1135-Q5-1211 David Honda (dhonda@sandi.net), Yana Mohanty (yana@imathgination.com) and David Patrick* (patrick@aops.com). Snapology Origami: Folding and Snapping Your Way to Geometry, Topology, Art, and More.

What do you get when you take strips of paper, cut them into small rectangles, and fold them together? You get the building blocks to create fantastic mathematical models. This is the art of Snapology Origami, also known as Knotology, created by Heinz Strobl. These models can be used to explore polyhedra, topology, art, and more. Much like unit origami, Snapology Origami models are created without glue or tape, and models are held together strictly by how the pieces are folded and assembled. We will discuss how the Snapology Origami models created by one of our San Diego Math Teachers' Circle participants, as a hobby, evolved into an entire MTC session. We will show how to create an icosahedron, and participants will be shown more complex models based upon similar methods, including various polyhedra, a Sierpinski Pyramid, a Buckyball, a Klein bottle, tori of various genus, and a few abstract sculptures. (Received September 20, 2017)