APES- Chapter #23- Air Pollution

Name: _____

1) When discussing atmospheric pollutants- what is a "sink"? Explain.

2) Compare and contrast the London 1952 fog event with smog problems in the Los Angeles basin.

3) Why do some people use "slash and burn" methods for clearing fields? How does this practice contribute to air pollution? Explain.

4) The word **SMOG** is a mixture of the words ______ and _____.

5) Define the following types of pollution:

- Point Sources:
- Fugitive Sources:
- Area Sources:
- Mobile Sources:

6) List a general effect of air pollution for each of the following:

- Cities:
- Vegetation:
- Human Health:
- Soils
- Water
- Buildings

7) What are some of the *human health effects* of air pollution?

8) What is a *synergistic effect of air pollutants*? How can this be dangerous?

9) Choose 2 major air pollutants and list the *effects on people, plants and materials:*

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10) What is the *difference* between primary and secondary pollutants? Give an example of each.

11) **Why** is acid deposition a major environmental problem, and *how can it be minimized*?

12) What are some damages caused by acid rain?

13) Why does air pollution *vary by different regions of the world*? What causes these changes?

14) Why does Las Vegas have such bad air?

15) How it is possible that somewhere, such as the *North Slope of Alaska*, be affected by pollution?

16) How does **atmospheric inversion** trap pollution in cities? Explain.

17) What 4 conditions contribute to the potential for air pollution in urban areas?

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18) Define photochemical smog and sulfurous smog and explain how they are formed.

19) What are *some strategies* the United States is taking to help air pollution in the future?

20) Explain what is happening in Mexico City and what are some possible solutions?

21) How can air pollution be controlled in the following areas:

- Particulates:
- Automobiles:
- Sulfur Dioxide:

22) Explain how **coal gasification** can help with air pollution.

- 23) What is gas desulfurization or scrubbing?
- 24) Explain the Clean Air Act Amendments of 1990:
- 25) What is the Air Quality Index? What does it measure?

26) Why is it so difficult to establish national air quality standards?

Summarize what you learned about air pollution. In a highly technological society, it is possible to have 100% clean air? It is feasible or likely in the future? Explain.