

Lesson Extensions 1

Energy Underground - It's Down to Earth



Energy Underground Idea

Natural gas, petroleum and coal formed millions of years ago from decaying plant and animal matter. This material was composed of marine animals, swamp vegetation, giant trees, ferns and the like. Buried under countless layers of mud, sand and silt at the end of their cycles, these carbon-based life forms became part of the Earth. Aided by helpful bacteria and subjected to heat and pressure of the passing centuries, these elements of geology's Carboniferous period have become the "fossil" fuels of today.

Methane - by any other name

Apologies to Shakespeare, but natural gas is composed mostly of methane, with

a few other hydrocarbons thrown in - like butane, propane and ethane. By composition, it is the cleanest burning of all fossil fuels, leaving no particulates as do coal or oil, and very little carbon dioxide. When burned, natural gas breaks down to basic elements like carbon dioxide and water vapor.

The methane in natural gas is also an element of the earth's atmosphere, the result of natural causes like plant decomposition. Methane has the nickname "swamp gas" or "marsh gas."

Oil companies once burned off natural gas as a useless by-product of drilling. Today it has become the responsible fuel of choice for 60 million Americans who use it to fuel their lives.

