# Jack-0'-Lantern Geometry Application Project 

Objective: In the spirit of Halloween, you will decorate your pumpkin using geometric 2-d shapes and other vocabulary words we learned in this unit (Unit 2: Triangles) in order to create a Jack-O'-Lantern. You may use pencil, pen, crayon, colored pencil, marker, etc... to complete this assignment. Your Jack-O'-Lantern does NOT have to be a face; however, it must be of an appropriate Halloween theme. A brainstorm on another piece of paper is recommended (this explains the second attached pumpkin). Please be neat! You should use a ruler or straight edge and if available, a protractor.

Requirements: You will draw at least one example of each vocabulary term on the graph paper pumpkin. You must label each geometric object on the as described below. Please include at least:

- 1 Right Triangle ( $\triangle \mathrm{ABC}$ )
- 1 Isosceles Triangle ( $\triangle \mathrm{DEF}$ )
- 3 Unique Scalene Triangle ( $\Delta \mathrm{GHI}, \Delta \mathrm{JKL}, \Delta \mathrm{MNO}$ )
- 3 Altitude on any triangle (Depends on the triangle you choose. Please write label on the rubric below)
- 3 Medians on the same triangle (Depends on the triangle you choose. Please write label on the rubric below)
- 1 Circumcenter of any triangle (Point P)
- 1 Incenter of any triangle (Point Q)
- 3 Other non-triangle shapes (Include their names on the rubric, no label necessary).


## Rubric:

| Object | Description (Properly Labeled) | Points (10 pts each*) |
| :--- | :--- | :--- |
| 1 Right Triangle | $\Delta \mathrm{ABC}$ |  |
| 1 Isosceles Triangle | $\Delta \mathrm{DEF}$ |  |
| 3 unique Scalene Triangle | $\Delta \mathrm{GHI}, \Delta \mathrm{JKL}, \Delta \mathrm{MNO}$ |  |
| 3 Altitude on any triangle |  |  |
| 3 Medians on the same triangle |  |  |
| 1 Circumcenter of any triangle | Point P |  |
| 1 Incenter of any triangle | Point Q |  |
| 3 Other non-triangle shapes <br> $* 30$ pts, 10 pts for each shape. |  | Total |

Date Assigned: Friday, October 28, 2011
Date Due: Tuesday, November 1, 2011

