

Make an Aurora Bracelet

Different gases in Earth's atmosphere, including oxygen and nitrogen, cause the different colors of the northern lights. Make a bracelet to remind you of the aurora colors!



Materials Needed:

String (about 12 inches long), 2 red pony beads, 4 green pony beads, 2 purple pony beads, 1 "O" bead, 1 "N" bead, scissors.

Note: Pony beads can be found at most craft stores. If you don't have beads, you can make your own from paper. Follow the instructions here:

www.bigbeadlittlebead.com/guides_and_information/guide_to_making_paper_beads.php

Instructions:

Step 1: Cut a piece of string about 12 inches long. Find the center of your string. Tie a **red** bead slightly to one side of the middle.



Step 2: String your aurora beads in order:

- One more **red** bead
- An **O** bead for Oxygen
- Four **green** beads
- An **N** bead for Nitrogen
- One **purple** bead



Step 3: Tie on the last **purple** bead to secure the beads.

Step 4: Tie the ends of the string together and wear your bracelet!

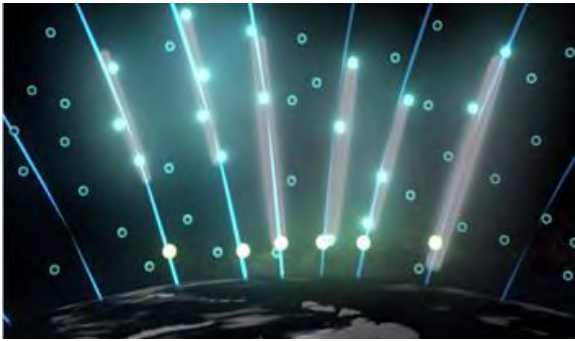


Learn more about the colors of the northern lights:

culturalconnections.gi.alaska.edu/multimedia/gas.html



Aurora Colors



culturalconnections.qi.alaska.edu

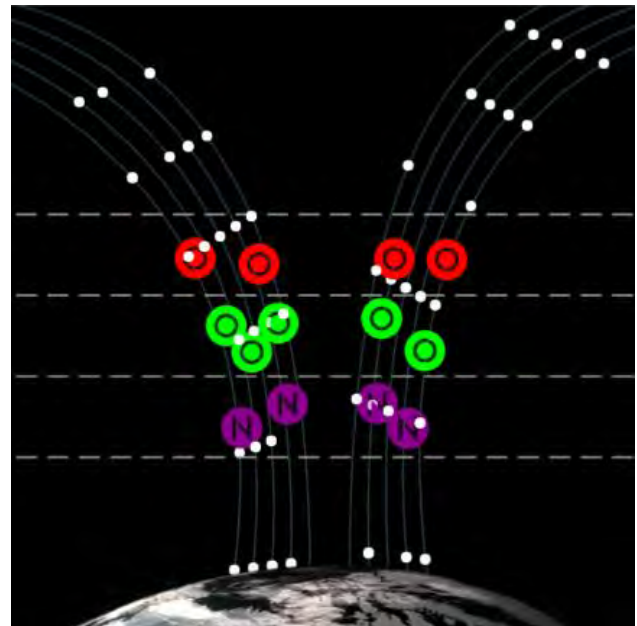
The sun emits a constant stream of particles, called the solar wind. Some of these particles get caught in Earth's magnetic field and move toward the poles. When the particles enter the atmosphere, they crash into gases. This excites the gases in the atmosphere, and they give off light like a neon sign.

Different gases in Earth's atmosphere create different colors of the aurora:

Red light is caused by energized oxygen high in the atmosphere.

Green, the most common light, is caused by energized oxygen in the middle of the atmosphere.

Purple light, which can appear white or light blue to human eyes, is caused by energized nitrogen lower in the atmosphere.



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The aurora seen from the International Space Station. Image: NASA.



Joe Huff / NASA