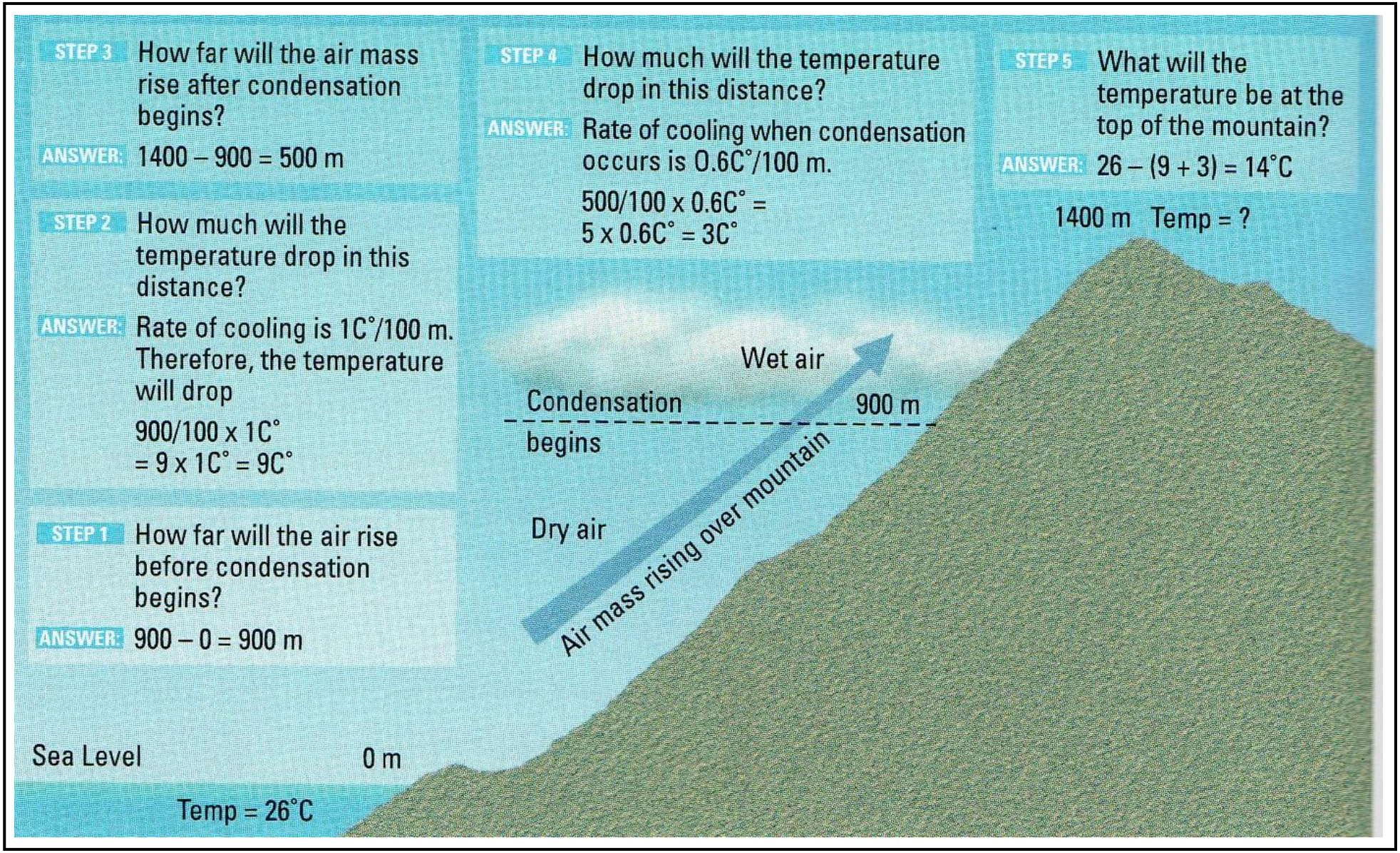
4. Elevation

Calculating Changes in Temperature of a Rising Air Mass



Instructions: Using the following scenario, determine the change in temperature of the air mass rising over Mount Garibaldi. Record your work for each step in the space provided. Draw a diagram of Mount Garibaldi in the space below.

Mount Garibaldi, north of Vancouver, is 2700 meters high. The temperature at the water front in Vancouver is 24°C. What will be the temperature of the air at the mountain top if condensation starts at 1200 meters?

Steps:

Diagram of Mount Garibaldi: