

# Introduction to the Ionosphere

1. In which layers of the atmosphere does the temperature decrease with increasing altitude? In which layers does the temperature increase?
  
2. Most of the atmosphere consists of gaseous matter. Some of the matter in the ionosphere, however, exists as a plasma (ionized gas). Using the internet, name three other examples of plasma.
  
3. The ionosphere and magnetosphere separate the dense Earth from “empty” Space. Similarly, the shoreline separates solid land from the liquid sea. Use your imagination and the internet to find some connections between:
  - a) Astronauts & Scuba divers
  
  - b) Sun storms & rain storms
  
  - c) Daily changes in the ionosphere & ocean tides
  
  - d) Wakes in the magnetosphere & wakes from boats
  
  - e) Plasma waves & water waves