**Earth’s Energy: Section 1**

1. Most energy sources are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ , which means they are used up faster than natural process can replace them.
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ , such as oil, natural gas and coal formed from the remains of swamp plants and other organisms that were once buried and altered over millions of years.
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the most abundant fossil fuel, a rock that contains at least 50% plant remains
4. Coal undergoes various stages of formation starting with peat, lignite coal, bituminous coal, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ coal which is the cleanest burning type of coal.
5. Over millions of years the buried remains of microscopic organisms form \_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ which are also referred to as fossil fuels.
6. \_\_\_\_\_\_\_\_\_\_\_\_\_ is a thick black liquid hydrocarbon.
7. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a gaseous hydrocarbon that forms with oil, but because it is a gas and thus lighter it is usually found above oil deposits.
8. Americans obtain most of their energy from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
9. Natural gas is used mostly for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

in homes.

1. \_\_\_\_\_\_\_\_\_\_\_\_\_ is used for heating oil, gasoline, and in manufacturing.
2. Fossil fuels are removed from the ground by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. Current reserves of coal will last about \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ years.
4. United States reserves of natural gas will last about \_\_\_\_\_\_\_\_\_\_\_\_ years.
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ hydrates , located in the ocean floor sediment , are believed to contain high amounts of carbon and might someday be a useable source for clean burning methane.
6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ energy is a nonrenewable resource produced from the fission , or splitting , of uranium atoms.
7. One problem associated with nuclear energy is that nuclear power plants produce highly radioactive \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ waste,; EPA has determined that nuclear waste must be stored and contained for at least \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ years.

**Renewable Energy Resources: Section 2**

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ energy resources include the sun, wind, water, and geothermal energy.

1.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ energy is energy derived from the sun.

a. solar \_\_\_\_\_\_\_\_\_\_\_\_- actively collect sun energy and convert it into electricity.

b. solar energy is not readily useable on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ days, or at \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ use a large number of windmills to generate electricity.

a. Few regions of the world have \_\_\_\_\_\_\_\_\_\_\_\_\_\_enough wind to generate electricity.

b. Wind does not always blow \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, so it is not a reliable energy source.

3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ energy creates electricity from running water flowing over dam; dams can create environmental problems.

4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ energy is obtained from hot magma or dry hot rocks inside the Earth.

B. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ energy resources, such as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_energy from burning organic material, can be replaced in a relatively short time such as a human life span.

1. Burning \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, the most commonly used biomass fuel, can cause pollution and disrupt natural habitats when trees are cut down.

2. Biomass fuel, such as \_\_\_\_\_\_\_\_\_\_\_\_\_, can be distilled into alcohol, such as ethanol and mixed with other fuels.

3. Currently, the production processes for making biomass fuels , such as ethanol, use more energy that the ethanol produces.

4. Trash burning power plants can burn \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_to generate electricity , but the resulting air pollution and toxic ash residue can present problems.