19.1 Resources and Energy

Earth Science

Summarize main points from each video.

Video Title / topic _____

Video Title / topic _____

Video Title / topic _____

Topic Introduction

Summarize your understanding of each paragraph.

Natural resources are resources that exist without actions of humankind. Some natural resources such as sunlight and air can be found everywhere, and are known as ubiquitous resources.

The vast majority of resources are theoretically exhaustible, which means they have a finite quantity and can be depleted if managed improperly.

Natural resources can be categorized as either renewable or non-renewable. Renewable resources can be replenished naturally. They replenish somewhat easily. Non-renewable resources form slowly or do not naturally form in the environment.

In recent years, the depletion of natural resources has become a major focus of governments and many other organizations. There is particular concern for rainforest regions which hold most of the Earth's biodiversity.

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

Read/Summarize Text

1. **Read the passage.**
2. **Underline key expressions in each sentence.**
3. **Re-write each word (or expression) you underlined.**
4. **Summarize the passage.**

Natural Resources – and Management of Resources

1

2

Natural resource management is a discipline in the management of natural resources such as land, water, soil, plants and animals, with a particular focus on how management affects the quality of life for both present and future generations.

Hence sustainable development can be followed where there is a judicial use of resources which compromises the needs of the present generations as well as the future generations.

Management of natural resources involves identifying who has the right to use the resources and who does not.

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

Re-write words you underlined

3

_____ _____ _____

_____ _____ _____

Using a complete sentence, summarize or rephrase the passage

4

Read Text for Comprehension

Read this article for deeper understanding. No summary is required, although you may want to circle, underline, or mark key ideas and words.

Renewable Energy Sources

Renewable Energy uses energy resources and technologies that are “clean” or “green” because they produce few if any pollutants. Many people use the terms “Alternative Energy”, “Renewable Energy” and even “Green Energy” together in the same sentence when taking about energy sources as though they all mean the same thing, but they are not the same. Each term means something different when talking about energy systems. So what does renewable energy mean.

