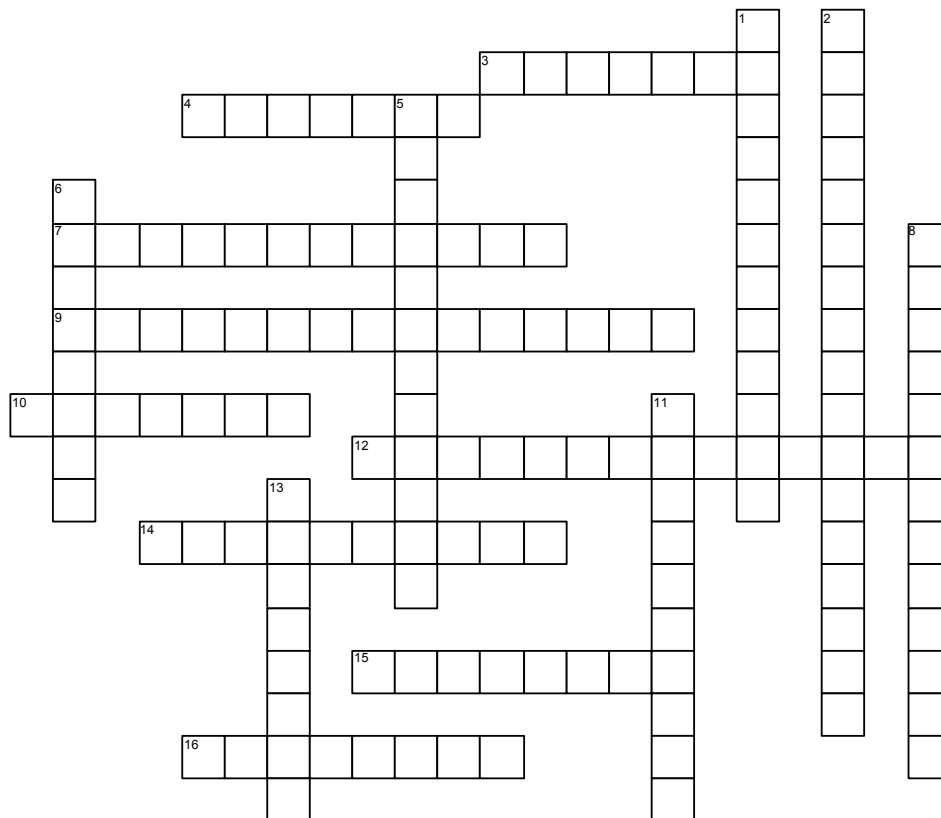


Gasoline, Alternative Fuels, and Diesel Fuels

Chapter 6



<http://jameshalderman.com>

ACROSS

- 3 _____ is the most widely used of all the alternative fuels mainly because of its use in fleets, which utilize a central refueling station.
- 4 _____ is drinkable alcohol and is usually made from grain.
- 7 The _____ is the proportion by weight of air and gasoline that the injection system mixes as needed for engine combustion.
- 9 _____ contain oxygen in the molecule of the fuel itself.
- 10 _____ can be converted to synthesis gas by a process called partial oxidation, and later converted to methanol.
- 12 The ideal mixture or ratio at which all of the fuel combines with all of the oxygen in the air and burns completely is called the _____ ratio, a chemically perfect combination.
- 14 _____ is a metallic noise an engine makes, usually during acceleration, resulting from abnormal or uncontrolled combustion inside the cylinder.
- 15 _____ is a chemical compound formula that includes one carbon atom, four hydrogen atoms, and one oxygen atom.
- 16 All gasoline is said to be _____, meaning that it is capable of being interchanged because each grade is created to specification so there is no reason to keep the different gasoline brands separated except for grade.

DOWN

- 1 The _____ is a measure of the ease with which the fuel can be ignited.
- 2 Today, instead of high heat, cracking is performed using a catalyst and is called _____.
- 5 The _____ of gasoline is the measure of its antiknock properties.
- 6 _____ is a term used to describe a complex mixture of various hydrocarbons refined from crude petroleum oil for use as a fuel in engines.
- 8 _____ is similar to catalytic cracking in that it uses a catalyst, but the catalyst is in a hydrogen atmosphere.
- 11 _____ describes how easily the gasoline evaporates.
- 13 _____ is the process during which hydrocarbons with higher boiling points can be broken down into lower boiling hydrocarbons by treating them to very high temperatures.