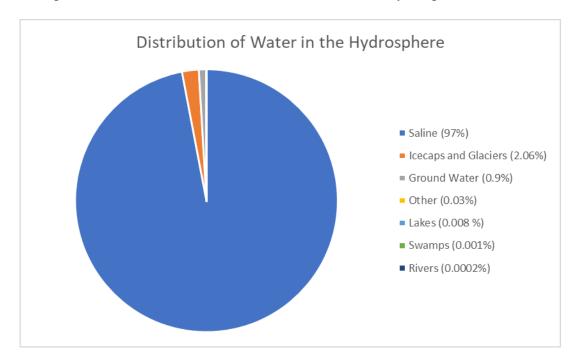
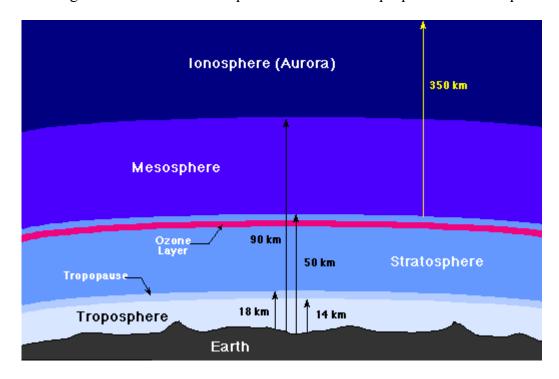
## Weather Worksheet 1 (answers)

1. Create a pie chart to illustrate the distribution of water in the hydrosphere.



2. Draw a diagram of the Earth's atmosphere and label the troposphere and stratosphere.



3. Discuss the implications of the unequal distribution of fresh water on the planet.

Answers will vary.

4. Predict why so few clouds are found in the stratosphere.

As water vapor rises it cools and forms clouds at that height. At the height of the stratosphere there is very little water vapor that has not condensed out due to the low temperature of the upper troposphere.

5. Describe the effect of latitude on absorption of solar radiation.

As latitude increases, the amount of solar radiation absorbed decreases due the angle of the earth's surface. In other words, more solar radiation is absorbed at the equator than at the poles.

6. Explain the relationship between the seasons and the angle of sunlight.

Due to the tilt of the earth, the angle of the sun is the greatest during the winter and smallest during the summer.

7. Describe the effect of cloud cover on reflectance of solar radiation.

Clouds increase the amount of solar radiation reflected back into space.

8. Differentiate between absorption and reflection.

Reflected energy simply "bounces" off the surface of the object. Absorbed energy causes the temperature of the object to increase.