0

* Preprocessor
  + #include
    - Will open the given header file, and paste its contents into where the “#include” is
  + #define
    - Will search for one word, and replace it with another
    - “#define INTEGER int”
      * Finds “INTEGER”, replaces it with “int”
* Compiling
  + ctrl +f7 – compile only
  + Errors begin with “C” for “compiler”
  + Takes text files and convert them into an intermediate format called an object file. These files are then passed onto the linker, which takes it from there.
  + Every .cpp file sent to the compiler will result in an object file
  + Read generated assebly code
    - properties->c/c++->output files->Assembler Output->Assembly-Only Listing (/FA)
    - checkout the .asm file
* Linker
  + Builds -> compile + link
  + Errors begin with “LNK” for “linker”
  + Finds the functions that you have declared in above code or headers
  + Static function means it can only be used within that translation unit, essentially making it “private” to that file
    - Can still be “included”, but then is now private to that included file
  + Inline
    - Copies function code to where it is called instead of actually calling that function

1

* Open GL is a specifcation/interface, NOT an implementation
* Graphics card manufacturers actually create implenations of open gl

2

* GLFW
  + Lightweight library to easily create cross platform OS windows
  + Linker matches up header files to libraries containing functions
* Setup VS project
  + New empty project
  + Properties
  + C/C++->General
    - Additonal Include Directories
      * $(SolutionDir)Dependencies\GLFW\include
  + Linker -> General
    - Additonal Library Directories
      * $(SolutionDir)Dependencies\GLFW\lib-vc2015
  + Linker -> Input
    - Additonal Dependencies
      * glfw3.lib
      * opengl32.lib
      * User32.lib
      * Gdi32.lib

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* GLEW
  + OpenGL Extension Wrangler
  + Figures out where the OpenGL function implementations are for your platform and gives you access to them.
  + Add to include directories
  + Add to library directories
  + Add to additional dependencies (.lib)