



# **NONRENEWABLE AND RENEWABLE RESOURCES**

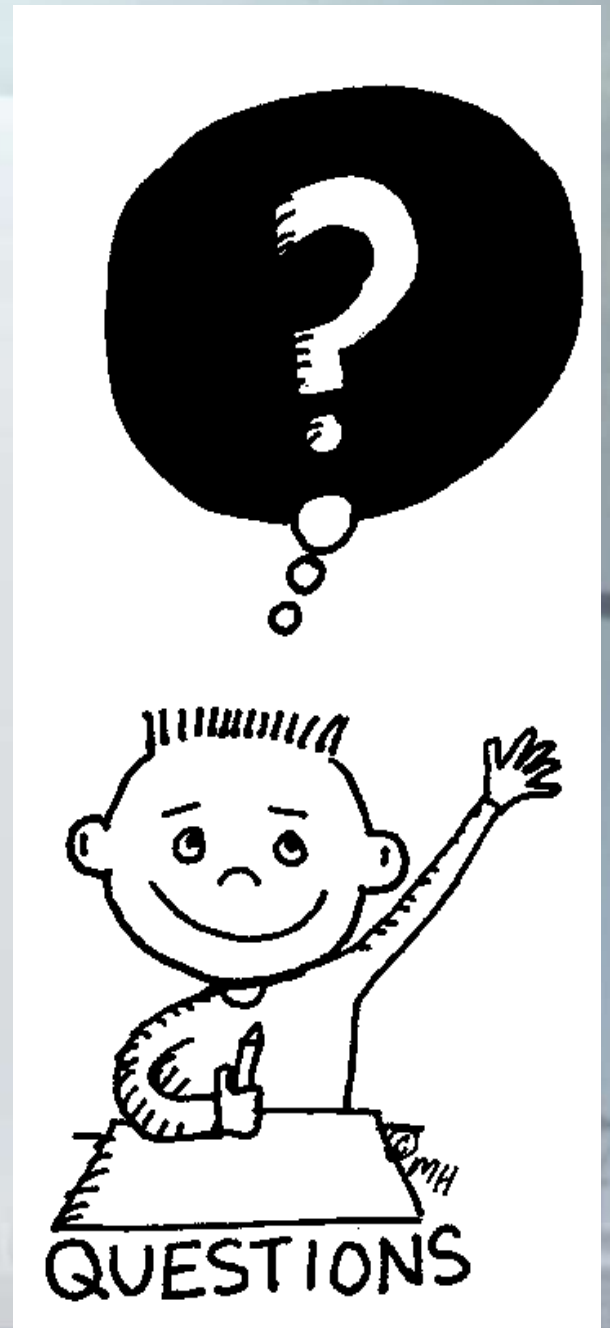
# HMMMM....

**What do you think  
nonrenewable  
resources are?**

**Break it down...**

**Nonrenewable?**

**Resource?**



# **NONRENEWABLE RESOURCES**



**A nonrenewable resource is a natural resource that cannot be re-made or re-grown at a scale comparable to its consumption.**

# NUCLEAR ENERGY



**Nuclear fission uses uranium to create energy.**

**Nuclear energy is a nonrenewable resource because once the uranium is used, it is gone!**

# COAL, PETROLEUM, AND GAS

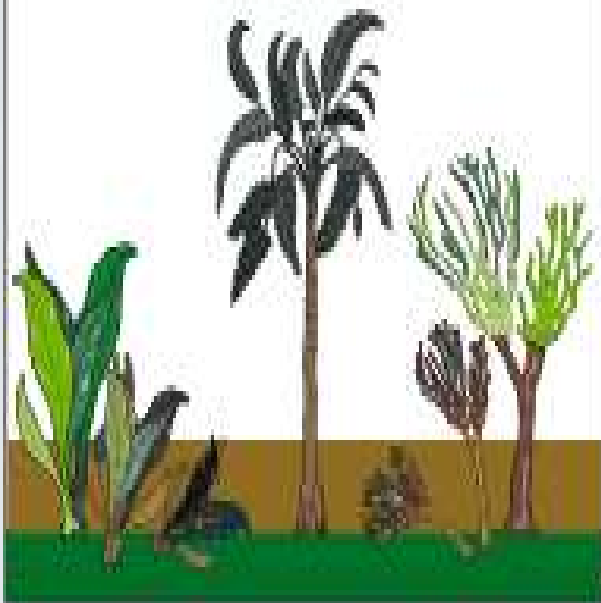
Coal, petroleum, and natural gas are considered nonrenewable because they can not be replenished in a short period of time. These are called fossil fuels.



