Lesson 7- Forms and Transformations of Energy

1. Energy:

2. Thermal energy:

3. Mechanical energy:

4. Electrical energy:

5. Chemical energy:

6. Electromagnetic energy:

7. Nuclear energy:

8. What is an energy transformation? Give 3 examples.

EOG Practice: 1.\_\_\_\_\_ 2.\_\_\_\_\_ 3.\_\_\_\_\_ 4.\_\_\_\_\_

Lesson 8- Energy Resources and Their Environmental Impact

1. Humans use large amounts of energy to power cars, heat homes and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

2. Humans choices affect the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

3. Energy resources can be classified as non-renewable or renewable. What is the difference?

4. Most of the energy used in the US is from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, which is \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

5. **Coal** is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in many power plants. How does coal “get energy” to the power grid?

6. **Petroleum** is also known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. What other fuels does oil make?

7. **Natural gas** can be used in:

8. What is the main advantage of fossil fuels? Main disadvantage?

9. How is **oil** obtained? Why is this a problem?

10. Burning **fossil fuels** releases \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Scientists have observed \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the atmosphere has \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the last few hundred years. Extra \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from burning fossil fuels is causing \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

11. Another source of electricity in the US is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. How do power plants use nuclear energy? What element is used?

12. What is an advantage of **nuclear energy**?

13. **Solar energy** is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. A photovoltaic cell \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. What are some disadvantages of photovoltaic cells?

14. What are the advantages of solar energy?

15. **Wind energy:**

How does it work?

Advantages:

Disadvantages:

16. **Hydropower:**

How does it work?

Advantages:

Disadvantages:

18. **Biomass:**

How does it work?

Advantages:

Disadvantages:

19. **Geothermal:**

How does it work?

Advantages:

Disadvantages:

EOG Practice: 1.\_\_\_\_\_ 2.\_\_\_\_\_ 3.\_\_\_\_\_ 4.\_\_\_\_\_