

YOUTH ART PROJECT FOR:

LEVELS OF ATMOSPHERE

OBJECTIVE

Students will learn about the different levels within the earth's atmosphere.

Set up/prep time:

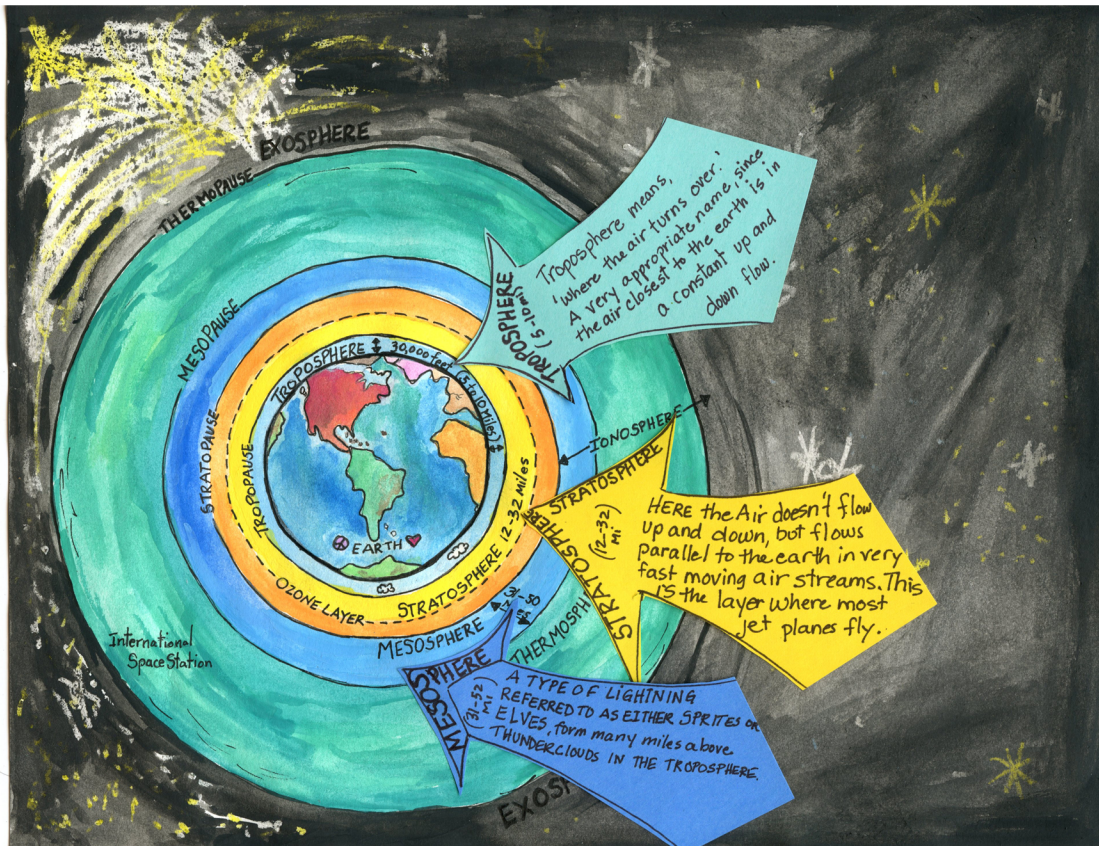
30 minutes

Activity Time:

2-3 hours

Materials Needed:

Water Colors, paper towels, water, a container for water, paintbrushes, crayons, fine point black marker, pencil, eraser, plastic compass, paper, and colored post-it-notes





COMMON CORE STATE STANDARD

CCSS.ELA-Literacy.RST.6-8.7

Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).

PRE LESSON ASSESSMENT

Do a pre lesson assessment to determine what the students already know about the earth's atmosphere.