# HOW IS COAL MADE ???

## SWAMP

300 million years ago



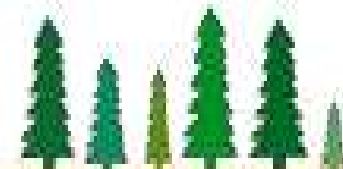
Before the dinosaurs, many giant plants died in swamps.

## WATER

100 million years ago



Over millions of years, the plants were buried under water and dirt.



Rocks & Dirt

Coal

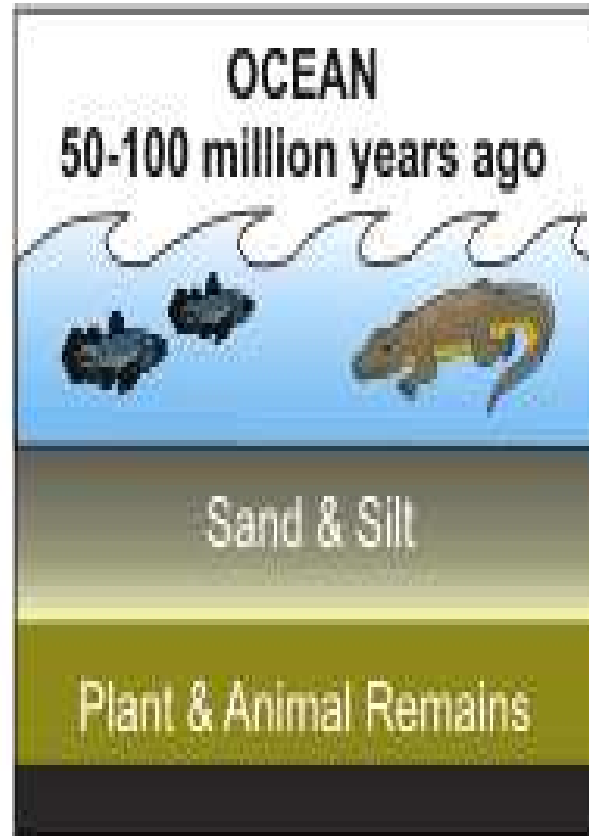
Heat and pressure turned the dead plants into coal.



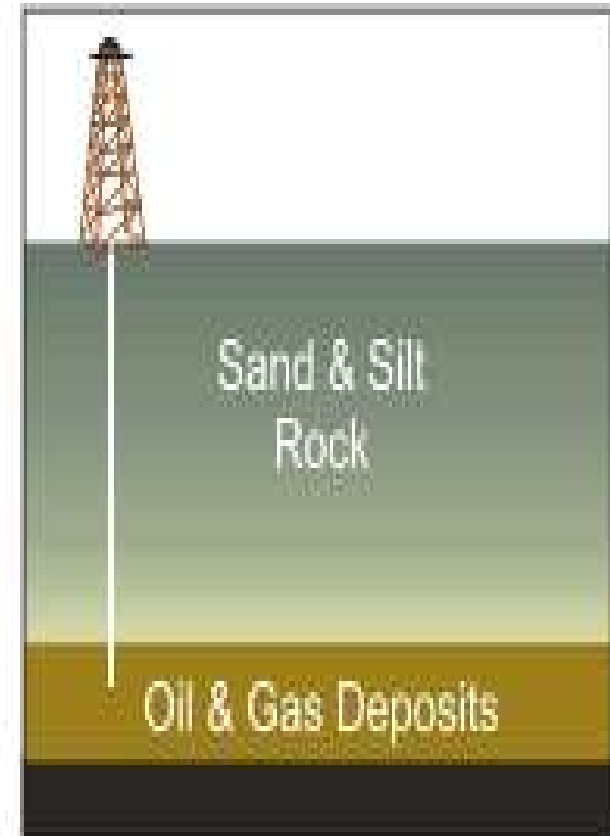
# HOW ARE OIL AND GAS MADE ???



Tiny sea plants and animals died and were buried on the ocean floor. Over time, they were covered by layers of silt and sand.

