## Quiz

- 1) A magnetosphere is:
  - a. The layer of a planet that contain its atmosphere
  - b. The outer region of the Sun
  - c. The region where charged particles are moved by the magnetic field
  - d. The region out of the Solar System where the Sun's ejected material moves
- 2) The convection zone is:
  - a. The layer of the Sun where the energy is produced and transported
  - b. The layer of the Sun where the sunspots emerge
  - c. The coolest region of the Sun where the energy is absorbed by atoms
  - d. The layer of the Sun that carry out the energy to the surface
- 3) The photosphere is:
  - a. The coolest layer of the Sun
  - b. The region where photons are produced
  - c. The layer that we can only observe with special filters
  - d. The layer that has less density
- 4) The sunspots are:
  - a. The remaining of comet impacts
  - b. The places where light is not emitted
  - c. The places where magnetic fields go outside and inside the Sun
  - d. The hottest elements on the Sun's surface
- 5) About the solar cycle and solar activity:
  - a. The more activity is produced at the beginning of the cycle
  - b. The solar cycle matches the number of sunspots with the activity
  - c. The solar cycle determine the birth and death of a star
  - d. The solar activity is not related with the electromagnetic field of the Earth
- 6) The Sun and the Earth:
  - a. Have different tilts on their rotation axes.
  - b. Have their equators on the same plane
  - c. Have different coordinates because of the different size of them
  - d. Have different coordinates because the magnetic poles are inverted
- 7) Based on the results, the Sun rotates:
  - a. At the same rate as the Earth
  - b. Slower than the Earth
  - c. Faster than the Earth
  - d. The diameter of Venus is unknown but necessary
- 8) The sidereal rotation period is:
  - a. The time the Earth takes to complete a rotation around the Sun
  - b. Longer than the synodic rotation period
  - c. The time a sunspot needs to rotate to the same apparent position viewed from Earth

- d. Is shorter than the synodic rotation period
- 9) The latitude of a sunspot can determinate:
  - a. The age of the Sun
  - b. The force of the magnetic field
  - c. The cycle's year
  - d. The rotation direction
- 10) To track sun rotation:
  - a. We need more than one sunspot
  - b. We need more than one image
  - c. We need to be in a solar minimum
  - d. We need to use a space telescope