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Ward Heilman* (wheilman@bridgew.edu). *Jack and the Beanstalk, Flintstone and Color Geometries: Teaching Finite Geometries in a course for Secondary Education Mathematics Students*. Preliminary report.

Students preparing to teach Mathematics in high school often think Euclidean Geometry is Geometry. A fascinating way to introduce them to other geometries is the study of finite geometries. We have collected and designed a sequence of finite geometries including the Fe Fo and Yabba Dabba geometries. Students construct and present models of these axiom sets using whatever symbols or mimes they choose, determine the independence of axioms and eventually compose their own finite geometries. This technique allows students to create and understand the idea of a geometry and is also very effective in transmitting the concepts of model and axiomatic system. (Received August 14, 2014)