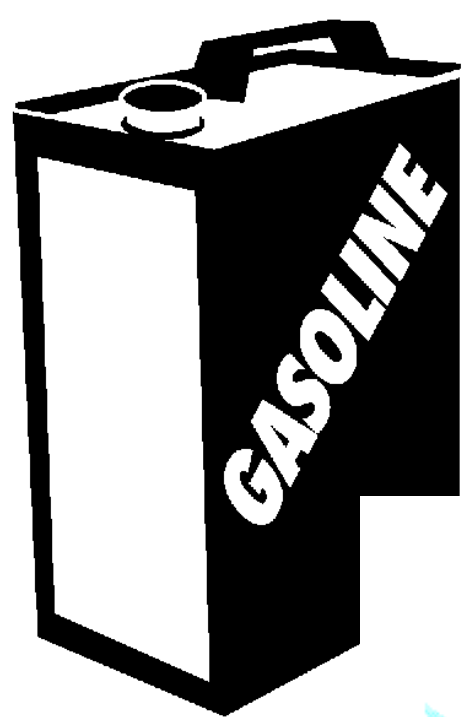


Over millions of years, the remains were buried deeper and deeper. The enormous heat and pressure turned them into oil and gas.



Today, we drill down through layers of sand, silt, and rock to reach the rock formations that contain oil and gas deposits.

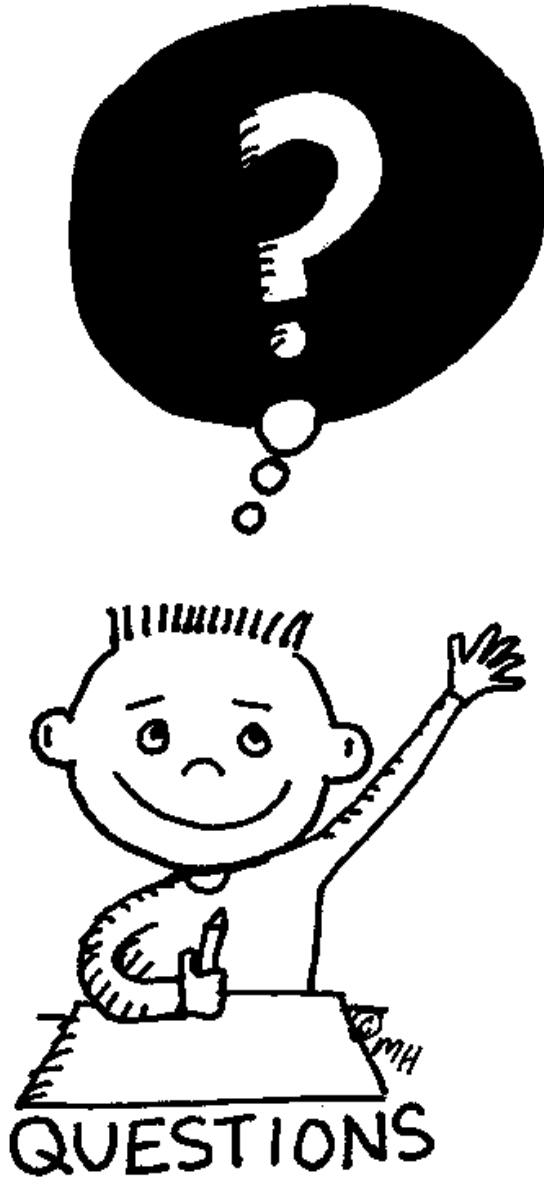
# WHAT WAS THE DIFFERENCE BETWEEN COAL AND OIL/GAS?





# HMMMM...

**If nonrenewable resources are resources that cannot be re-made at a scale comparable to its consumption, what are renewable resources?**



