

Date: Answer key

Chapter 5, Lessons B & C Practice Worksheet (5 B & C)

1. Compare between the states of matter using the words below.

	solid	liquid
arrangement of particles	tightly/closely packed	loosely packed
movement of particles	vibrate	move around one another

2. Butter melts at 35 °C.

a. Draw the particle model that shows the process of butter melting.



b. Melting butter is a physical change. Explain in one sentence.

No new substance is formed. There is only a change in state.

3. Flour is a solid that acts like a liquid.

In 2 ways write how it acts like a liquid.

1. It can flow.
2. It can be poured and takes the shape of the container.

4. Mia finds this information about some substances.

- a. Write 2 substances in the table that are **liquid** in your opinion?

B & C

- b. Sami says substance F could be a solid.
Is he correct?

Yes, some solids behave like liquids.

They behave like liquids because
they are made up of many small grains.
So they flow, can be poured and take
the shape of the container.

Examples: salt, sand, sugar, rice, etc....

substance	does the substance flow easily?
A	no
B	yes
C	yes
D	no
E	yes
F	yes

5. Write **physical** or **chemical change** next to the statement that describes it best.

a. A change in color is noticed. chemical change

b. There is a new substance formed. chemical change

c. A change in size, shape and appearance is noticed. physical change

6. **Rust** is a new substance that forms when two or more substances react together.

Name the substances that react with each other to form rust.

iron + air + water → rust

7. Fill in the blanks.

substance: something that is made of one type of matter

chemical change: a process that results in the formation of
one or more new substances

freezing/solidification: the change from a liquid into a solid

particle model: the model that describes the way particles
in matter are arranged and how they move about

material : the matter that an object is made of

particles : tiny units that make up matter

fair test : an investigation where only one variable is changed and all other conditions are kept the same

melting : the change from a solid into a liquid

physical change : a change in which no new substance is formed

variables : factors or conditions that can be changed or kept the same in an investigation