



ISTITUTO COMPRENSIVO DE ZERBI-MILONE

CLASSE I C

PLESSO ZAGARI

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SCIENCE IN CLIL

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THE ATMOSPHERE



The Earth is surrounded by a layer of gases called the atmosphere.
It is the air that plants and animals breathe to survive.



The atmosphere protects Earth like a **big blanket** .

It absorbs the heat from the Sun and keeps the heat inside the atmosphere helping the Earth to stay warm

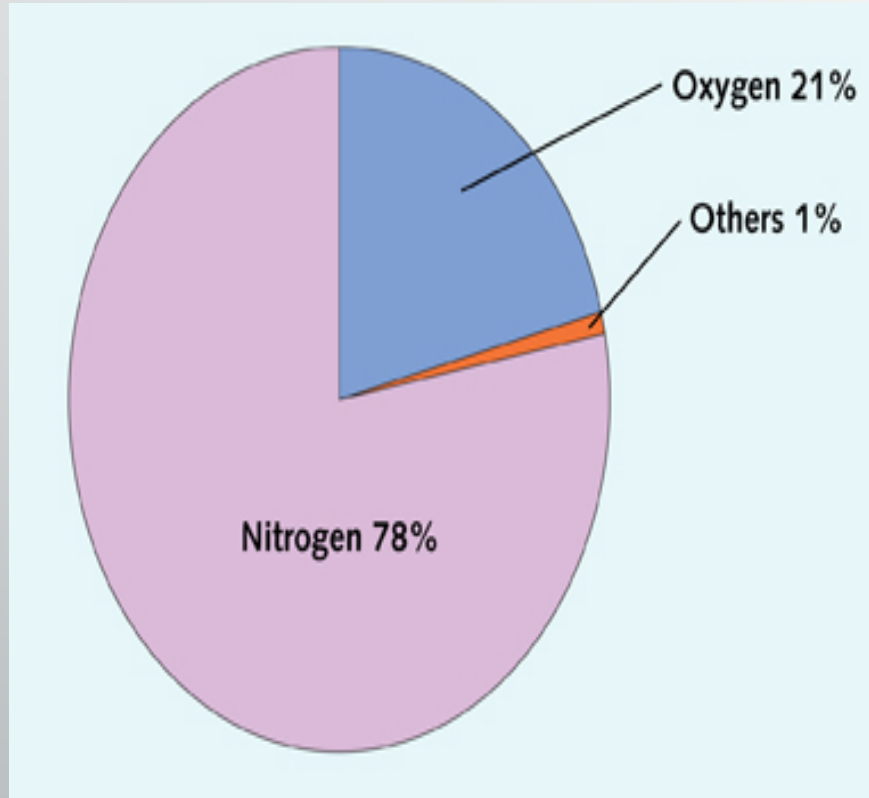
There is also a portion of the atmosphere called the *ozone layer* that helps to protect the Earth from the Sun's radiation.



This big blanket also helps to form our weather patterns and climate.



