Exploring Quadratics with Fireworks!

Process Standards:

Students will be able to:

- Interpret results in ways that are meaningful for the given context.
- Effectively communicate their mathematical knowledge.
- Identify errors and their work and revise when necessary.
- Exhibit characteristics of a cooperative learner.
- Organize class materials so that they are easily accessible and able to be used as an additional resource in problem solving situations.
- Accurately reflect on their progress and use their reflection to develop goals and design strategies that will aid in their improvement.

Content Standards:

Students will be able to:

- Select and apply appropriate computational strategies to problem solving and life situations.
- Use technology to assist in data collection and interpretation of functions.
- Perform operations and transformations on functions, polynomials, and other mathematical entities.
- Recognize equivalent forms of an expression, equation, function or relation.
- Generate equivalent forms of an expression, equation, function or relation.
- Interpret and describe classes of functions through rules, tables and graphs.
- Interpret situations that involve variable quantities.
- Solve problems that involve quantities.
- Model a wide range of phenomena using a variety of functions.
- Find intercepts, local extreme values, and asymptotic behavior of functions.
- Interpret intercepts, local extreme values, and asymptotic behavior of functions in given contexts.
- Select and produce appropriate graphical representations.