surface. (Received September 20, 2016)