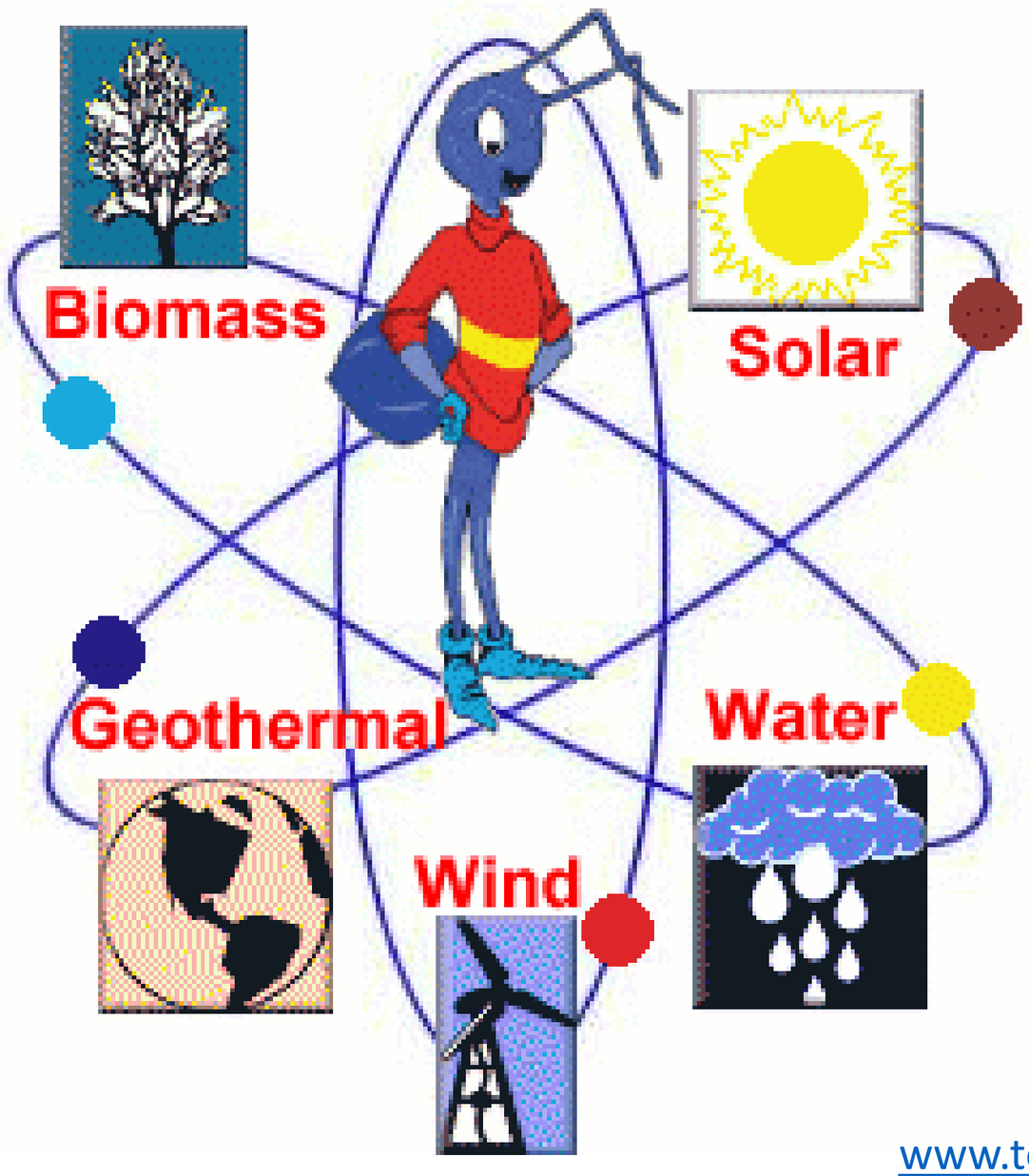
Some say that alternative energy comprises everything that is not based on fossil fuel consumption. While these may be alternative energy sources compared to conventional fossil fuels, alternative energy in its broadest sense, is any type of energy that replaces another, so we can correctly say that coal energy is an alternative energy source compared to crude oil or natural gas but as we now know, coal is a fossil fuel and burning it is bad for the environment. Even nuclear energy was once considered to be an “alternative” to conventional fossil fuels, and was thus called an alternative energy source.

Renewable Energy on the other hand uses renewable energy sources that are continually replenished by Mother nature producing a usable energy that can not be used up faster that it is consumed. These energy sources created mainly by the Sun shinning on the Earth are converted into different forms, such as: solar radiation to wind or water based energy which is distributed over the Earth and atmosphere, the Earth’s geothermal heat, and plants in the form of biomass. Renewable energy technologies turn these fuels into usable forms of energy, most often electricity, but also heat, chemicals, or mechanical power. So what are renewable resources.

http://www.alternative-energy-tutorials.com/energy-articles/renewable-energy-sources-a-brief-summary.html