VOCABULARY

Troposphere, Stratosphere, Mesosphere, Thermosphere, Exosphere

RELEVANT RESOURCES

Content

<http://www.windows2universe.org/earth/Atmosphere/layers.html>

<http://www.space.com/17683-earth-atmosphere.html>

<http://www.starhop.com/library/pdf/studyguide/elementary/brsp-4Layers.pdf>

<http://www.srh.noaa.gov/jetstream/atmos/layers.htm>

Art

<http://cnx.org/content/m34374/latest/?collection=col11200/latest>

<http://www.vtaide.com/png/images/atmosphere.jpg>

<http://www.dragoart.com/tuts/2604/1/1/how-to-draw-a-cartoon-earth.htm>

Students will engage in:

- Listening
- Speaking
- Reading
- Writing
- Partner Work
- Cooperative Learning
- Whole Group Instruction
- Visuals
- Hands on
- Technology Integration
- A Project
- Centers
- Simulations
- Activities

*"Clouds come floating into my life,
no longer to carry rain or usher storm,
but to add color to my sunset sky."*

-Rabindranath Tagore





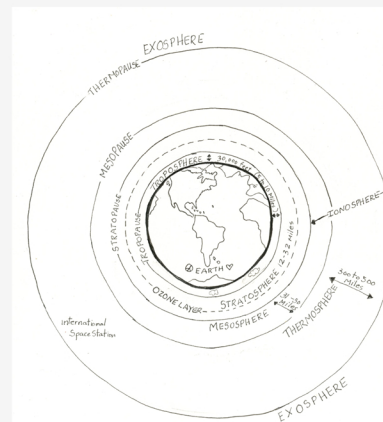
STEP 1

Using a compass, have the students draw a circle in the center of the page lightly in pencil. This circle will represent the earth, have the students then draw in the details needed in the circle so it resembles the continents and the oceans on the Earth. From the center of their earth moving outward towards the edge of the paper have the students section off five round sections, these sections will represent the five different layers of the earth's atmosphere.



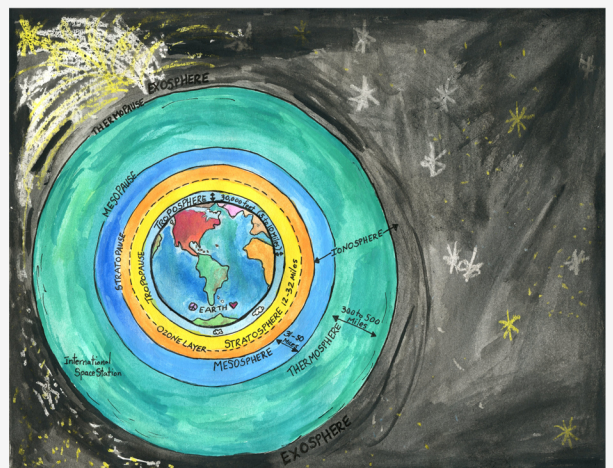
STEP 2

After the outline of the student's artwork is done have them go over their lines with a black fine point marker, erasing their pencil markings after. Have the students label the layers of the earth's atmosphere starting from the bottom and moving outward towards the edge of the paper; TROPOSPHERE, STRATOSPHERE, MESOSPHERE, THERMOSPHERE, and EXOSPHERE. In between the troposphere and stratosphere there is a thin layer called TROPOPAUSE. There is also another thin layer between stratosphere and mesosphere called STRATOPAUSE, in between mesosphere and thermosphere is a layer called MESOPAUSE, and in between thermosphere and exosphere is another thin layer called THERMOPILES.



STEP 3

Have the students draw in and label the ozone layer and the ionosphere. The ozone layer, which protects the earth from too much heat, is in between the troposphere and the stratosphere, this layer should be represented by a dotted line. The ionosphere is a region of the atmosphere that is ionized by solar radiation. It forms the inner edge of the mesosphere and stretches upward through the thermosphere and includes parts of the exosphere. Have the students then paint their artwork using the watercolors. After their artwork is completed have the students take notes on their sticky notes about what they have learned about the various layers of the earth's atmosphere and stick it to their artwork.



POST LESSON ASSESSMENT

Do a post assessment to determine what new knowledge the students have gained.

