

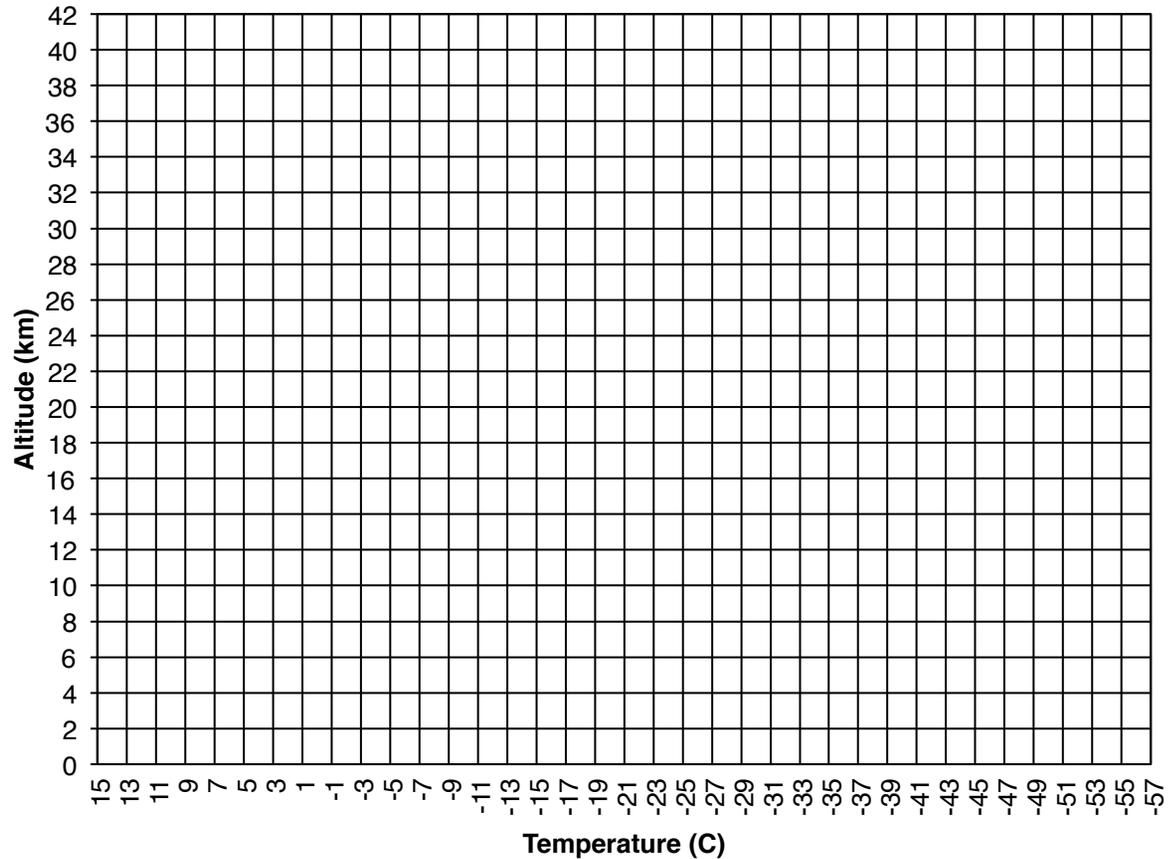
Name: _____

How Does Temperature Change with Altitude?

Create a graph using the following information from the table below. Temperature is in degrees Celcius and gets cooler the further to the right on the x-axis. Plot the data on the graph. Using a colored pencil, connect the plots, creating a line graph.

Altitude (km above Earth's surface)	Temperature (C)
0	15
2	2
4	-11
6	-24
8	-37
10	-50
12	-57
14	-57
16	-57
18	-57
20	-57
22	-57
24	-57
26	-51
28	-49
30	-47
32	-45
34	-39
36	-34
38	-28
40	-23

Temperature Vs. Altitude



After completing the graph of Temperature Vs. Altitude, what changes or trends do you notice?

Mark on the graph 39km (about 128,000 feet) the approximate altitude from which Felix Baumgartner jumped. Then using a different color pencil, trace the line until the temperature is at the Earth's surface (altitude is 0 km).

Circle the correct answer:

- Did temperature *increase, decrease, or stay the same* as Felix fell from **39 km to 20 km** above Earth's surface?
- Did temperature *increase, decrease, or stay the same* as Felix fell from **20 km to 11 km** above Earth's surface?
- Did temperature *increase, decrease, or stay the same* as Felix fell from **11 km to the Earth's surface (0 km)**?

Answer the following:

- What happened to the temperature as Felix fell? Can you determine 2 layers based on temperature changes?

What happens to the temperature that divides the layers

- Do any of these observations coincide with the visual observations that you made in the video?
