

Gas Gobblers

Objective: To demonstrate the interdependence people and animals share with plants

through the exchange of oxygen and carbon dioxide.

Time: 20 minutes.

Materials: Four bottles of blow bubbles, construction paper (red, green), red and blue

arm bands.

Ask the gardeners to recall some of the benefits we receive from plants. Explain that plants help people and animals breathe. Tell them that people inhale air and use the oxygen in it to live, and that we exhale carbon dioxide. Ask them why they think people have not used up all of the oxygen in the world yet. Explain that plants breathe the carbon dioxide we exhale and they breathe out the oxygen for us to use.

Game 1

Ask your group how many gardeners would be in each group if the whole group were divided in half. Then have half the class wear green arm bands to represent the plant group and the remaining gardeners wear blue arm bands to represent the people/animal group. Choose two people from each group to be bubble blowers. Have those students spread out to make a square with the remaining gardeners in the middle.

Remind the gardeners that people, animals and plants rely on each other to survive. Tell them that when you call out "OXYGEN," the plant bubble blowers should begin blowing bubbles while the people/animal group begin popping the bubbles to represent breathing them. After several seconds, call out "CARBON DIOXIDE" and have the other group pop bubbles blown by the people/animal group. Remind the gardeners that plants and people need each other for both to survive.

Game 2

Choose four bubble blowers to represent plants of the rain forest. The rest of the students represent the people and animals of the world. Explain that the largest concentration of plants in the world is in the rain forest.

Have the gardeners try to hold their breath for 30 seconds. Have the gardeners describe the feeling that tells them it's time to start breathing again. Tell all those who represent the people/animals that they need oxygen to survive. In this game, they must be able to "breathe" (or touch) 10 bubbles before you say "stop," or they are out of the game.

Call out the word "BREATHE." The "plants" should begin blowing. Allow enough time for all the gardeners to grab the needed bubbles. Explain that much of the rain forest is being removed through deforestation. Have one of the plant bubble blowers stop blowing and again tell the students they need 10 bubbles to survive before you say "STOP." Call out the word "BREATHE." Allow the same time as you did before, but point out that fewer gardeners were able to get the oxygen they needed. Remove another blower (plant) and continue playing this way until you have removed all plants, and the people can no longer survive.

Have the gardeners tell you what this game teaches them.

This page reproduced with permission of the National Junior Master Gardener® Program. For more information about the JMG® Program or to obtain JMG® curricula,

visit: www.jmgkids.us

Gas Gobblers
JMG Level One
Teacher/Leader Guide, p18

