Grade: Five	Subject: Science	Term: 2 nd	Time: 40min
Teacher's Name:		Week: 3	Day: 1
Chapter 5: Physical and Chemical Changes of		Topic: Matter and its States	
Matter			

Students Learning Outcomes:

At the end of this period, the students will be able to:

• Identify observable changes in materials that do not result in new materials with different properties (e.g., dissolving, crushing aluminum can).

Resource Materials:

Chalk/marker, white/blackboard, Science Textbook, Worksheet

Warm-up Activities:

5mins

Before beginning the lesson, ask students to say "Tasmiya."

Ask them: What are different states of matter? Can you name a substance that exists in all the three states on Earth? Wait for their responses.

Teaching and Learning Activities:

25mins

- Write down the topic name 'Matter and its States' on board.
- Tell students today we will learn about matter and its states.
- Tell them all the time changes are taking place around us.
- Matter: Matter is anything around us that occupies space and has mass.
 The matter exists in three states: solid, liquid and gas. Examples include: ice, water, steam etc.
- When you boil an egg, it becomes hard. If you put ice out of freezer, it will melt. Egg and ice undergo a change.
- A change can be of two types.
 - Physical change
 - Chemical change
- Write 'Physical change' on the board.
- Tell students today we will learn about physical changes in matter.
- Physical change is only change in physical appearance. A change in which the basic composition of a material or thing does not change and no new material is formed.
- Change in size, shape, structure is a physical change.
- Crushing, cutting, tearing, etc. are examples of physical changes.

Review: 3mins

Explain the main points about changes in matter.

Evaluation: 5mins

To check the understanding of students, ask them:

- What is matter? List its states.
 - What is physical change?

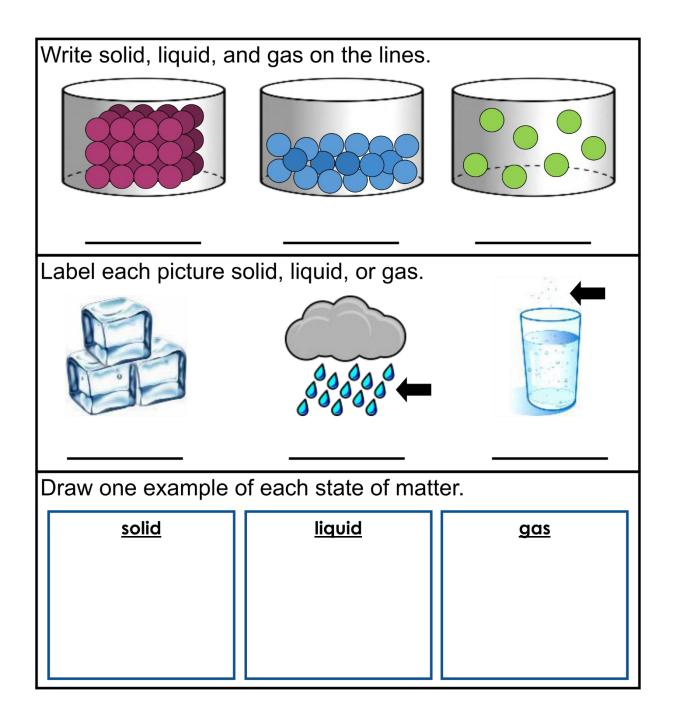
• Give some examples of physical changes.

Homework: 2mins

Ask students to learn the topic. And solve the given worksheet.

Worksheet

Q1. States of Matter



Grade: Five	Subject: Science		Term: 2 nd	Time: 40min	
Teacher's Name:	ne:		Week: 3	Day: 2	
Chapter 5: Physical and		Topic: Prod	esses in Change of	State of Matter	
Chemical Changes of Matter					

Students Learning Outcomes:

At the end of this period, the students will be able to:

 Recognize that matter can be changed from one state to another by heating or cooling (candle wax)

Resource Materials:

Chalk/marker, white/blackboard, Science Textbook, Worksheet

Warm-up Activities:

5mins

Before beginning the lesson, ask students to say "Tasmiya."

Ask them: What is change? What are types of changes in matter? What is a physical change? Wait for their responses.

Teaching and Learning Activities:

25mins

- Write the topic name 'Process in changes of state of matter' on the board.
- Tell the students today we will learn about processes in change of state of matter.
- Tell students when you put ice out of refrigerator, it melts. Ask students why? Let them respond.
- Tell them the temperature of its surrounding is higher than the refrigerator so it changes its state from solid to liquid.
- Matter undergoes changes in its states by changing the temperature.
- Tell them, A change of state is a physical change in a matter.
- Matter can be changed from one state to another on heating or cooling.
- They are reversible changes and do not involve any changes in the chemical makeup of the matter.
- Tell students when matter is heated, its particles gain energy and start moving faster.
- On other hand when matter is cooled, its particles losses energy. The forces
 of attraction become stronger and they come closer to each other and their
 state changes.
- Tell the student about the common changes of the state include evaporation, boiling, sublimation, condensation, melting and freezing.

