Julia Set Exploration Questions

To understand the Mandelbrot set, we need to work with two variable (complex) functions and their Julia sets.

- 1. Classify the Julia sets for the points you investigated with the <u>Two Variable Function Pump</u> in the <u>Exploration Questions</u> as either connected or fractal dust.
- 2. Use the <u>Julia Set Activity</u> to find at least 5 new points with connected Julia sets and 5 new points with fractal dust Julia sets.
- 3. Explore various Julia sets using the <u>Julia Set Activity</u>, until you find one you particularly like. Students in the class will judge who found the most interesting Julia set.