

Air Terms: The Flash Card Game



Target Grade Levels

Fourth - Sixth

Time

30 minutes in first class

40 minutes in second class with guest presenter

Materials

- 3"x5" index cards, white
- magazines
- typing paper
- art supplies

Knowledge and Skills (TEKS)

- Language Arts:
 - Use a thesaurus, synonym finder, dictionary, and software to clarify meanings and usage;
- Science:
 - Classify, order, and sequence data; and
 - The student shall be given opportunities to classify matter, forces energy, organisms, actions, and events from the environment according to similarities and differences.

Overview

To learn important vocabulary terms regarding air quality.

Background Information

Air pollution is a problem in many of areas of the United States. It can damage trees, lakes and animals, and make people sick. It can also damage buildings and other structures. Air pollution also can cause haze, reducing visibility in national parks and sometimes interfere with aviation. The federal government regulates air pollution in order to protect human health and the environment. There are several words that are used when discussing the subject of air pollution.

Procedure

1) Vocabulary

- | | |
|-------------------------------|----------------------------|
| a) air pollution | o) fossil fuels |
| b) ambient air | p) hydrocarbons |
| c) atmosphere | q) hazardous air pollutant |
| d) benzene | r) meteorology |
| e) carbon dioxide | s) nitrogen oxides |
| f) carbon monoxide | t) ozone |
| g) catalytic converter | u) particle pollution |
| h) chlorofluorocarbons (CFCs) | v) photochemical process |
| i) combustion | w) plume |
| j) contaminant | x) pollution |
| k) dispersion | y) smog |
| l) emission | z) smoke |
| m) environment | aa) stomata |
| n) respiratory | |

- bb)stratosphere
- cc)toxic
- dd)volatile organic compounds

2) Activities

- a) Make flash cards from Vocabulary by using 3:x5” index cards—write the term on one side, and the definition on the other side.
- b) Divide students into groups of five. The students will number off from one to five. This group will be the base team.
- c) Next, ask all of the ones to sit together, the twos to sit together, the threes to sit together, and the fours to sit together, etc.
- d) Give each group six air quality terms on flash cards that will be placed in the middle of the table. (The list of terms and definitions are provided. A formatted set of terms and definitions ready for double-sided photocopying is available at the end of this lesson.)
- e) The students will decide who will be first to take the top card. The first student will read the term and then the definition of that word from the card. The group will look in magazines for pictures that represent the air quality term. Each member of the group must find a picture or draw a picture to share with the base team.
- f) After all the groups have completed illustrating the terms, the students will return to their base team.
- g) Each member of the group will share the illustrations.
- h) Each group will then practice reading the terms and definitions.
- i) Show the aerosol can again. Ask the students how many air quality terms do they think relate to the can.

Adapted from: “Air Terms: The Flash Card Game” *Texas Commission on Environmental Quality*. www.tnrcc.state.tx.us/air/monops/lessons/lesson_plans.html.

Reference: Spencer Kagan: Cooperative Learning, 1992.

Acknowledgement: Lea Land, Stephen F. Austin Universtiy Nacogdoches TES Course, 1994