COMPOSITION OF ATMOSPHERE

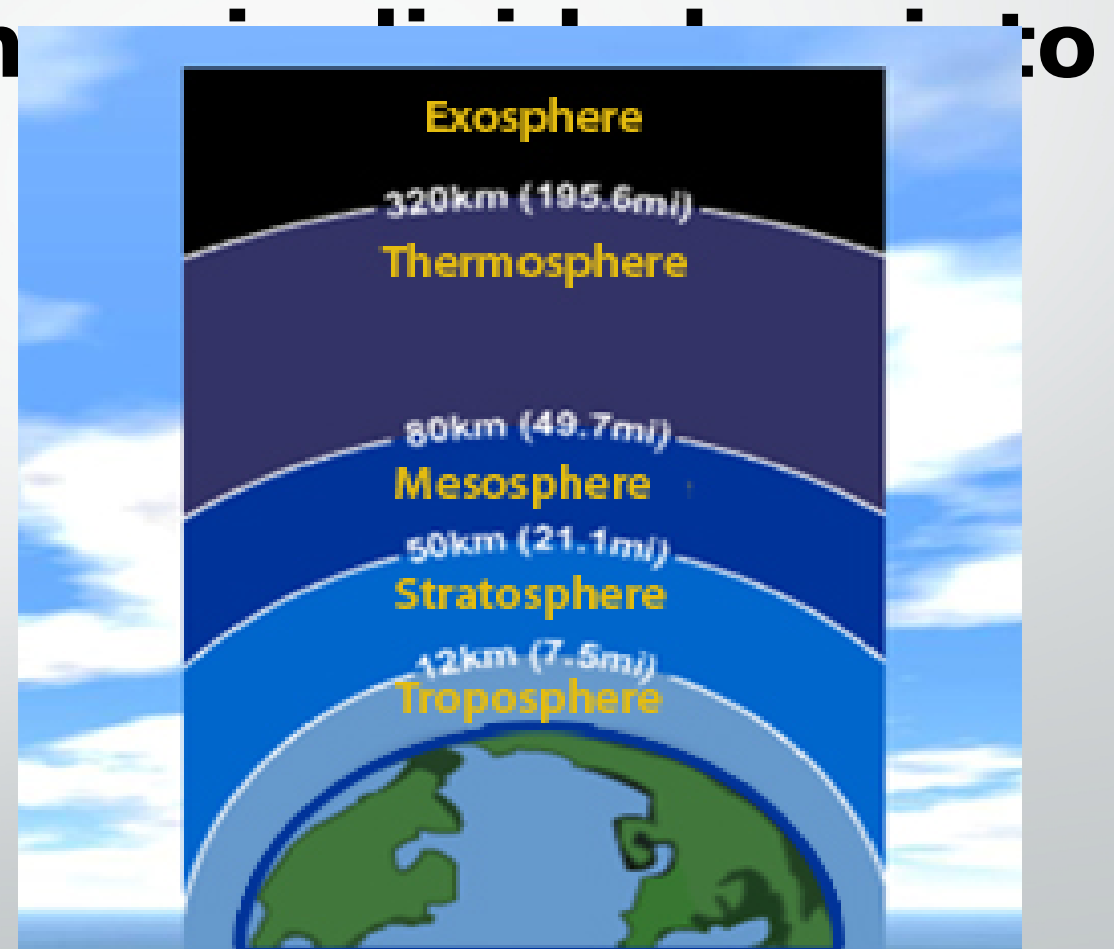


The atmosphere is made up of mostly *nitrogen* (78%) and *oxygen* (21%). There are lots of other gases that are part of the atmosphere, but in much smaller amounts. These include *argon, carbon dioxide, neon, helium, hydrogen,* and more. Oxygen is needed by animals to breathe and

