

**WORD LIST**

states	space	condensation
gases	properties	mass
melting	fluids	molecules
matter	volume	solids
forms	liquids	evaporation

**Goal** • Demonstrate your understanding of the particle theory.

**What to Do**

1. There are three circles below, labelled solid, liquid, and gas. Use Xs to represent particles of matter. Draw Xs inside each circle to illustrate the distance between particles in each state of matter.

2. Use your knowledge of the particle theory of matter to fill in the blanks in the following sentences.

(a) Solids, liquids and gases are made up of \_\_\_\_\_.

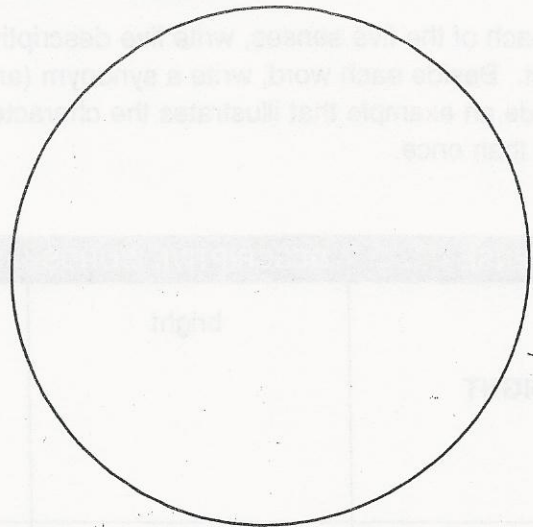
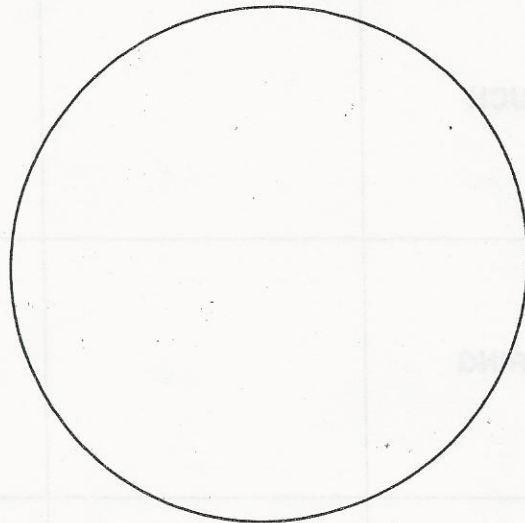
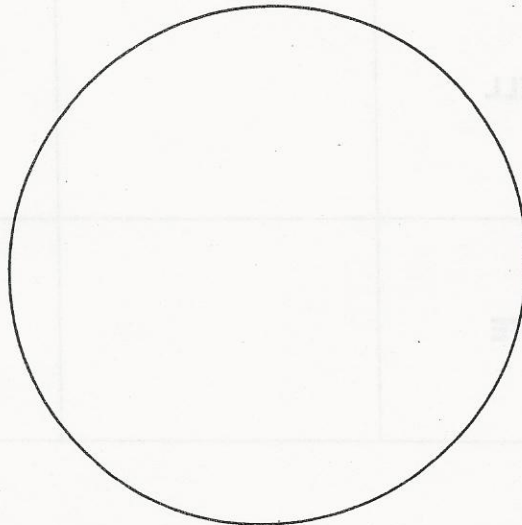
(b) A \_\_\_\_\_ is made up of particles that are closely packed together.

(c) A gas is made up of particles that are \_\_\_\_\_.

(d) Particles in a liquid are \_\_\_\_\_

than those in a solid.

(e) The \_\_\_\_\_ explains the differences in states of matter.

**Solid****Liquid****Gas**

Blackline Master 1.1.1

*Descriptive Words*

For each of the five senses, write five descriptive words that could be used to describe an object. Beside each word, write a synonym (another word with the same meaning). Provide an example that illustrates the characteristics described. No word may appear more than once.

SENSE	DESCRIPTIVE WORDS	SYNONYM	EXAMPLE
SIGHT	bright	glistening	snow
TOUCH			
HEARING			
SMELL			
TASTE			

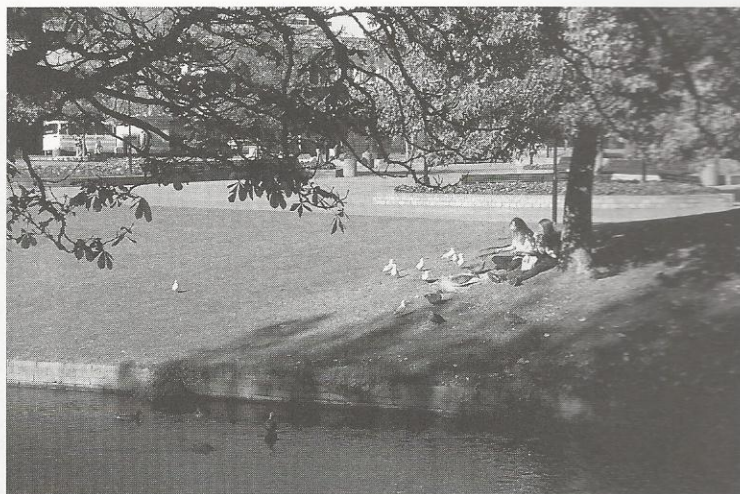
► **Key Question: What is matter made of and how does it behave?**

Think about the things you see and touch every day. You may see trees and cars. You may touch paper, wood, and stone. What are these things made of?

All the objects around you are made of matter. Your body is made of matter. Even air is made of matter! **Matter** is anything that has mass and takes up space. Look at Figure 1 to find more kinds of matter.

**matter**

anything that takes up space and has mass



**Figure 1** What kinds of matter can you see?

## THE SCIENCE OF MATTER

The study of matter and its changes is called **chemistry**. Scientists who work in chemistry are called chemists.

Chemists study matter. Chemists can often imitate, or copy, the matter found in nature using artificial chemicals.

Artificial chemicals can be good for people. For example, some medicines are made from matter in plants. Chemists can also use artificial chemicals to make medicines that cost less. The medicines with artificial chemicals are often purer than the medicines made from plants.

**chemistry**

the study of matter and its changes