

1145-J1-1523 **Teresa Deltz Magnus*** (tmagnus@rivier.edu), Department of Mathematics and Computer Sci,
Rivier University, 420 S. Main Street, Nashua, NH 03060. *Delving Deeper into Geometry through
Purposeful Play.*

Pentominos, Tangrams, Geoboards, Pythagorean puzzle pieces, Polydrons, and other geometrical tools come out of the closet to encourage students to explore geometry in a whole new way. The intuitive notions of conservation of area, the area of a rectangle, and the angle sum of a triangle lead to an understanding of other area formulas, why the Pythagorean Theorem holds, and which regular and semiregular polyhedral can be built. While this course full of exploration, experimentation, and justification was designed for Elementary Education majors, it is open as an elective to all students wanting to know the why behind the geometry they've studied and to experience some topics outside the typical curriculum. (Received September 22, 2018)