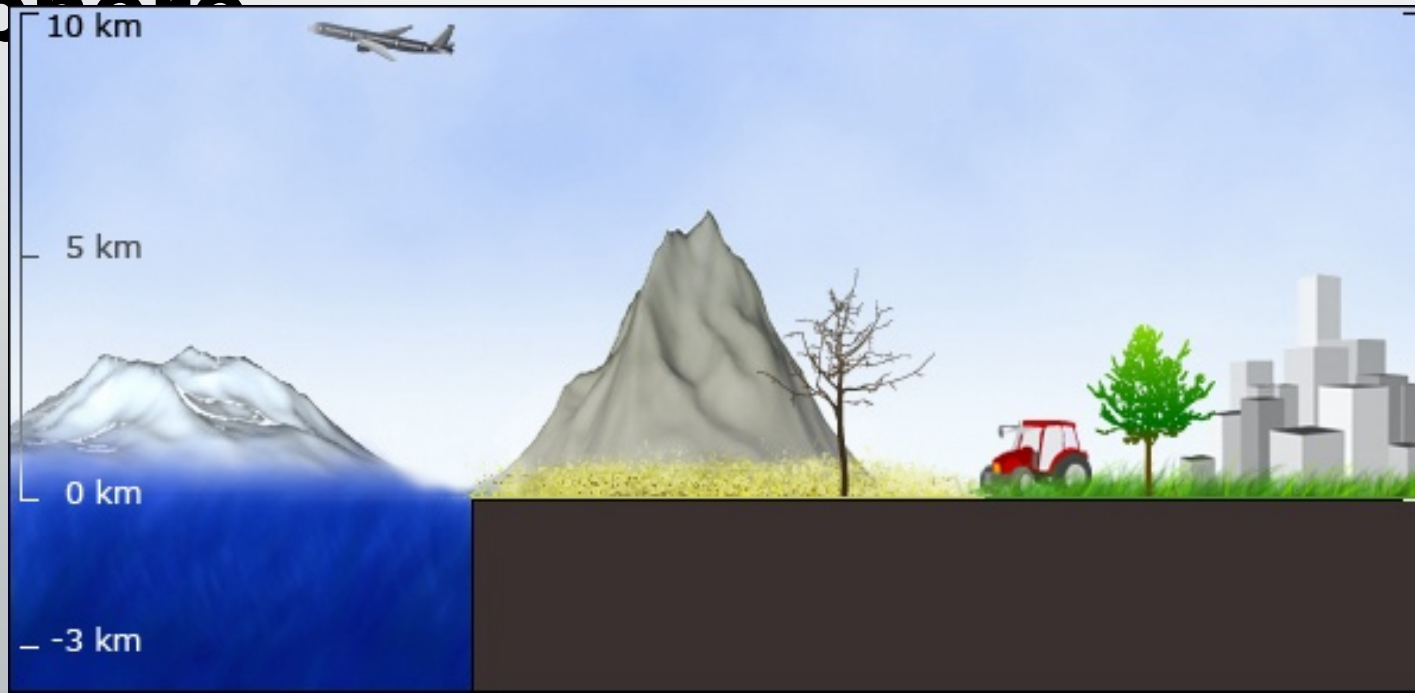
Layers of Earth's Atmosphere

The Earth's atmosphere consists of 5 major layers:

1. Troposphere
2. Stratosphere
3. Mesosphere
4. Thermosphere
5. Exosphere

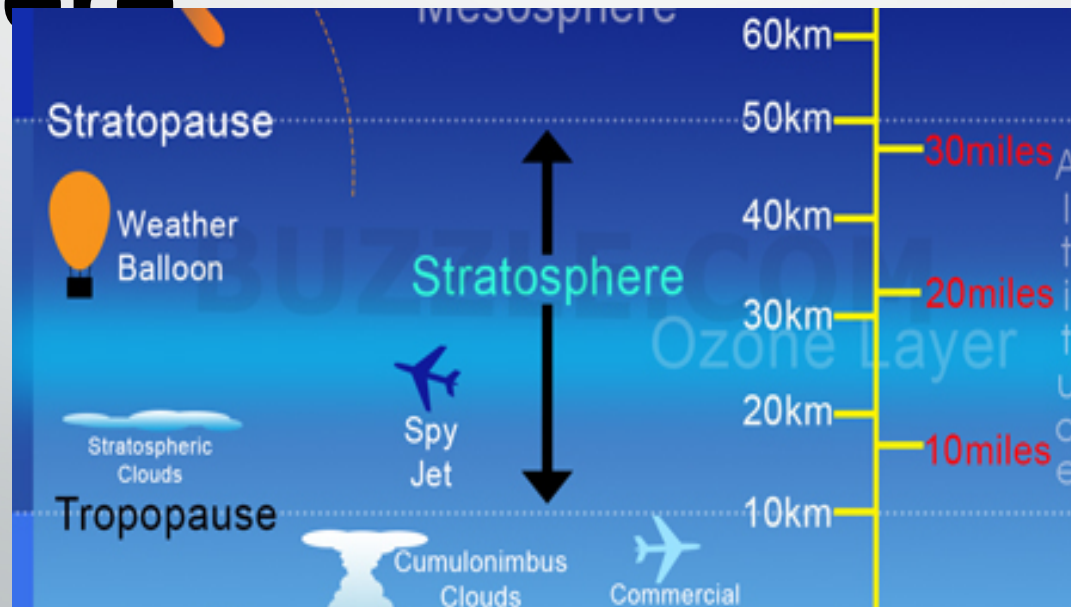


The troposphere is the layer next to the ground or surface of the Earth. It covers around 6-20 kilometres. This is where we live and even where planes fly. Around 80% of the mass of the atmosphere is in the troposphere.



The stratosphere

The stratosphere extends for the next 50 km after the troposphere. The Ozone is in this layer. Weather balloons go as high as the stratosphere.



