

# Lesson Plan

<b>Grade:</b> Five	<b>Subject:</b> Science	<b>Term:</b> 2 <sup>nd</sup>	<b>Time:</b> 40min
<b>Teacher's Name:</b> _____		<b>Week:</b> 4	<b>Day:</b> 1
<b>Chapter 5:</b> Physical and Chemical Changes of Matter			<b>Topic:</b> Condensation

## 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 freezing? What do you know about melting?

Wait for their responses. Appreciate them for good response.

## Teaching and Learning Activities:

**25mins**

- Write the topic name 'Condensation' on the board.
- Today we will learn about other states of matter.
- **Condensation:** Tell students when water vapor present in air comes in contact with cool surface, they turn into tiny water droplets. This process is called condensation.
- During this process vapors of water come closer to each other and take the shape of a liquid.
- Dew drops on grass is a common example of condensation.
- Tell them, water droplets appear on a cool glass surface is an example of condensation.
- Ask students to give examples of condensation from daily life. Let them respond. Ask them to open their textbook and do the activity.

## Review:

**3mins**

Explain the main points about condensation.

## Evaluation:

**5mins**

To check the understanding of students, ask them:

- What is condensation? Give its examples.

## Homework:

**2mins**

Ask students to learn the topic.

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<b>Grade:</b> Five	<b>Subject:</b> Science	<b>Term:</b> 2 <sup>nd</sup>	<b>Time:</b> 40min
<b>Teacher's Name:</b> _____		<b>Week:</b> 4	<b>Day:</b> 2
<b>Chapter 5:</b> Physical and Chemical Changes of Matter		<b>Topic:</b> Evaporation and Sublimation	

## 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 condensation? What do you know about freezing? Wait for their responses.

## Teaching and Learning Activities:

**25mins**

- Write the topic name 'Evaporation' on the board.
- Tell the students today we will learn about evaporation and sublimation. Tell them, first about evaporation.
- Evaporation is the process by which a liquid turn into gas on heating.
- Ask students to take a bowl of water and place it under sunlight. Observe after few hours. Note your observations.
- You will see a decreased level of water in bowl.
- This is due to water molecules from bowl move into air. This process is called evaporation. It occurs at all times.
- Common examples of evaporation are drying of wet clothes in the sun.
- Now tell the students about 'Sublimation'.
- Tell them, when a solid material changes directly into gas without becoming liquid first, the process is called sublimation e.g.: dry, ice

## Review:

**3mins**

Explain the main points about evaporation and sublimation.

## Evaluation:

**5mins**

To check the understanding of students, ask them:

- What is an evaporation?
- Give some examples of evaporation.
- What is sublimation?

## Homework:

**2mins**

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

## Worksheet

Define the following terms.

Melting:

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Evaporation:

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Freezing:

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Boiling:

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Condensation:

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# Lesson Plan

<b>Grade:</b> Five	<b>Subject:</b> Science	<b>Term:</b> 2 <sup>nd</sup>	<b>Time:</b> 40min
<b>Teacher's Name:</b> _____		<b>Week:</b> 4	<b>Day:</b> 3
<b>Chapter 5:</b> Physical and Chemical Changes of Matter		<b>Topic:</b> Dissolving Substances in the Water	

## Students Learning Outcomes:

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

- Distinguish between strong and weak concentrations of simple solutions.

## 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 evaporation? What is sublimation? Wait for their responses.

## Teaching and Learning Activities:

**25mins**

- Write down the topic name 'Dissolving Substances in the water' on board.
- Tell the students today we will learn about dissolving substances in the water.
- A substance that dissolves in water is called as a solvent.
- The thing that is dissolved is called as a solute.
- Solute and solvent together make a solution.
- Ask students what will happen if you mix sugar in water? Let them respond.
- Now tell them, it will dissolve in water. Because sugar is soluble in water. It forms a solution.
- A solution is a homogeneous mixture of two or more substances.
- Orange juice, lemonade, tea, etc. are examples of some solutions.
- Sugar (solute) + Water (Solvent) → Sweet Water (Solution).
- Tell them, Water is a "Universal Solvent" because it is capable of dissolving lots of substance than any other liquid.
- Ask students to prepare different concentrations of salt solution by adding 1, 2 and 3 spoons of salt in one glass of water. Check their work.

## Review:

**3mins**

Explain the main points about dissolving substance in the water.

## Evaluation:

**5mins**

To check the understanding of students, ask them:

- What are solutions?
- What is solvent?
- What is solute?

