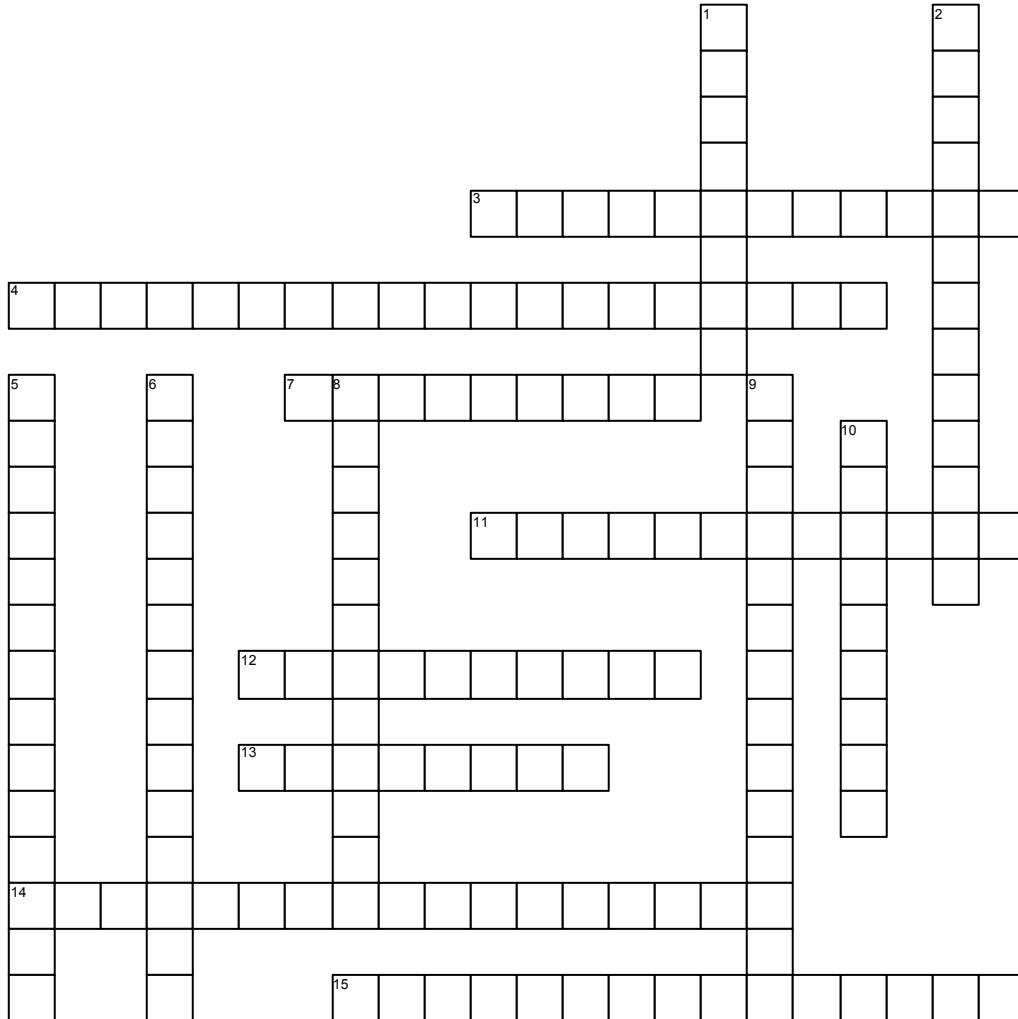


Gasoline

Chapter 4



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ACROSS

- 3 In the 1800s, crude was separated into different products by boiling, in a process called _____.
- 4 The heat produced by the combustion process is measured in _____.
- 7 At higher temperatures, liquid gasoline can easily vaporize, which can cause _____.
- 11 The _____ of gasoline is the measure of its antiknock properties.
- 12 _____ describes how easily the gasoline evaporates.
- 13 _____ is the process where hydrocarbons with higher boiling points could be broken down into lower-boiling hydrocarbons by treating them to very high temperatures.
- 14 _____ is the pressure of the vapor above the fuel when the fuel is at 100°F (38°C).
- 15 _____ contain oxygen in the molecule of the fuel itself.

DOWN

- 1 _____ is a term used to describe a complex mixture of various hydrocarbons refined from crude petroleum oil for use as a fuel in engines.
- 2 _____ can break down hydrocarbons that are resistant to catalytic cracking alone, and it is used to produce diesel fuel rather than gasoline.
- 5 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, chemically perfect combination.
- 6 The pump octane is called the _____.
- 8 The _____ is the proportion by weight of air and gasoline that the injection system mixes as needed for engine combustion.
- 9 One of the first additives used in gasoline was _____.
- 10 As it comes out of the ground, _____ crude can be as thin and light as apple cider or as thick and black as melted tar.