NONRENEWABLE
AND
RENEWABLE
RESOURCES
HMMMM....

What do you think nonrenewable resources are?

Break it down...

Nonrenewable?

Resource?
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 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**

Heat and pressure turned the dead plants into coal.
How are Oil and Gas Made???

OCEAN
300-400 million years ago

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

OCEAN
50-100 million years ago

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

Sand & Silt Rock

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

Energy from Earth’s heat.

Why is energy from the heat of the Earth renewable?
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

Energy from the flow of water.

Why is energy of flowing water renewable?
SUMMARY

What are the differences between nonrenewable and renewable resources?