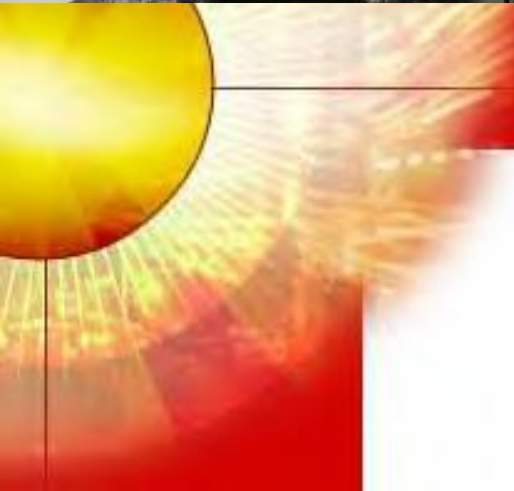


Bell Ringer

1. What kind of clouds are there outside right now?
2. How do protostars differ from stars?
3. What is the difference between a rock and a mineral?

Natural Resources

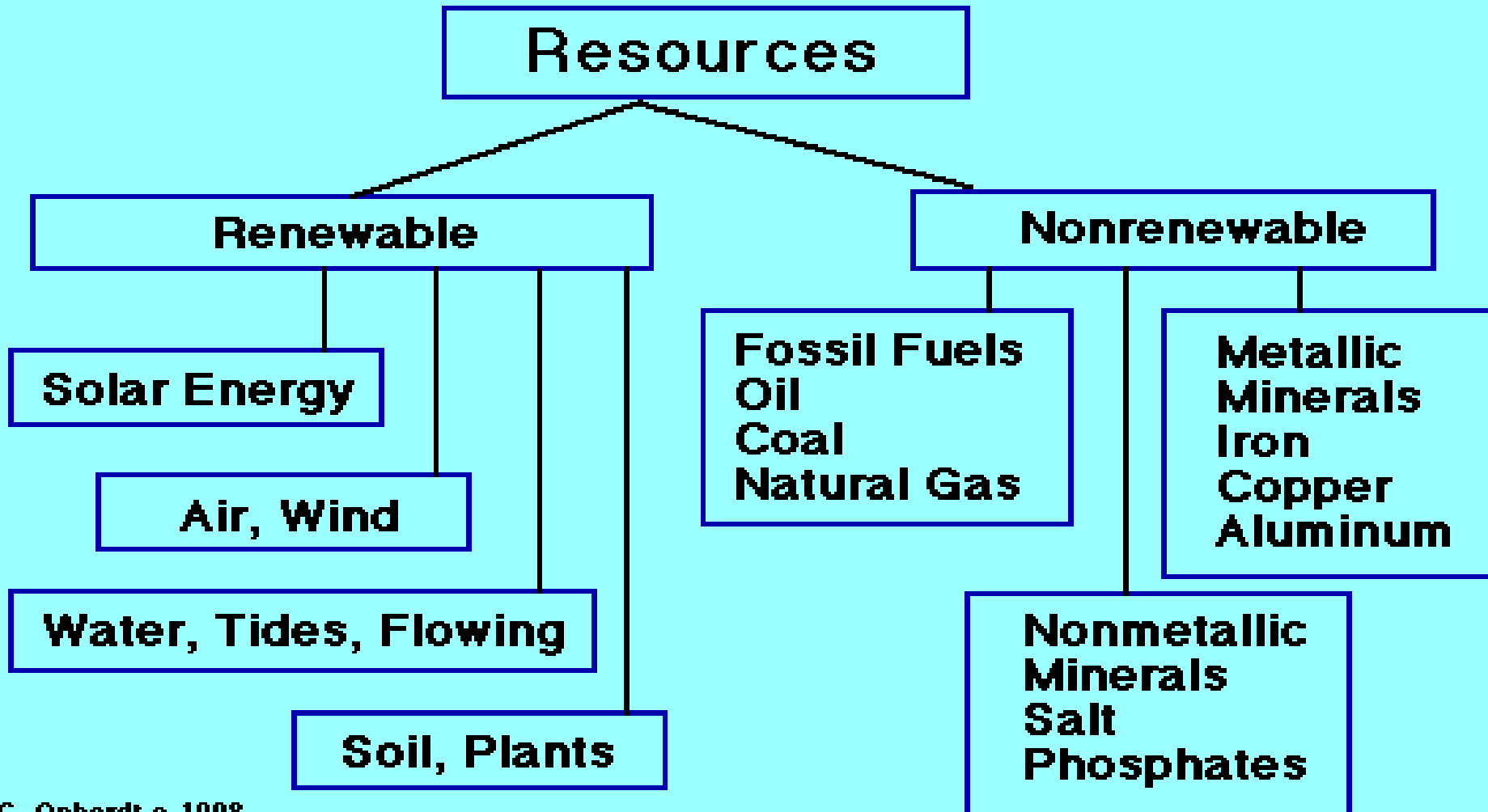


1. What are the Earth's Natural Resources?

- **Mineral** Resources
- **Energy** Resources
- **Living** Resources
- **Air**
- **Water**
- **Sunlight**
- **Soil**



