

1116-F5-2145 **Robert Cohen*** (rcohen@western.edu), 600 N. Adams St., Gunnison, CO 81231. *Interactive Fractal Design.*

Fractal design can provide exciting motivation to explore geometric transformations and matrix techniques. We have developed an interactive Mathematica presentation that guides students through a creative, mathematical process leading to the design of fractals. This material has been well-received by a variety of students including middle school math campers and non-math major college freshmen. Students were invited to interactively explore parameter space with Mathematica notebooks and many have been inspired to create their own fractals. This presentation has provided an enticing introduction to mathematical topics most young students have never seen while demonstrating an impressive variety of fractal images created from simple mathematical ideas. At this talk, the presentation will be outlined and all materials will be made available to interested instructors. (Received September 21, 2015)