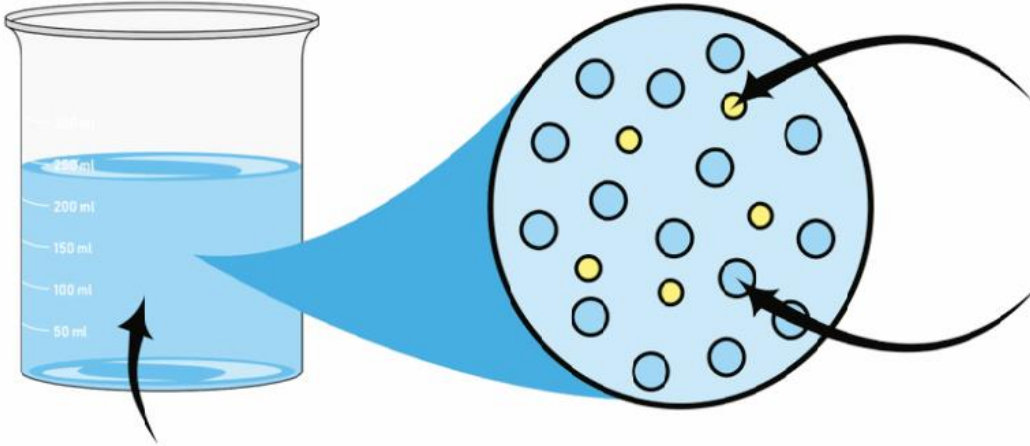
## Homework:

**2mins**

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

## Worksheet

**Q1. Label the given figure.**



**Q2. Differentiate between solvent, solute and solution.**

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<b>Grade:</b> Five	<b>Subject:</b> Science	<b>Term:</b> 2 <sup>nd</sup>	<b>Time:</b> 40min
<b>Teacher's Name:</b> _____		<b>Week:</b> 4	<b>Day:</b> 4
<b>Chapter 5:</b> Physical and Chemical Changes of Matter		<b>Topic:</b> Dissolving Substances in the Water	

## Students Learning Outcomes:

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

- Identify ways of accelerating the process of dissolving materials in given amount of water and provide reasoning (i.e., increasing the temperature, stirring, and breaking the solid into smaller pieces increases the process of dissolving).

## 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 solvent and solute? Wait for their responses.

## Teaching and Learning Activities:

25mins

- Write the topic name 'Ways of dissolving substances in the water' on the board.
- Tell students, the rate of dissolving substances in water is increased by the following ways.
- Size of solute particles
- Stirring
- Increasing Temperature
- **Size of solute particles:** Size also affects rate of dissolution. Powdered sugar will dissolve quickly as compared to solid cube of sugar.
- **Stirring:** Stirring also increases rate of dissolution. Due to stirring solute particles react with solvent particles more frequently and dissolve quickly.
- **Increasing Temperature:** Heating a solution increases the movement of both the particles of solute and solvent. It causes the solute particles to interact with solvent particles more frequently which in turn is responsible for the dissolution of solute rapidly.
- Ask students to open textbook and do the activities A, B and C. Now ask the students about concentrated solution and dilute solution.
- Concentrated solution or strong solution is the one that has more amount of the dissolved solute in the solvent.
- **Dilute solution:** A dilute solution is the one that has small amount of the dissolved solute in the solvent.
- It is also called a weak solution.
- Ask the students to open their textbooks and do the activity. Check their work and appreciate them.

**Review:****3mins**

Explain the main points about ways of dissolving substance in the water.

**Evaluation:****5mins**

To check the understanding of students, ask them:

- What are the factors that affect dissolution?
- How increasing temperature affect the dissolution?
- Differentiate between weak and strong solution.

**Homework:****2mins**

Ask students to learn the topic.

# Lesson Plan

<b>Grade:</b> Five	<b>Subject:</b> Science	<b>Term:</b> 2 <sup>nd</sup>	<b>Time:</b> 40min
<b>Teacher's Name:</b> _____		<b>Week:</b> 4	<b>Day:</b> 5
<b>Chapter 5:</b> Physical and Chemical Changes of Matter		<b>Topic:</b> Chemical Changes, Decaying	

## Students Learning Outcomes:

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

- Identify observable changes in materials that make new materials with different properties (e.g., decaying, burning, rusting).

## Resource Materials:

Chalk/marker, white/blackboard, Science Textbook

## Warm-up Activities:

**5mins**

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

Ask them: Wait for their responses. What do you know about concentration and dilute solution?

## Teaching and Learning Activities:

**30mins**

- Write the topic name 'Chemical change' on the board.
- Tell the students today we will learn about chemical change and its examples.
- A change in which one or more new substances are formed is called a chemical change.
- A chemical change is also called a chemical reaction.
- It is a permanent or irreversible change.
- Examples include burning of paper, decaying of food, rusting of iron, etc.
- Now write 'Decaying' on board.
- Tell them when they are placed something like fruits, vegetables etc. in open air, microorganisms like bacteria and fungi act on them. They started to rot.
- The decomposition of matter into simple particles is called decaying. Decaying is the process in which the waste matter and dead organisms decompose into simple components by bacteria and fungi.
- Ask the students to open their textbook and do the activity.

## Review:

**3mins**

Explain the main points about chemical change and decaying.

## Evaluation:

**5mins**

To check the understanding of students, ask them:

- What is a chemical change?
- Give some examples of chemical change.
- What is decaying?
- Give some examples of decaying.



**Homework:**

**2mins**

Ask students to learn the topic.