# RENEWABLE RESOURCES

**Renewable resources are natural resources that can be replenished in a short period of time.**

- **Solar**
- **Geothermal**
- **Wind**
- **Biomass**
- **Water**



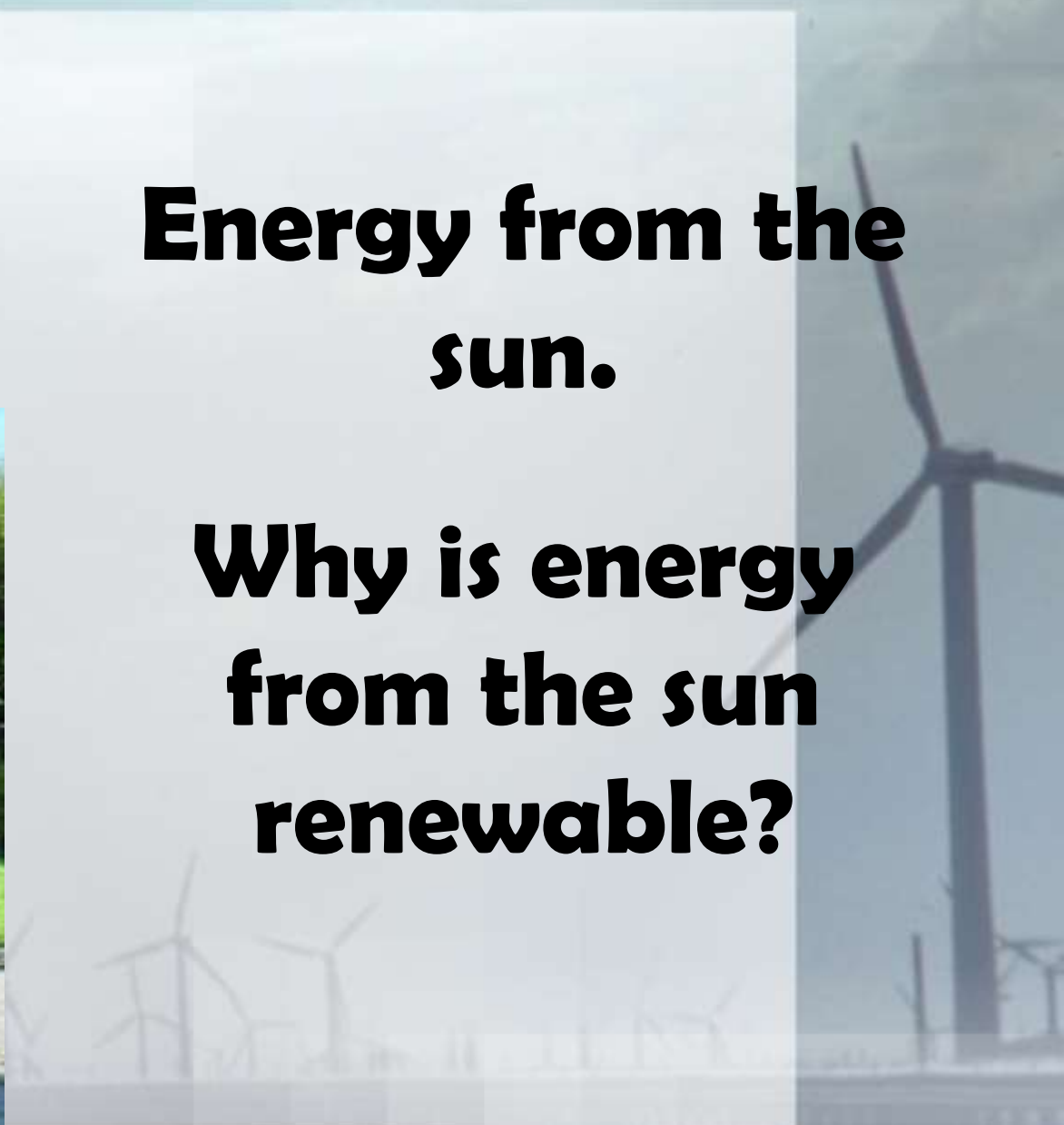
# **SOLAR**



**Energy from the  
sun.**



**Why is energy  
from the sun  
renewable?**



# **GEO THERMAL**

**Energy from  
Earth's heat.**

**Why is energy  
from the heat of  
the Earth  
renewable?**



# **WIND**



**Energy from  
the wind.**

**Why is energy  
from the wind  
renewable?**

# **BIOMASS**

**Energy from  
burning organic  
or living matter.**

**Why is energy  
from biomass  
renewable?**





# **WATER or HYDROELECTRIC**



**HOOVER DAM**

**Energy from the  
flow of water.**

**Why is energy of  
flowing water  
renewable?**



# SUMMARY

**What are the differences between nonrenewable and renewable resources?**

