Response Sheet—Investigation 2

A student and his friends hiked up to a fire tower at an elevation of 2,445 m. On top of the mountain, the student drank the last of his water. He put the cap back on the plastic bottle, tossed it in his day pack, and forgot about it.

When the student returned home and unpacked his stuff, he found his water bottle. It looked like this.

![Water Bottle Image]

The student thought,
I must have sat on my water bottle, or something, to squash it like that.

When he unscrewed the cap, he heard a hissing sound, and the bottle slowly returned to its proper shape. What do you think happened to his bottle? Can you explain his squashed bottle and the hissing sound? Use diagrams to help you explain.