The mesosphere

The mesosphere covers the next 80 kilometres above the stratosphere. This is where most meteors burn up upon entry. The coldest place on Earth is at the top of the mesosphere



The thermosphere

In the thermosphere air is very thin. Temperatures can get extremely hot. Thermo means hot. It is about 100 km above the Earth . The aurora borealis «northern lights» occur in a smaller layer in the thermosphere called the ionosphere.



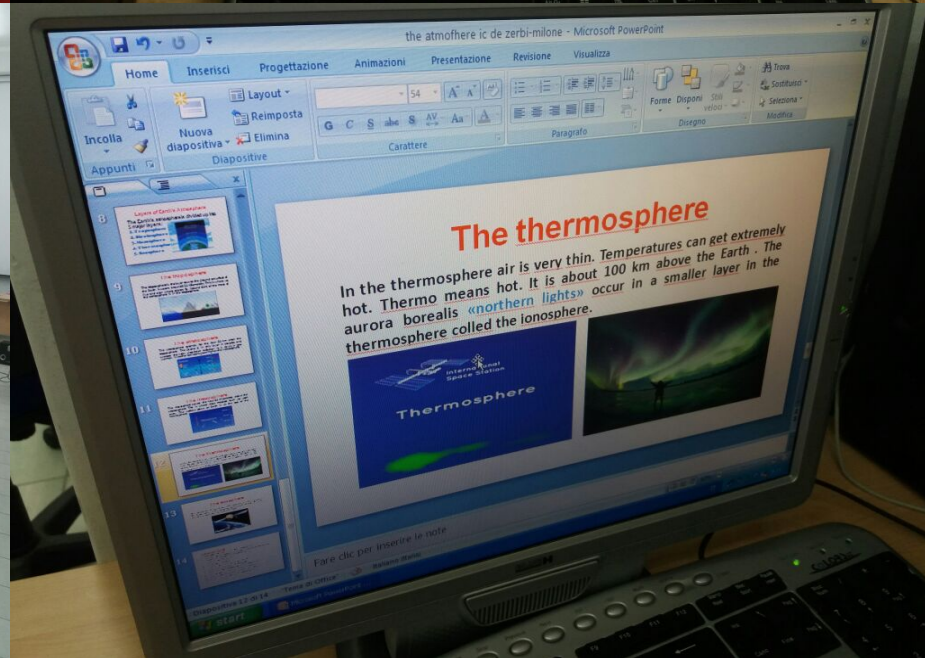
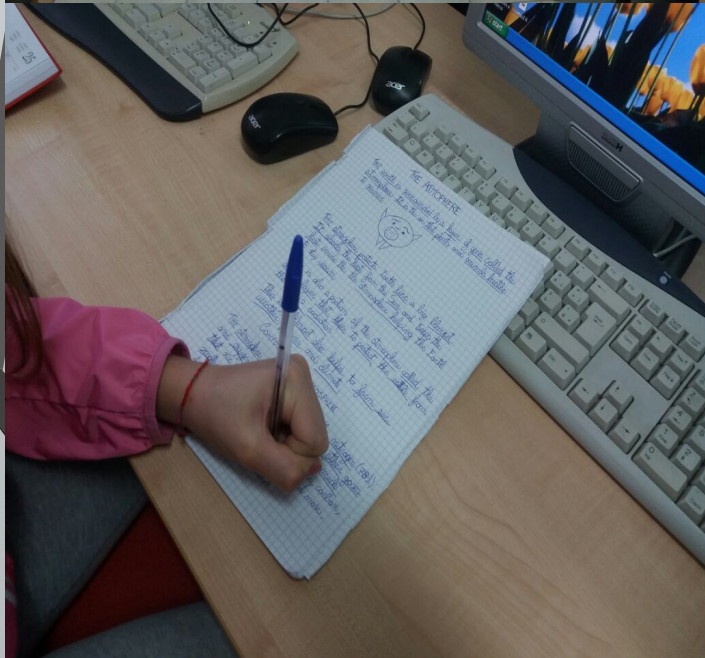
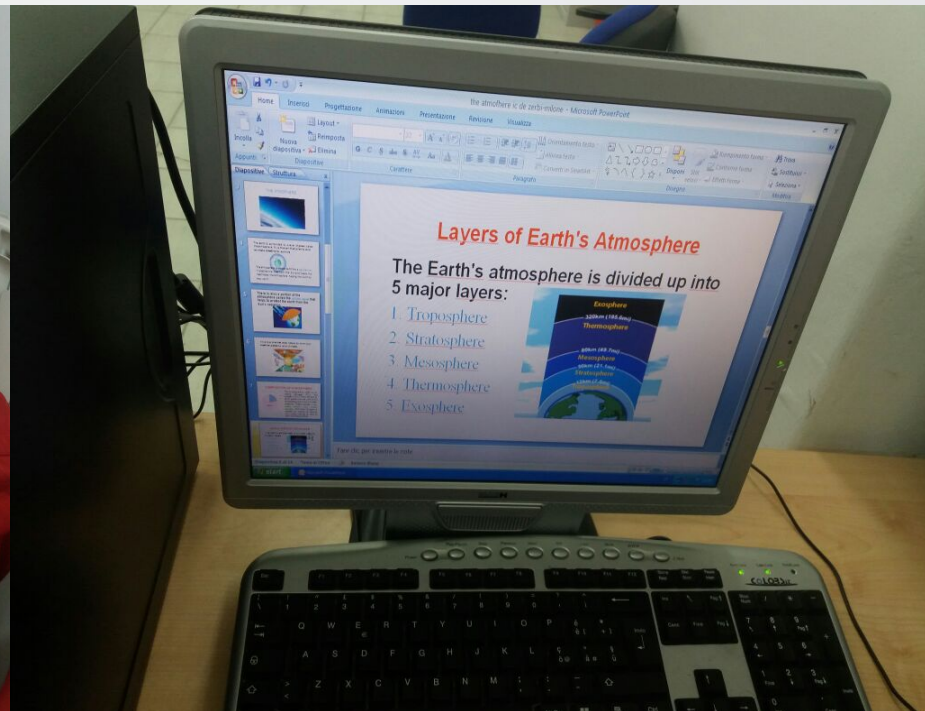
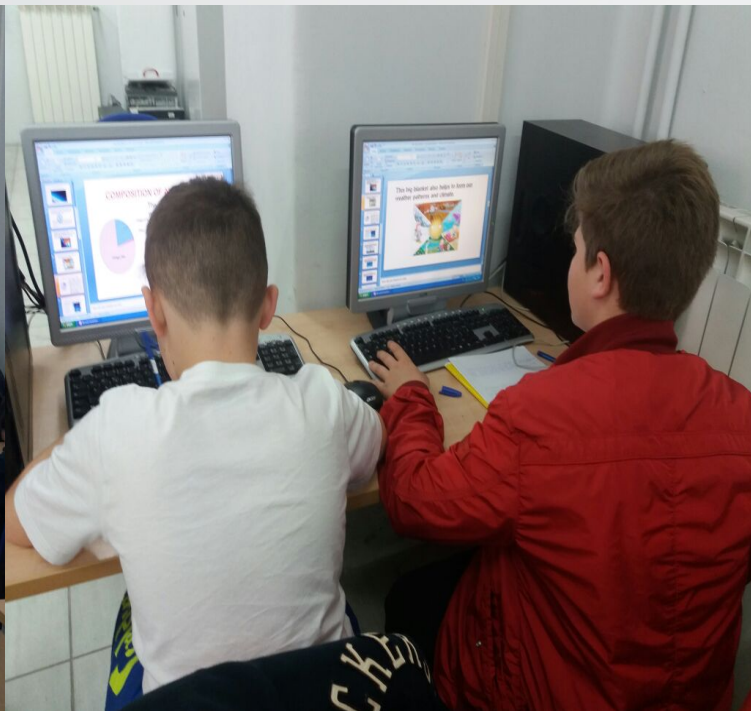
The exosphere

The last and the thinnest layer of the atmosphere is the exosphere. The temperature in the exosphere goes up with altitude. This is the area where many satellites orbit



Lesson Quiz

1. How many layers are in the Earth's atmosphere?
2. Put the layer of atmosphere in order (stratosphere, mesosphere, exosphere, troposphere, thermosphere.)
3. In which layer do we live?
4. Which layer is coldest?
5. In which layer is the ozone layer found?
6. What is the function of the Ozone Layer?
7. What is the most common gas in the atmosphere?
8. What gas makes up around 21% of our atmosphere?





THE END