

AIR IN A SYRINGE B

1. Why did you draw the particles in syringe B the way you did?

Nothing changed to change the number of particles in a given volume (space).

The number of particles in half a syringe was 20 at the start, and still is.

They fill the space evenly.

2. Why did you draw the particles in syringe C the way you did?

The syringe was clamped shut, but nothing changed to change the number of particles in a given volume (space). The number of particles in half a syringe was 20 at the start, and still is. They fill the space evenly.

3. Why did you draw the particles in syringe D the way you did?

The volume was reduced in half. The 20 particles had no place to go, so they were compressed into the smaller space (pushed closer together). They fill the space evenly.

4. Why did you draw the particles in syringe E the way you did?

The volume was doubled. The 20 particles expanded to fill the space. The particles are farther apart, but still fill the space evenly.

5. What happens to the air particles when air expands?

Nothing happens to the particles; they just fly farther apart.

6. What happens to the air particles when air is compressed?

Nothing happens to the particles; they just get pushed closer together.