

Name: _____ Date: _____

Battling for Oxygen Worksheet **Answers**

Answer the following questions, based on what you learned in the gumdrop-ozone activity:

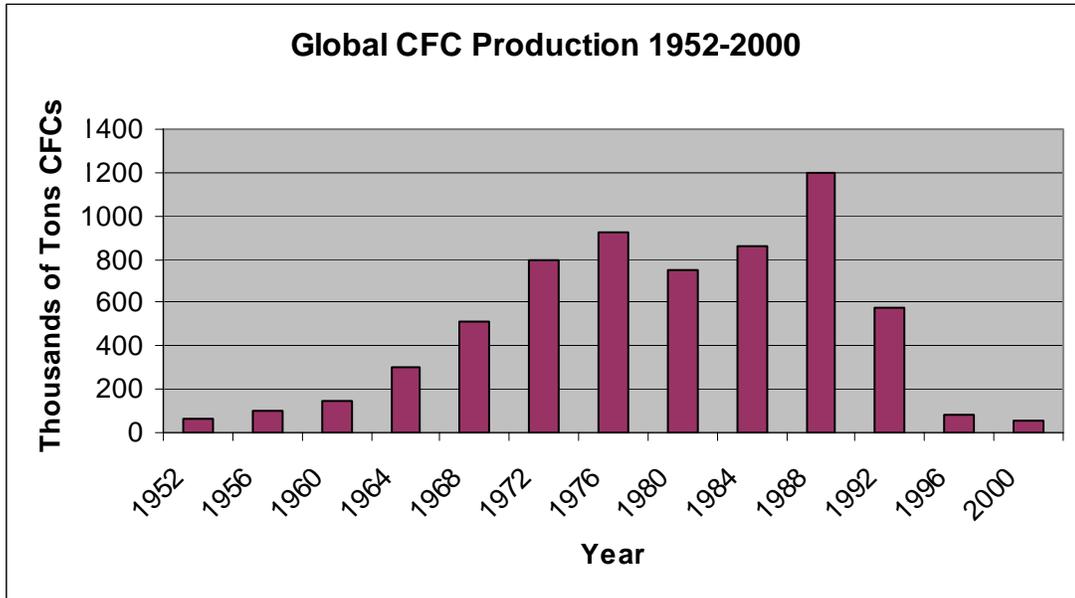
- Ozone is made of _____ oxygen molecules.
 - one
 - two
 - three**
 - four

- The chemical formula for oxygen gas is _____.
 - O₂**
 - O₃
 - O₄
 - ClO₂

- Sources of chlorofluorocarbons include aerosol cans, old refrigerators and _____.
 - batteries
 - plants
 - car engines
 - old air conditioners**

- Ultraviolet light (UV) light _____ ozone molecules.
 - builds
 - breaks up**
 - does not affect
 - doubles

- Ultraviolet light _____ humans and other organisms.
 - is harmful to**
 - is helpful to
 - does not affect
 - protects



Using the graph above, answer the following questions:

1. When were the most chlorofluorocarbons (CFCs) produced?
 - a) 1972
 - b) 1978
 - c) 1988**
 - d) 2000

2. When did CFC production first reach 200 thousand tons?
 - a) 1972
 - b) 1956
 - c) 1964**
 - d) 1960

3. What do you **guess** the average production of CFCs is?
 - a) 1,200 thousand tons
 - b) 490 thousand tons**
 - c) 6 thousand tons
 - d) 100 thousand tons

4. Why are CFCs no longer produced?

In the U.S., CFCs are no longer produced because they break down the ozone layer, which protects us from ultraviolet light.

Graph source: Tom Rutkowski, Integrated Teaching and Learning Program,
College of Engineering, University of Colorado at Boulder, 2003.