

Solids, Liquids, and Gases, Capstone, 2008 9781432914387 2008 32 pages Angela Royston

Gases, liquids and solids are all made up of atoms, molecules, and/or ions, but the behaviors of these particles differ in the three phases. The following figure illustrates the microscopic differences. Microscopic view of a gas. Microscopic view of a liquid. Microscopic view of a solid. Note that: Particles in a: gas are well separated with no regular arrangement. liquid are close together with no regular arrangement. solid are tightly packed, usually in a regular pattern. Particles in a: gas vibrate and move freely at high speeds. liquid vibrate, move about, and slide past each other. solid Activity: Comparing solids, liquids and gases. Accessing and recalling information, comparing. CAPS suggested. Investigation: Comparing the diffusion of particles in a gas and in a liquid. Hypothesising, observing, identifying variables, recording information, comparing, interpreting information. CAPS suggested. 2.3 Change of state (2 hours). Tasks. Skills. Recommendation. Solids, liquids and gases are known as states of matter. Before we look at why things are called solids, liquids or gases, we need to know more about matter. This animation explores water as a solid, liquid and gas. The water molecules stay the same, but they behave differently as they change from one form to another. Matter is everything around us. Matter can be a confusing word because it has several meanings. We often hear phrases like "What is the matter?" or "It doesn't matter". Scientists have a different meaning for matter "matter is anything that occupies space and has mass. Matter is made up of tiny particles. These can be atoms or groups of atoms called molecules.