

1135-VI-1570 **James Morrow*** (jmorrow@mtholyoke.edu). *The Theme of Observation in a Geometry Course.*

I describe structured observation exercises as both a theme and a jumping off point for an introductory geometry course. These observations are designed to encourage students to make detailed observation a habit of mind. Exercises include: Observing and describing a given complex object, finding and describing something interesting encountered while on a walk, discovering and representing a real-life problem to solve, uncovering what they understand and do not understand in a geometry reading, and examining a sketch, painting, or sculpture in an art museum. I illustrate how observation strategies can be the basis for geometric and artistic design and construction and form a strong foundation for further mathematical study and for a reflective life. For students in an introductory mathematics course, becoming a better observers helps them become more independent, better able to ask deeper questions, know what they know and what they don't understand, better able to be creative, have more strategies for problem solving, and be able to distinguish between claims that have a basis in reasoning and those without such a basis. (Received September 23, 2017)