**Activity: Atmosphere Riddles**

Directions: Write the name of the layer or part of the atmosphere that answers the riddles.

1. I have the coldest temperature of the atmosphere.  Who am I?
2. I am where most of the weather occurs. Who am I?
3. I contain most of the ozone layer. Who am I?
4. Artificial satellites orbit the earth here. Who am I?
5. I protect the earth from meteoroids. Who am I?
6. I protect the earth from ultraviolet rays given off by the sun. Who am I?
7. I am where radio waves are bounced back to the earth's surface. Who am I?
8. I extend to an average altitude of about 12 km. Who am I?
9. My temperature may reach as high as 2000 degrees celsius. Who am I?
10. Convection currents are produced in my layer. Who am I?
11. I am the layer that touches the surface of the earth. Who am I?
12. I am the layer that reaches the highest altitude. Who am I?
13. The jet stream is located here. Who am I?
14. I extend to an altitude from about 50 km to 80 km. Who am I?
15. I am the layer that interacts with living things. Who am I?
16. I extend upwards from an altitude of about 550 km to 1000 km. Who am I?
17. The air pressure is the greatest here. Who am I?
18. Electrically charged particles called ions are found here. Who am I?
19. My temperature drops about 6.5 degrees Celsius per km. Who am I?
20. I extend to an altitude of about 12 km to 50 km. Who am I?

**Answers**

1. I have the coldest temperature of the atmosphere.  Who am I? Mesosphere
2. I am where most of the weather occurs. Who am I? Troposphere
3. I contain most of the ozone layer. Who am I? Stratosphere
4. Artificial satellites orbit the earth here. Who am I? Exosphere
5. I protect the earth from meteoroids. Who am I? Mesosphere
6. I protect the earth from ultraviolet rays given off by the sun. Who am I? Stratosphere (Ozone)
7. I am where radio waves are bounced back to the earth's surface. Who am I? Ionosphere
8. I extend to an average altitude of about 12 km. Who am I? Troposphere
9. My temperature may reach as high as 2000 degrees Celsius. Who am I? Thermosphere
10. Convection currents are produced in my layer. Who am I? Troposphere
11. I am the layer that touches the surface of the earth. Who am I? Troposphere
12. I am the layer that reaches the highest altitude. Who am I? Thermosphere
13. The jet stream is located here. Who am I? Troposphere
14. I extend to an altitude from about 50 km to 80 km. Who am I? Mesosphere
15. I am the layer that interacts with living things. Who am I? Troposphere
16. I extend upwards from an altitude of about 550 km to 1000 km. Who am I? Exosphere
17. The air pressure is the greatest here. Who am I? Troposphere
18. Electrically charged particles called ions are found here. Who am I? Ionosphere
19. My temperature drops about 6.5 degrees Celsius per km. Who am I? Troposphere
20. I extend to an altitude of about 12 km to 50 km. Who am I? Stratosphere