Learning Set 1: Lesson 2
Glossary of Tabs, Processes, and Terms

		Brief Descriptions of GREET 1_2013 Worksheets (Tabs)
Sheet		**Description**
EtOH (Ethanol)		Calculations of well-to-pump energy use and emissions for producing ethanol from corn, sugarcane, and cellulosic biomass and producing butanol from corn
Pyrolysis		Calculations of well-to-pump energy use and emissions for pyrolysis-based renewable gasoline and diesel.
Fuel_Specs		Specifications of individual fuels and global warming potentials of GHGs
JetFuel_WTP		Calculations of well-to-pump energy use and emissions for jet A, Fischer-Tropsch jet and hydrotreated renewable jet
JetFuel_PTWa		Calculations for pump-to-wake energy use and emissions for a passenger or freight aircraft
JetFuel_WTWa		Well-to-pump and well-to-wake energy use and emissions results for jet fuel/aircraft technology combinations. A Complete Life Cycle Process.
Drop-in Fuel		A fuel that is similar to Jet fuel; requires only small or zero modifications to the jet engine
LHV		Low heat value not including heat from water of combustion
HHV		High heat value including heat from water of combustion
Energy Units		BTU; Joule; Calorie; Watt-hours
Power Units		Watts; Horsepower
Energy Density		Joules per liter (liquid) and/or Joules per kilogram (liquid or solid)
		Major Process or Pathway
Pyrolysis		a process that makes fuel. It uses thermochemical decomposition of organic material at elevated temperatures in the absence of oxygen (or any halogen). It involves the simultaneous change of chemical composition and physical phase, and is irreversible.
Fischer-Tropsch		a process that makes fuel. It is a collection of chemical reactions that converts a mixture of carbon monoxide and hydrogen into liquid hydrocarbons. It involves a series of chemical reactions that produce a variety of hydrocarbons, ideally having the formula ($C_nH_{(2n+2)}$) where n = 10 to 20 length carbon chains (alkanes).
Hydrotreated Renewable Jet **HRJ** or **HEFA** Hydroprocessed Esters and Fatty Acids		a process that makes fuel by adding hydrogen to remove oxygen to form a water by-product- one process uses solid biomass feedstocks and one uses bio-oil and fats. The process using solid second-generation biomass sources such as switchgrass or woody biomass first uses pyrolysis to produce a bio-oil, which is then catalytically stabilized and deoxygenated to produce a jet-range fuel. The process using natural oils and fats goes through a deoxygenation step, followed by hydrocracking and isomerization to produce a renewable synthetic paraffinic kerosene jet fuel (drop-in fuel).