Draw Illustration

Copy and Label the Illustration in the Space Provided



www.teachengineering.org

Draw (Copy) the Illustration Here

Interpret a Graph

Write the title of the graph _____

Circle the type of chart this represents

Bar Chart *Line Chart* *Pie Chart* *Other*

If applicable,

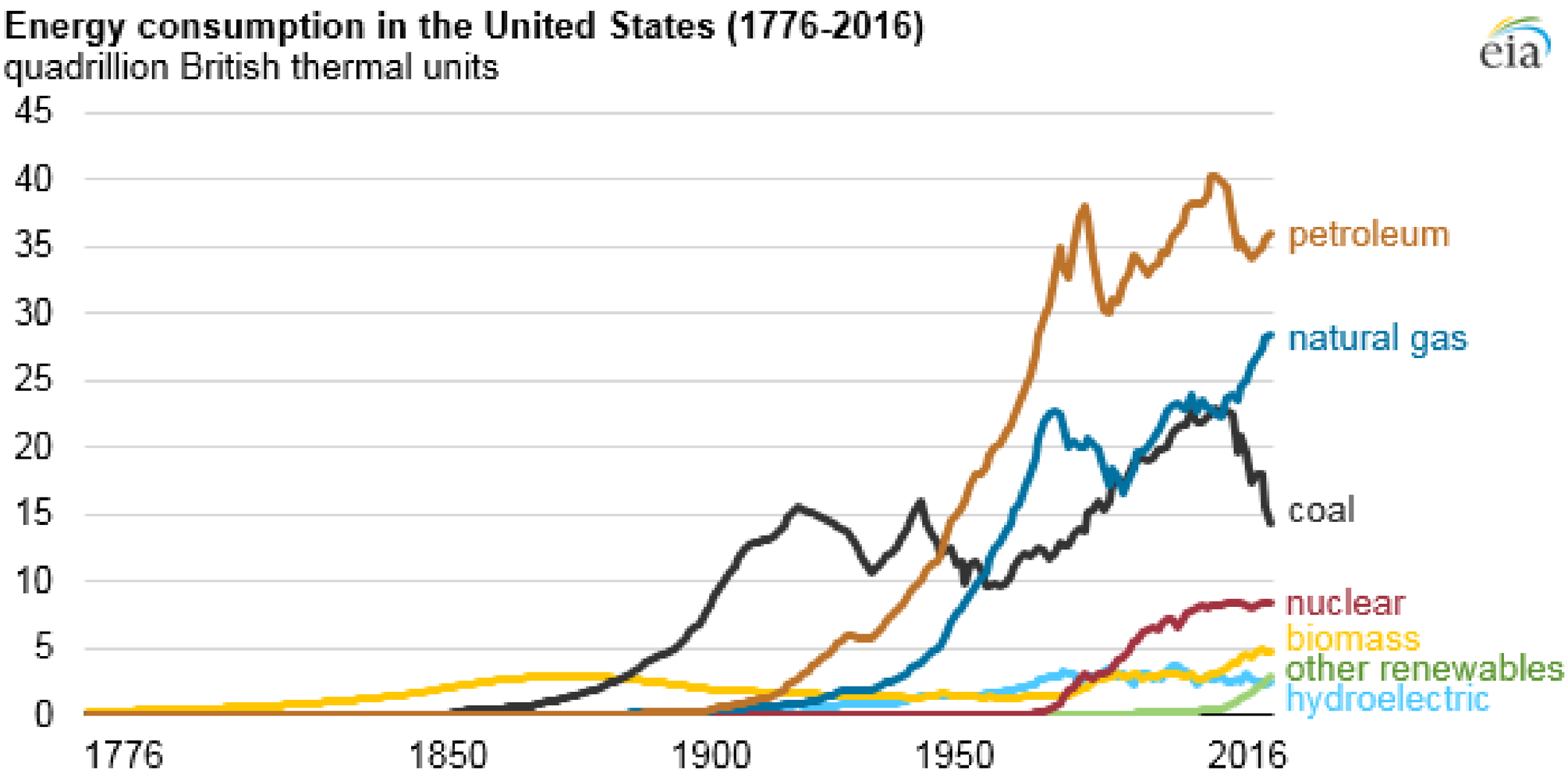
What does the X-axis represent _____

What does the Y-axis imply _____

Summarize what this graph represents or conveys

_____

https://www.eia.gov/renewable/



Show-Off Your Smarts!

Instructions

- Complete as an individual or small group.
- Discuss your ideas/answers/responses in a small group.
- Select one person to present your responses to the class.

Q1. How can this information be applied to a young-person's life?

Q2. How does this information apply to (or impact) communities?

Q3. When do scientists need to apply this information? How?

Q4. How would a person from 100 years ago view this information?

Q5. How does this topic connect to other science topics or math?

Write down at least three words introduced or covered by this topic.

1.
2.
3.
4.
5.
6.

Make a Poster

In the space provided here, create/draw a poster which conveys the concepts you have learned on this topic.