

Topic/Objectives: 17-2 Fossil Fuels; (1) Explain how fossil fuels formed, (2) Describe the uses of coal and how it is removed from the ground; (3) Describe the uses of oil and how it is extracted; (4) Explain the characteristics and uses of natural gas; (5) Predict the future of fossil fuels.

Name:

Date:

Period:

Essential Question: How did fossil fuels form, and how are they obtained and used?

Questions:

Notes:

HOW FOSSIL FUELS FORM

_____ form the remains of organisms that lived millions of years ago.

- Fossil fuels are composed of _____, compounds made mainly of hydrogen and carbon atoms.
- Fossil fuels are produced only when living remains are broken down in an environment with little to no _____.
- Temperature, _____ and chemical composition determine which fossil fuel is produced.

FOSSIL FUEL	USES	REMOVAL	NOTE
Coal	Provides 1/4th of the world's energy and ½ of America's energy use.	_____ _____ removing layers of soil and rock above the mineral deposit. _____ _____ digging shafts and removing exposed vein.	Advantages of coal include it's abundance, need for less processing, and ease in transport
Oil (_____)	Transportation, heating, and other household products	Oil is found trapped in <u>porous rock</u> ; drilling and pressure is generally needed to remove it.	Oil taken out of the ground is known as crude oil, and must be refined to be usable.
Natural Gas	Generate electricity, heating, plastics, dyes and fertilizers.	Found above coal and oil deposits, in the US natural gas is piped out and generally directly to where it's used.	Faster growing, less polluting, and provides large amounts of energy.

SUPPLY OF FOSSIL FUELS

While _____ is every increasing, it's estimated that nearly half of the world's oil reserves have been extracted.

Alternative sources of fossil fuel could be a solution:

- _____ – moist sands containing bitumen.
- _____ – rock filled with hydrocarbons.
- _____ – ice trapped methane.

Alternative fossil fuels are non-renewable and will not solve our energy challenges.

Summary:

[illegible]