Review: 3mins

Explain the main points about Processes in changes of states of matter.

Evaluation: 5mins

To check the understanding of students, ask them:

What is physical change?

• Give some examples of physical change.

Homework: 2mins

Ask students to learn the topic. And solve the given worksheet.

Worksheet

Name	the type of changes.	_
List so	ome physical changes in your surroundings.	
1.		
2.		
3.		
4.		
5.		
How r	matter changes its state on heating?	

Grade: Five	Subject: Science	Term: 2 nd	Time: 40min
Teacher's Name: _		Week: 3	Day: 3
Chapter 5: Physica	l and Chemical Changes of	Topic: Melting	
Matter			

Students Learning Outcomes:

At the end of this period, the students will be able to:

• Describe and demonstrate the states of water (i.e., melting, freezing, boiling, evaporation, and condensation).

Resource Materials:

Chalk/marker, white/blackboard, Science Textbook

Warm-up Activities:

5mins

Before beginning the lesson, ask students to say "Tasmiya."

Ask them: How matter changes state? Wait for their responses.

Teaching and Learning Activities:

25mins

- Write the topic name 'Melting' on the board.
- Tell the students today we will learn about melting.
- **Melting:** The change in the solid to liquid phase at a constant temperature is called melting.
- On heating, particles of a solid start moving faster unit they get free from their fixed positions.
- The temperature at which melting occurs is called the melting point of the solid.
- Heat is released from the solid in this process.
- Melting point of ice is 0°C.
- Tell them melting of ice cream on a hot summer day or melting butter in a frying pan are some common examples of melting.
- Tell them to search from internet and find melting points of different materials and note them in their notebooks. Check their work.

Review: 3mins

Explain the main points about melting.

Evaluation: 5mins

To check the understanding of students, ask them:

- What is melting?
- What is melting point?

Homework: 2mins

Ask students to learn the topic.

Grade: Five	Subject: Science	Term: 2 nd	Time: 40min
Teacher's Name: _		Week: 3	Day: 4
Chapter 5: Physical and Chemical Changes of		Topic: Boiling	
Matter			

Students Learning Outcomes:

At the end of this period, the students will be able to:

 Describe and demonstrate the states of water (i.e., melting, freezing, boiling, evaporation, and condensation).

Resource Materials:

Chalk/marker, white/blackboard, Science Textbook

Warm-up Activities:

5mins

Before beginning the lesson, ask students to say "Tasmiya."

Ask them: What do you know about melting? Wait for their responses.

Teaching and Learning Activities:

25mins

- Write the topic name 'Boiling' on the board.
- Tell the students today we will learn about boiling.
- Tell students when a liquid is heated, it is converted into gas. This process is called boiling.
- On heating, liquid first converts into bubbles and then into a gas. In liquids particles move freely but they are close to each other.
- Heat increases the speed of the particles and decreases the force of attraction between them.
- Thus, they start moving faster and move far apart from each other.
- The temperature at which liquid boils is called boiling point. Boiling point of water is 100°C.
- Ask the students to search from internet and find boiling points of different materials and note them in notebooks. Check their work.

Review:

Explain the main points about boiling.

Evaluation:

5mins

To check the understanding of students, ask them:

- What is boiling?
- What is boiling point?

Homework: 2mins

Ask students to learn the topic.

Grade: Five	Subject: Science		Term: 2 nd		Time: 40min
Teacher's Name: _			Week: 3		Day: 5
Chapter 5: Physica	l and Chemical Changes		Topic: Freezing		
of Matter					

Students Learning Outcomes:

At the end of this period, the students will be able to:

 Describe and demonstrate the states of water (i.e., melting, freezing, boiling, evaporation, and condensation).

Resource Materials:

Chalk/marker, white/blackboard, Science Textbook

Warm-up Activities:

5mins

Before beginning the lesson, ask students to say "Tasmiya."

Ask them: What do you know about boiling? Wait for their responses. Appreciate them for good response.

Teaching and Learning Activities:

25mins

- Write the topic name 'Freezing' on the board.
- Today we will learn about freezing.
- **Freezing:** when a liquid is cooled, it is converted into solids. This process is called freezing.
- When liquid is cooled, the speed of its particles decreases, they come close to each other, and their intramolecular forces become strong enough to change the liquid into the solid state.
- The temperature at which liquid freezes is called freezing point.
- Freezing point of water is 0 °C.
- Ask students to give examples of freezing from daily life.

		•	 •	
Review:				3mins
Explain the main p	oints about	freezing.		
Evaluation:				5mins
Explain the main p	oints about	freezing.		

To check the understanding of students, ask them:

What is freezing? Give its examples.

Homework: 2mins

Ask students to learn the topic.