2. Resources are **limited** and are either **Renewable or Non renewable**



3. What are Renewable Resources?

- Renewable Resources can be **replaced** by nature at a rate close to the rate at which they are used.



What are examples of Renewable Resources?

- Vegetation
(Crops & Forests)
- Sunlight
- Air
- Soil
- Geothermal
- Water
- Ice



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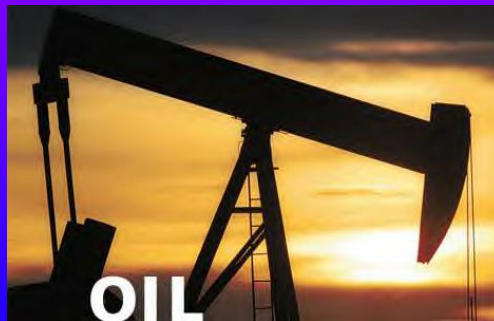
4. What are Nonrenewable Resources?

- Resources that exist in a fixed amount
- Nonrenewable are renewed very slowly or not at all.



What are examples of Nonrenewable Resources?

- Coal
- Oil
- Natural Gas
- Sand, Stone, & Gravel
- Salt
- Talc



- Graphite
- Sulphur
- Gypsum
- Uranium
- Phosphate Rock, Potash, & Nitrates
- And other Minerals

Examples of Nonrenewable Natural Resources

- **Talc**



- **Graphite**



What is an Ore Mineral?

- The metallic element or valuable mineral part of the rock is known as the **Ore Mineral**
- The remaining part of the rock is called the **Gangue**

Natural Resources

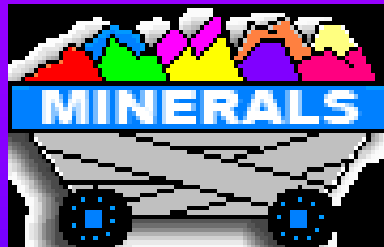
- Copper ore



- Iron ore

What is a Mineral Reserve?

- The known deposits of a mineral in ores that are worth mining



Natural Resources

Location of Production for Nine Important Minerals



5. Nonrenewable Energy Resources

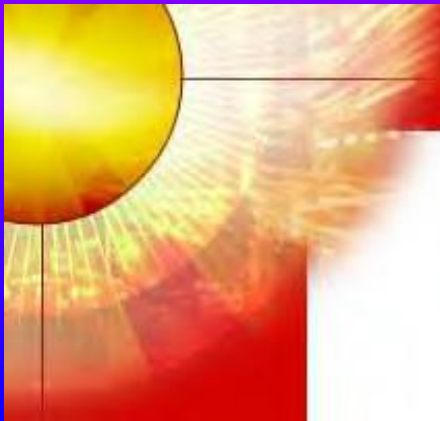


- **A. Fossil Fuels** are nonrenewable and may cause **pollution**
- They are relatively **cheap** and **easy** to extract and use. (Examples include: **Coal, Oil, Petroleum, and Natural Gas**)
- **B. Nuclear power**: energy is created by **atomic fission**. It produces very little air pollution, but it does produce toxic waste that takes millions of years to decompose. It uses the radioactive mineral **Uranium**, which is nonrenewable.

6. Renewable Energy Resources

Have less of an impact on the environment and promote sustainability (the ability for future generations to have the same resources that we do)

- Water
- Wind
- Sun
- Geothermal Energy



7. Environmental Cost v/s Economic Benefit

- Modern living standards are supported by extensive use of both renewable and nonrenewable resources
- There are **advantages** + and **disadvantages** - to using any energy source.
- Extraction and use of any resource carries an environmental cost that must be weighed against the economic benefit.

8. Utah has many natural resources

In Utah, major rock and mineral resources include: **copper** for *wires and motors*, **uranium** for *power and weapons*, and **salts** for *domestic and industrial use*.

How does the way in which some resources are extracted and used affect the Earth's environment?

