Unit 2 Reading (due Thursday, January 24)

Please let the instructor know immediately if you have trouble accessing any of these materials. There is nothing to turn in for your reading, but you will be expected to be comfortable with these concepts by Quiz 2.

Required Reading:

Matrix Transformations:

Introduction to Computer Graphics, Chapter 4 (https://www.safaribooksonline.com/library/view/introduction-to-computer/9781439852798/K12432_C004.xhtml) - Please read up through section 4.6. You may skip subsections 4.6.2.1 and 4.6.2.2 since those involve perspective projection, which we'll cover in the next unit. The rest of section 4.6 deals with orthographic projection and viewing volume. You won't need to have a strong mathematical understanding of these just yet (again, that's the next unit), but you should have a basic idea because you'll be applying these concepts in Project 1. (Note in particular the section on aspect ratios!)

Newell Method:

Calculating a Surface Normal (https://www.khronos.org/opengl/wiki/Calculating_a_Surface_Normal)

Polygonal Meshes and Vertex Normals (https://web.cs.wpi.edu/~emmanuel/courses/cs543/slides/lecture3_p3.pdf)

Animation:

Animation in WebGL (https://webglfundamentals.org/webgl/lessons/webgl-animation.html)

Learn WebGL: Screen Updates and Animation (http://learnwebgl.brown37.net/07_cameras/screen_updates_and_animation.html)