

Here are the 5 Long Answer Questions based strictly on the provided chapter text:

1. Describe the three characteristics of particles of matter as demonstrated in the activities mentioned in the chapter (activities 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8).
2. Explain the concept of diffusion with reference to the activities performed in the chapter. How does the rate of diffusion change with temperature?
3. Compare the properties of solids, liquids, and gases based on their shape, volume, and compressibility. Use examples from the chapter to support your answer.
4. What evidence from the chapter activities suggests that particles of matter have space between them? How does this explain phenomena like making tea or lemonade?
5. Using the human chain activities (activities 1.6) and the substance activities (activities 1.7 and 1.8), explain the idea that the force of attraction between particles of matter varies.