- Can lead to pollution of land, water, and air
- May contribute to global warming
- Destruction of landscape may occur



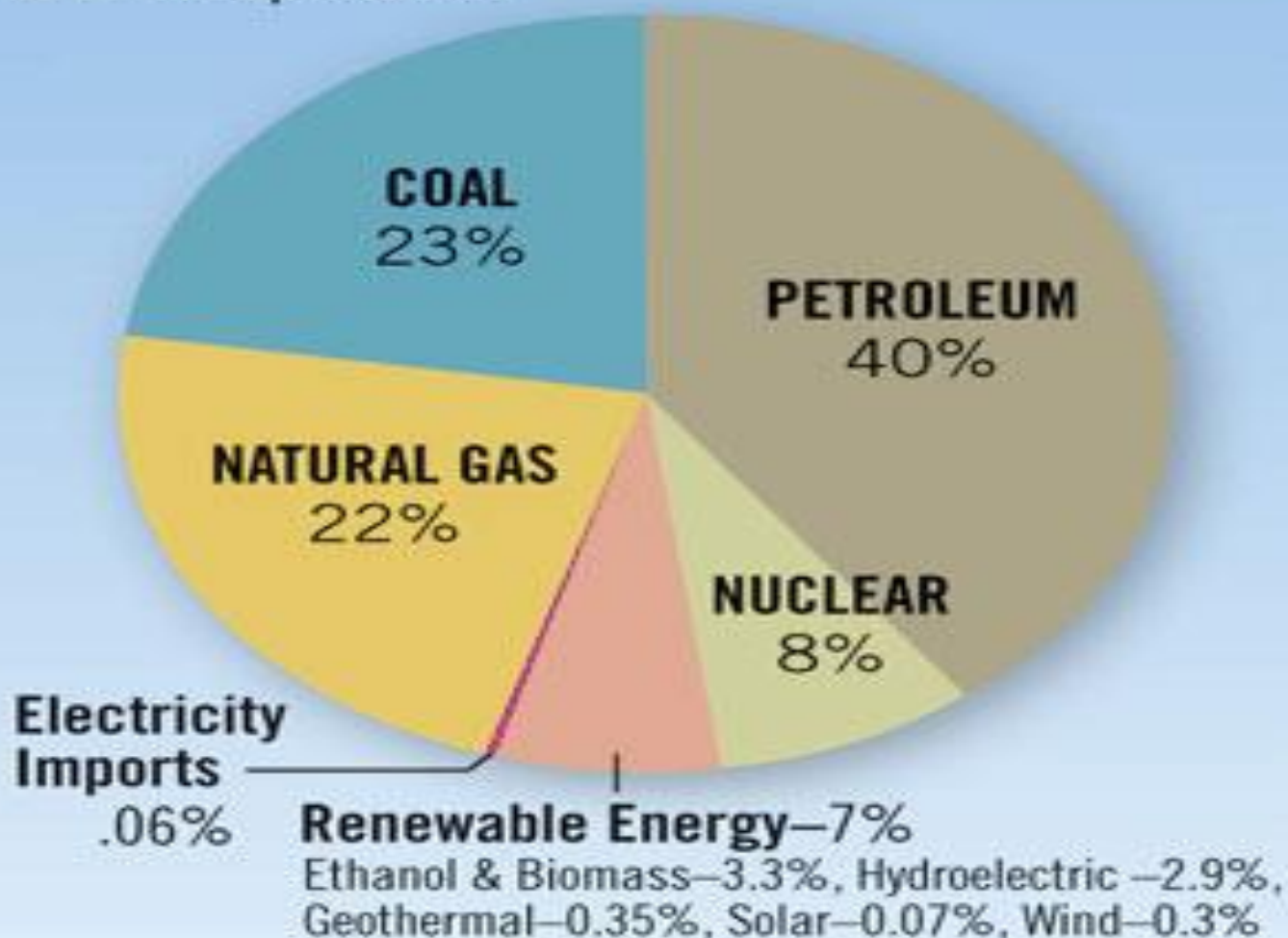
Advantages vs. Disadvantages

For each energy source listed below there are advantages and disadvantages of using it.

- Fossil fuels
- Hydro
- Wind
- Geothermal
- Solar

Consuming Energy

Total U.S. energy use, including electrical and transportation



*Totals may not equal sum of components because of rounding

Source: U.S. Energy Information Administration

Terms to understand

- Export – To transport goods to another place for trade
- Import – To bring in a good or service from another area for trade
- Interdependence – People relying on each other for goods, services, and ideas
- Trade – Buying, selling, or exchanging goods and services.

National Resources

- Activity
- Get spare piece of paper and write country name on it.
- Gold: 5 points per unit
- Oil: 4 points per unit
- Lumber – 3 points per unit
- Electronics – 2 points per unit
- Coffee – 1 point per unit
- At the end of each round tally up points