

Solutions

Each answer shows the steps, then the **result**.

2.1

- It gets cooler with height (warmest near the ground)

2.2

- Warm air sits above cooler air near the ground

2.3

- The trapped surface air cannot rise, so pollutants accumulate near the ground

3.1 B

- above cool air stops the surface air from rising

3.2

(a)

- The warm layer above traps the cool surface air, which cannot rise, so pollutants accumulate near the ground

(b)

- Wind (or the ground heating to break the inversion)

3.3

- Cool, dense air sinks and pools at the valley floor while warmer air sits above it, creating the inversion layer, especially on calm clear nights