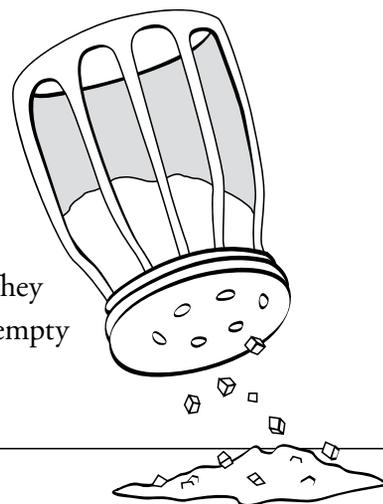


Salt Crystals

Boris and his friends were looking at tiny crystals of salt with a magnifying glass. They wondered what they would see if they had a magnifying device powerful enough to see the atoms. This is what they thought they might see:



Boris: “The atoms would be packed tightly together. They would look like a solid material without any empty spaces between the atoms.”

Portia: “I think I would see vibrating atoms arranged in an orderly way with spaces between them. There would be nothing in the spaces, not even air.”

Vivi: “I think I would see atoms not moving and arranged in an orderly way with spaces between them.”

Leif: “I think I would see vibrating atoms arranged in an orderly way. There would be space between the atoms. The space would be filled with air.”

Whit: “I think I would see atoms in the shape of small cubes. Each of these small cubes would join together to form a larger cube of salt.”

Guillermo: “I think I would see lots of vibrating atoms connected together by little lines. The lines connecting each atom give them a definite cube shape.”

Shantidas: “I think I would see individual atoms moving from place to place. They would be moving all about the inside of the crystal shape.”

Which student do you most agree with and why? Draw a picture that best represents how you think you would see the atoms in a salt crystal if you had a powerful magnifying device. Explain your picture.
