$\qquad$

## Vertex Form of Parabola

In this activity we will investigate the vertex form of quadratic equations.

Step 1: Record the equation from your card below.
Your equation: $\qquad$

Step 2: Enter the equation into Y1 in the activity center.

Step 3: Get into a group with others that have your same vertex. Take your card with you.

Step 4: Record your group members' quadratic equations below.
Equation 1: $\qquad$ (rewrite yours)

Equation 2: $\qquad$
Equation 3: $\qquad$

## Equation 4:

$\qquad$
Step 5: Find the vertex for your group's quadratic equations.


Step 6: In your group, discuss similarities and differences in the equations above. Record your group findings below.

Step 7: Based on your findings, describe how to find a vertex given an equation.

Name:
Date: $\qquad$

## Check for Understanding:

Which graph shows a function $y=x^{2}+c$ when $c<-1$ ?
F

H

G



