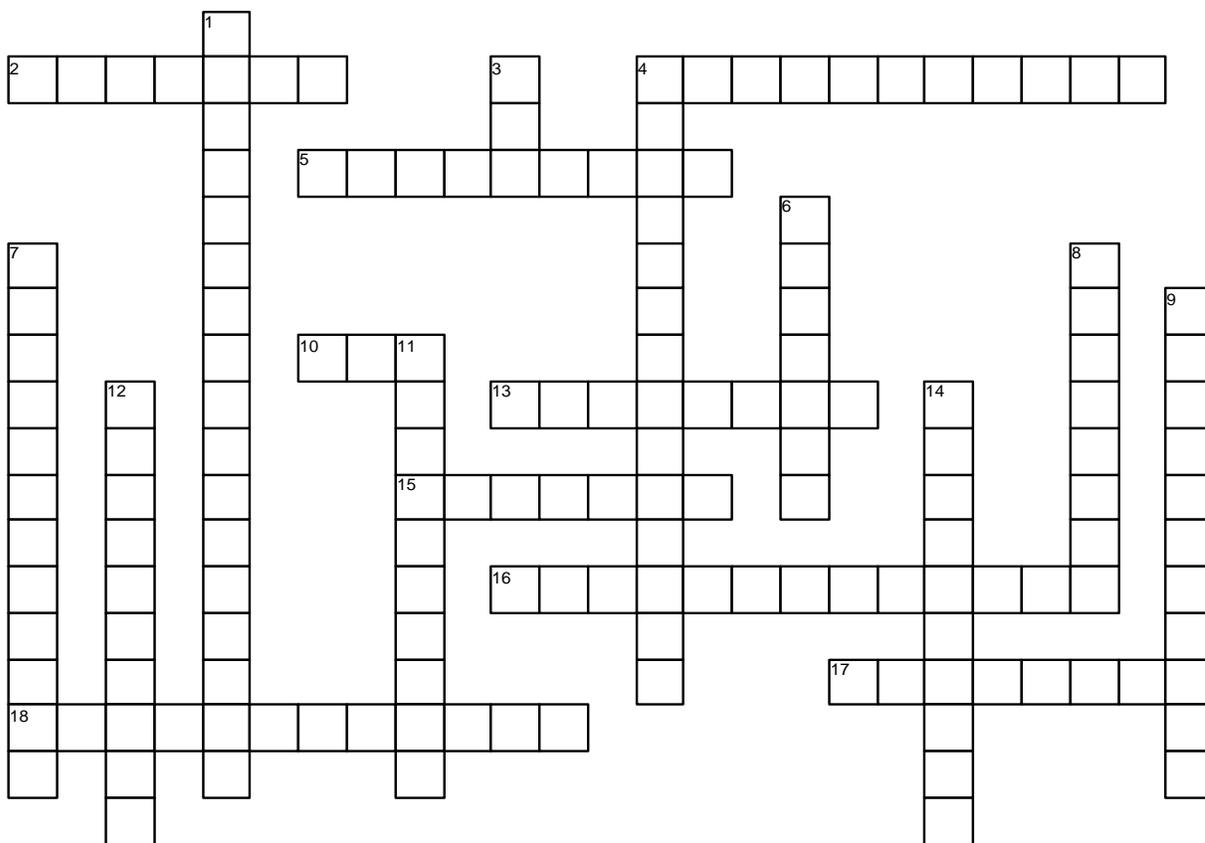


Gasoline, Alternative Fuels, and Diesel Fuels

Chapter 11



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ACROSS

- 2 _____ is the most widely used of all the alternative fuels mainly because of its use in fleets, which utilize a central refueling station.
- 4 The volatility of _____ - _____ gasoline should be about 7 PSI RVP.
- 5 _____ pressure (RVP) is the pressure of the vapor above the fuel when the fuel is at 100°F (38°C).
- 10 Abbreviation for a Flexible fuel vehicle.
- 13 _____ is a term used to describe a complex mixture of various hydrocarbons refined from crude petroleum oil for use as a fuel in engines.
- 15 The _____ - _____ ratio is the proportion by weight of air and gasoline that the injection system mixes as needed for engine combustion.
- 16 _____ can break down hydrocarbons that are resistant to catalytic cracking alone and it is used to produce diesel fuel rather than gasoline.
- 17 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.
- 18 The _____ of gasoline is the measure of its antiknock properties.

DOWN

- 1 Today, instead of high heat, cracking is performed using a catalyst and is called _____. A catalyst is a material that speeds up or otherwise facilitates a chemical reaction without undergoing a permanent chemical change itself.
- 3 Abbreviation for an alternative fuel vehicle.
- 4 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.
- 6 _____ is drinkable alcohol and is usually made from grain.
- 7 In the late 1800s, crude was separated into different products by boiling in a process called _____.
- 8 _____ 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.
- 9 The American Society for Testing and Materials (ASTM) standards for _____ - _____ gasoline allow volatility of up to 15 pounds per square inch (PSI) RVP.
- 11 _____ describes how easily the gasoline evaporates (forms a vapor).
- 12 _____ fuels contain oxygen in the molecule of the fuel itself.
- 14 _____ (also called detonation or ping) is a metallic noise an engine makes, usually during acceleration, resulting from abnormal or uncontrolled combustion inside the cylinder.