



Science Virtual Learning

7th Grade Science Human Impact on the Environment



April 24, 2020



7th Grade Science Lesson: April 24, 2020

Objective/Learning Target:

I can describe and research how humans have impacted the environment in specific ways.

Bellwork (Do this first on your own piece of paper):
What is the difference between the inner and outer planets?

Next watch this Video Over: Human Impact on the Environment



Bellwork Answer Key:

The inner planets are closest to the sun, they are terrestrial, and they are small. The inner planets and outer planets are separated by the asteroid belt. The outer planets are farther from the Sun, are gaseous and all have rings.



Some Key Points to Remember...

(write these down on a piece of paper to use for today's practice)

- · Humans have impacted the environment physically in the following ways:
- 1. Overpopulation- too much of an increase in the population of humans
- 2. Pollution -A harmful change in the chemical makeup of the soil, water, or air-spreads to a particular habitat, some of the species that live in that habitat that suffer
- 3. Burning Fossil Fuels- Natural Gas, Coal, Oil, etc.
- 4. Deforestation -Anytime time trees are being removed from the environment. It can be by cutting down trees, forest fires and other means
- 5. Genetic Engineering- Modification of DNA material of living things



Some Key Points to Remember...

(Write these down on a piece of paper to use for today's practice)

- Changes like the ones listed on the previous slide have caused
 - Climate change--refers to the change of the average temperature of our planet. This
 problem is caused by excess carbon dioxide that is released in the environment due
 to the burning fossil fuels.
 - Soil erosion-the removal of soil by water and wind
 - Poor Air Quality
 - Undrinkable Water
 - Increase in Crop Production Rate
 - Disease Control
 - Health problems in Humans and Animals



Some Key Points to Remember...

(Write these down on a piece of paper to use for today's practice)

- Renewable vs. Nonrenewable Resources
 - Renewable resources can be replenished in short periods of time. Non-renewable either cannot be recreated or takes an extremely long time to recreate
- Renewable Resources:
 - Biomass (such as ethanol- a fuel made from corn or once living material)
 - Hydropower
 - Solar Energy
 - Tidal Energy
 - Wind
 - Geothermal
- Nonrenewable Resources:
 - Coal, Oil, Natural Gas, Nuclear Energy



Here is a specific practice activity over Air Pollution

(Write this down on a piece of paper to use for today's practice)

Environmental Factors Affect the Severity of Pollution Events

Air pollution is a mixture of solid particles and gases in the air.

Car emissions, chemicals from factories, dust, pollen and mold spores may be suspended as particles.

When ozone forms air pollution, it's also called smog.

Some air pollutants are poisonous. Inhaling them can increase the chance you'll have health problems.

Air pollution isn't just outside - the insides of buildings can also be polluted and affect your health.



Here is a specific practice activity over Air Pollution

(Write this down on a piece of paper to use for today's practice)

Environmental Factors Affect the Severity of Pollution Events

Use the information from slides 4-6 to help you move through linked activity below.

Preventing Bad Air Days Interactive

After you finish all of your answers, you click "Exit", but you do not have to move on to the next activity on the site.



More Practice

Now, Choose one type of Resource that is either Renewable or Nonrenewable from Slide 6 that you think would be the best energy source for Earth. Using the links to the right, research information about that energy source and write down on your own piece of paper what that source is or how it works, at least 2 positives, 2 negatives of that energy source and defend why it would be the best to produce energy on Planet Earth.

- Non-renewable Energy Sources
- Renewable Energy Sources
- Renewable Energy: The Clean Facts
- Energy Sources Explained