

Answer key

Date: _____

Chapter 5: Practice Worksheet (5.C.2)

1. Copy the letter of the word that best completes the sentence.

a. **X** take the shape of the container.

x. Liquids o. Liquids and solids z. Solids

b. I can change the state of matter by letting it gain or lose **o**.

x. light o. heat z. sound

c. The particles are represented by flat circles in the **o**.

x. fair test o. particle model z. energy

2. Fill in the blanks using **four** of the words provided in the word bank.

vibrate	move fast	energy	freezing point	0°C	100°C
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a. The **freezing point** is the temperature at which a substance changes from a liquid to a solid.

b. In a solid, the particles **vibrate**.

c. At **0° C**, an ice cube starts to turn into liquid water.

3. Choose **all** the correct options.

a. A horn gives off (heat / **sound** / light) energy.

b. The sun produces (sound / **heat** / **light**) energy.

4. Label the change as **physical** or **chemical**.

rust forming on metal



chemical

baking bread



melting ice-cream



physical

5. Match.

heat	a process where a new substance is formed
chemical reaction	It is made up of one or more substances.
fair test	An investigation where only one variable is changed and all other conditions stay the same.
material	A type of energy that moves from a hot object to a cold object.

6. Stearic acid is a white solid at room temperature.

Carlos **heats** some stearic acid until it becomes a **liquid**.

a. What is the **name** of the **process** when a solid becomes a liquid?

melting

b. Carlos lets the stearic acid **cool** down. It **changes** back into a **solid**.

What is the **name** of this **process**? **freezing or solidification**

7. Tia has four different materials.



glass marble



chalk powder



copper pipe



wood cube

a. These material are all solids

b. Write down one thing about the **arrangement** of particles in all these materials.

The particles are packed closely together and have fixed positions.

c. Write down one thing about the **movement** of particles in all these materials.

They vibrate or move back and forth quickly.
They cannot move around one another.

d. Which one of these materials can be poured like a liquid?

Circle the correct answer then explain why you chose this material.

glass marble

chalk powder

copper pipe

wooden cube

Explain:

It is made of many small grains, when poured they take the shape of the container