1046-20-1195 Carolyn Yackel* (yackel_ca@mercer.edu). Temari Math and Geometry on the Sphere. Preliminary report.

We will discuss the interplay between mathematics and the craft of embroidered temari thread balls. Two different ways of classifying temari ball designs will be considered; one presented by Conway, Burgiel, and Goodman-Strauss in their recent book The Symmetries of Things and the other as a projection of polyhedra onto the sphere. One portion of the talk will demonstrate the use of temari as examples of spherical symmetries or polyhedral projections. The other half will focus on which symmetries or polyhedra can be realized in some mathematically exact sense given the restriction to temari techniques. (Received September 15, 2008)