

**TABLE 1**  
Average Temperature Readings at Various Altitudes

Altitude (km)	Temp (°C)	Altitude (km)	Temp (°C)
0	15	52	-2
5	-18	55	-7
10	-49	60	-17
12	-56	65	-33
20	-56	70	-54
25	-51	75	-65
30	-46	80	-79
35	-37	84	-86
40	-22	92	-86
45	-8	95	-81
48	-2	100	-72

1. Graph this data using a line graph.

2. Label the different layers of the atmosphere and the separating boundaries between each layer.

3. Mark the general location of the ozone layer. You should place eight words on your graph in the correct locations: troposphere, tropopause, stratosphere, stratopause, mesosphere, mesopause, thermosphere and ozone layer.

**QUESTIONS:**

1. What is the basis for dividing the atmosphere into four layers?

2. Does the temperature increase or decrease with altitude in the:

troposphere? \_\_\_\_\_ stratosphere? \_\_\_\_\_

mesosphere? \_\_\_\_\_ thermosphere? \_\_\_\_\_

3. What is the approximate height and temperature of the:

tropopause: \_\_\_\_\_

stratopause: \_\_\_\_\_

mesopause: \_\_\_\_\_

4. What causes the temperature to increase with height through the stratosphere, and decrease with height through the mesosphere?

5. What causes the temperature to decrease with height in the troposphere?