Energy and Petroleum

- Petroleum is liquid sunshine
- All energy from fossil fuels originates from the sun!!!!
- Plants capture that energy during photosynthesis
- Plants die
- Animals eat plants...and die
- Plants use sunlight to make sugar (glucose)
- Sunlight + $6CO_2$ + $6H_2O \rightarrow C_6H_{12}O_6$ + $6O_2$
- Endothermic Reaction requires energy

Energy and Petroleum

* Petroleum is liquid sunshine

all energy stored in the bonds originates from the Sun.

energy + CO2 + H2O - C6H12O6 + Oa

photosynthesis

Endothermic Reaction - requires

energy

plants + animals
die
lants
hotocrathetic

Energy remains stored in the newly created petroleum molecules.

(hydrocarbons)

Fossil Fuel Energy

Combustion of fossil fuels releases the energy

Stored in hydrocarbon bonds.

Exothermic Reaction - heat lenergy released.

Simplest:

$$CH_{4(9)} + 20_2 \longrightarrow CO_2 + 2H_2O + energy$$
 methane