## Geometry / Model: The Center of Things

Algebra can be used to find the center of gravity of a triangle. This can be done by finding the point where the medians of a triangle intersect. The median of a triangle is a segment joining a vertex to the midpoint of the opposite side.

Draw several different kinds of triangles on graph paper. Find the midpoint of each side of each triangle and draw the medians. Write an equation for each median. Choose two medians for each triangle and solve this system of equations to find the coordinates of the center of gravity. Check this point in the third equation.

Make a model of each triangle showing how it balances at its center of gravity. Demonstrate this to your class, explaining how you arrived at your conclusions.

