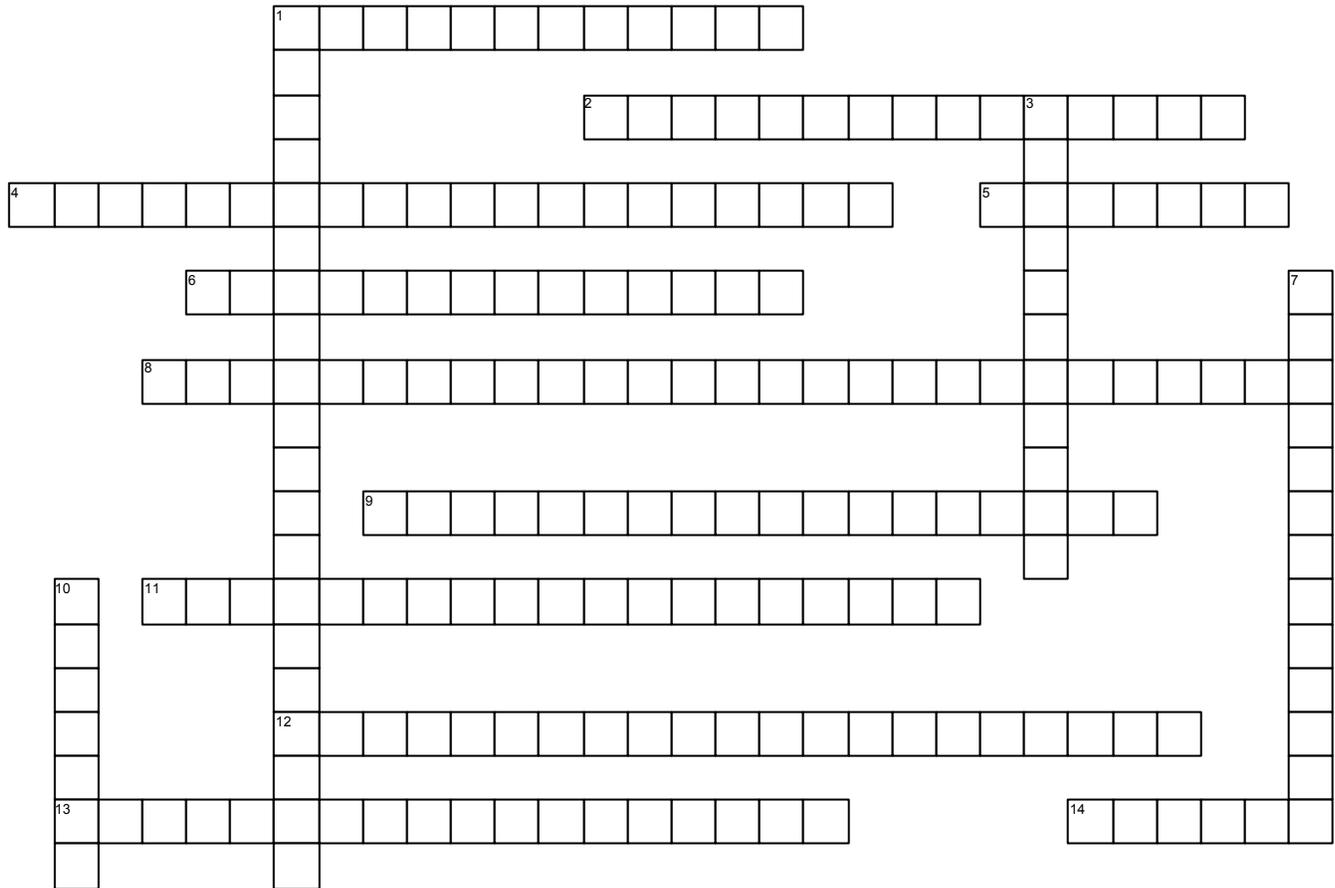


Propane, CNG, LNG, and Synthetic Fuels

Chapter 6



<http://jameshaldeman.com>

ACROSS

- 1 Coal is very abundant in the United States and coal can be converted to a liquid fuel through a process called _____.
- 2 _____ is similar to HD-10, and it is not suitable for use in motor vehicles, and instead is used in commercial applications such as to fuel power plants.
- 4 Diesel fuel created using the _____ process is often called GTL diesel.
- 5 _____ alternative fuel is patented by Princeton University and is a non-petroleum- or natural gas-based fuel suitable for use in flexible fuel vehicles or any vehicle designed to operate on E85.
- 6 Synthetic fuels were first developed using the _____ method and have been in use since the 1920s to convert coal, natural gas, and other fossil fuel products into a fuel that is high in quality and clean-burning.
- 8 The method of _____ is Russia's method using CTL by injecting air into the underground coal seams.
- 9 Exxon Mobil has developed a process for converting methanol into gasoline in a process called _____.
- 11 Natural gas can be turned into a liquid if cooled to below -260°F (-127°C) and is called _____.
- 12 When sold as a fuel, propane is also known as _____ because propane is often mixed with about 10% of other gases such as butane, propylene, butylenes.
- 13 Vehicles using CNG are often referred to as _____.
- 14 _____ propane vehicles have two separate fueling systems that allow the vehicle to use either propane or gasoline.
- 3 _____ technology, uses a catalyst, usually iron or cobalt, and incorporates steam reforming to give off the by-products of carbon dioxide, hydrogen, and carbon monoxide.
- 7 _____ can be made from a variety of products, using several different processes.
- 10 _____ is the most widely used of all of the alternative fuels and is a by-product of petroleum refining of natural gas.

DOWN

- 1 _____ is a readily available alternative to gasoline made by compressing natural gas to less than