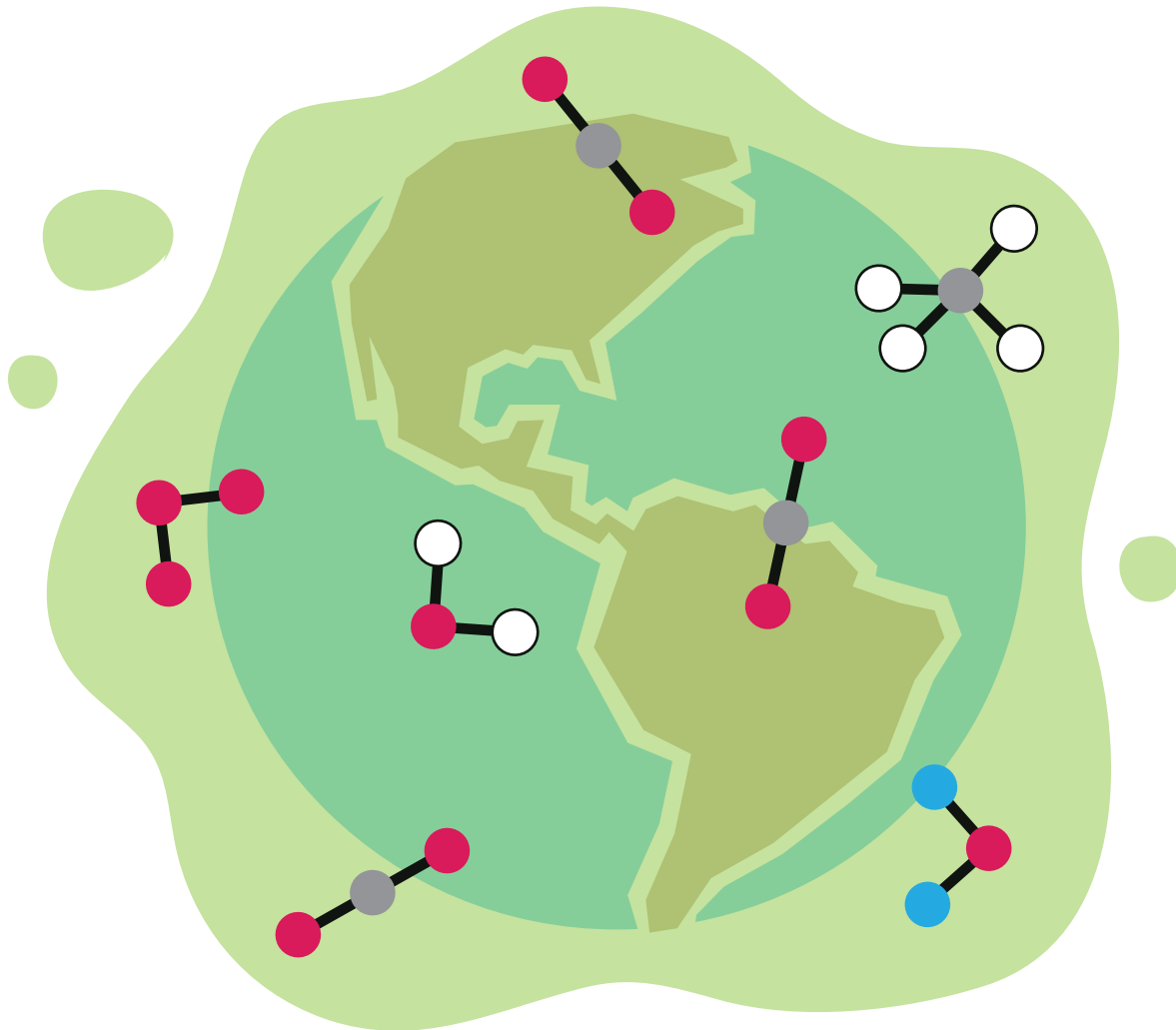


Yummy Gummy Greenhouse Gases



Let's make some molecules! Molecules make up most of the stuff that we see and that includes you. With this activity, you can make greenhouse gas molecules that you can eat, and that can help us learn how to take better care of our planet Earth.



What you will need to get started:






- Gumdrops in the following colors: Red, White, Grey, Blue
- Round toothpicks
- 1 sheet poster board or construction paper
- Markers or crayons

Directions

To build molecules, you need atoms. In this edible activity, the gumdrops will be the atoms we use to make our molecules of greenhouse gases. Each color of a gumdrop stands for a different atom. Read the chart below to find out which color stands for which atom!



All right, let's build some greenhouse gas molecules. Each molecule has a formula, or recipe, which is written in a sign, called shorthand. For instance, the shorthand for a water vapor molecule is H₂O. The H₂ stands for 2 hydrogen atoms, and the O stands for 1 Oxygen atom. So: H₂O = 2 Hydrogen Atoms plus 1 Oxygen Atom. GOT IT?! Look below for molecule recipes.

GREENHOUSE GAS	RECIPE	FORMULA	GUMDROP MODEL
Ozone	3 oxygen atoms	O ₃	
Nitrous oxide	2 nitrogen atoms and 1 oxygen atom	N ₂ O	
Carbon dioxide	1 carbon and 2 oxygen atoms	CO ₂	
Water vapor	2 hydrogen atoms and 1 oxygen atom	H ₂ O	
Methane	1 carbon atom and 4 hydrogen atoms	CH ₄	

1. Take some toothpicks and break them in two pieces. One half of a toothpick will be a bond, or connection, for two atoms. But in our case, gumdrops.
2. Put the gumdrop atoms together in the patterns shown in the chart above. You have now made a molecule out of your atoms!
3. Get your big piece of poster board and markers and draw a chart of greenhouse gas molecules, their names and their colors. It should look similar to the chart above.

