Name _____ Pd _____ Date _____

OUR EARTH, IN OUR (GOOD?) HANDS

How often in a day do you go to the water fountain? * Do you turn off the lights when you leave a room? * How many cars does your family have? * Do you grow vegetables in your garden? * Do you recycle? * How many reusable bags do you bring to the store?

EXPLAIN:

1. What is a resource?

2. List examples of <u>natural</u> resources on earth?

3. Resources can be _____, which means that they _____ _____.

4. Resources can also be _____, which means that they _____ _____.

EXTEND:

5. To be considered a resource, what characteristics must something possess?

6. In what ways are natural resources used? Does everyone use the same resources equally?

7. Are all resources natural? What other kinds of resources are there and how are they used by living things?

8. The perception of a resource's value changes over time. What causes the perception to change?

NATURAL RESOURCES... RESOURCE

http://en.wikipedia.org/wiki/Natural_resource

Natural resources occur naturally within environments that exist relatively undisturbed by mankind, in a natural form. A natural resource is often characterized by amounts of biodiversity and geodiversity existent in various ecosystems.

Natural resources are derived from the environment. Many of them are essential for our survival while others are used for satisfying our wants. Natural resources may be further classified in different ways.

Natural resources are materials and components (something that can be used) that can be found within the environment. Every man-made product is composed of natural resources (at its fundamental level). A natural resource may exist as a separate entity such as fresh water, and air, as well as a living organism such as a fish, or it may exist in an alternate form which must be processed to obtain the resource such as metal ores, oil, and most forms of energy.

There is much debate worldwide over natural resource allocations, this is partly due to increasing scarcity (depletion of resources) but also because the exportation of natural resources is the basis for many economies (particularly for developed nations such as Australia).

Some Natural resources can be found everywhere such as sunlight and air, when this is so the resources is known as an ubiquitous (existing or being everywhere) resource. However most resources are not ubiquitous, they only occur in small sporadic areas, these resources are referred to as localized resources. There are very few resources that are considered inexhaustible (will not run out in foreseeable future), these are solar radiation, geothermal energy, and air (though access to clean air may not be). The vast majority of resources are however exhaustible, which means they have a finite quantity, and can be depleted if managed improperly. The natural resources are materials, which living organisms can take from nature for sustaining their life or any components of the natural environment that can be utilized by man to promote his welfare is considered as natural resources.

Renewable resources are ones that can be replenished naturally. Some of these resources, like sunlight, air, wind, etc., are continuously available and their quantity is not noticeably affected by human consumption. Though many renewable resources do not have such a rapid recovery rate, these resources are susceptible to depletion by over-use. Resources from a human use perspective are classified as renewable only so long as the rate of replenishment/recovery exceeds that of the rate of consumption.

Non-renewable resources are resources that form extremely slowly and those that do not naturally form in the environment. Minerals are the most common resource included in this category. By the human perspective, resources are non-renewable when their rate of consumption exceeds the rate of replenishment/recovery; a good example of this are fossil fuels, which are in this category because their rate of formation is extremely slow (potentially millions of years), meaning they are considered non-renewable. Some resources actually naturally deplete in amount without human interference, the most notable of these being radio-active elements such as uranium, which naturally decay into heavy metals. Of these, the metallic minerals can be re-used by recycling them,[1] but coal and petroleum cannot be recycled.[2]

There are various methods of categorizing natural resources, these include source of origin, stage of development, and by their renewability, these classifications are described below. On the basis of origin, resources may be divided into:

- Biotic – Biotic resources are obtained from the biosphere (living and organic material), such as forests, animals, birds, and fish and the materials that can be obtained from them. Fossil fuels such as coal and petroleum are also included in this category because they are formed from decayed organic matter.

- Abiotic – Abiotic resources are those that come from non-living, non-organic material. Examples of abiotic resources include land, fresh water, air and heavy metals including ores such as gold, iron, copper, silver, etc.

Considering their stage of development, natural resources may be referred to in the following ways:

- *Potential Resources* – Potential resources are those that exist in a region and may be used in the future. For example, petroleum may exist in many parts of India, having sedimentary rocks but until the time it is actually drilled out and put into use, it remains a potential resource.

- *Actual Resources* – Actual resources are those that have been surveyed, their quantity and quality determined and are being used in present times. The development of an actual resource, such as wood processing depends upon the technology available and the cost involved.

- *Reserve Resources* – The part of an actual resource which can be developed profitably in the future is called a reserve resource.

- *Stock Resources* – Stock resources are those that have been surveyed but cannot be used by organisms due to lack of technology. For example: hydrogen.