

Lesson Plan

Grade: Four

Subject: Science

Term: 2nd

Time: 40min

Teacher's Name: _____

Week: 2

Day: 1

Chap 4: Matter and Its Characteristics

Topic: Metals

Students Learning Outcomes

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

- Explore the properties of metals (i.e., appearance, texture, color, odor, density).

Resource Materials:

Chalk/marker, white/blackboard, Science Textbook

Warm-up Activities

5mins

- Before beginning the lesson, ask students to say "Tasmiya."
- Ask them: What are conductors and insulators? Wait for their responses. Appreciate them for correct answers.

Teaching and Learning Activities:

25mins

- Write the topic name 'Metals' on the board.
- Tell students today we will learn about metals.
- Metals are hard and shiny materials. They are good conductor of electricity.
- Among solids, metals are of great importance. It is a material which is malleable, ductile and shiny.
- Metals have several uses in everyday life.
- **Texture:** Some metals are hard and strong while others are soft. Metals used in making machines and tools are strong for example iron.
- Soft metals include gold and silver.
- **Appearance:** Metals have shiny appearance that means they have luster. Metals have shiny surface because they have a lot of free electrons that form a net on surface of metals.
- Place some wooden materials and some metals. Ask students to differentiate between their luster. Check their work. Tell the students about non-luster metal. Sodium is non-luster metal because it does not have any free electrons.

Review:

3mins

Explain the main points about properties of metals.

Evaluation:

5mins

To check the understanding of students, ask them:

- What are metals?
- What are the properties of metals?
- Why are metals shiny?

Homework:

2mins

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

Worksheet

Q1. Write down names of lustrous and non-lustrous materials.

Lustrous materials	Non-Lustrous materials

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Week: 2

Day: 2

Chap 4: Matter and Its Characteristics

Topic: Properties of Metals

Students Learning Outcomes

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

- Identify properties of metal (conducting heat and electricity) and relate these properties to use of metals (i.e., a copper electric wire, an iron cooking pot).

Resource Materials:

Chalk/marker, white/blackboard, Science Textbook

Warm-up Activities

5mins

- Before beginning the lesson, ask students to say "Tasmiya."
- Ask them: What are properties of metals? Wait for their responses. Appreciate them for good responses.

Teaching and Learning Activities:

25mins

- Write down the topic name 'Properties of Metals' on board.
- Tell students today we are going to learn about conductivity of metals.
- Metals are good conductor of heat and electricity.
- **Conductivity of heat:** We use aluminum or steel containers to cook food. It is because these metals allow heat to pass through them. The property of material that allows heat to pass through it is called conductivity of heat.
- Mercury is also good conductor of heat that is why it expands on increasing temperature. This principle is used in thermometers.
- **Conductivity of electricity:** Metals are also good conductors of electricity. Metal wires such as copper are used due to its property of conducting heat and electricity. In computers, silver or gold wires are used. Ask the students: **Which metals are used for making kitchen utensils? and why?**
- Write down the answer on board: **"Steel and aluminum are used for making kitchen utensils. It is because they are good conductor of heat and allow heat to pass through them."**
- Ask students to open their textbooks and do activity. Tell them to select the conductors of heat and insulators among the following materials. Check their work.

Review:

3mins

Explain the main points about properties of metals.

Evaluation:

5mins

To evaluate the understanding of students, ask them:

- What is meant by conductivity of heat?
- Why copper wires are used?

- Which metals are used for making utensils?

Homework:

2mins

Ask students to learn the topic.

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Teacher's Name: _____

Week: 2

Day: 3

Chap 4: Matter and Its Characteristics

Topic: Properties of Metals

Students Learning Outcomes

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

- Explore the properties of metals (i.e., appearance, texture, color, odor, density).

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 do you know about conductivity? Wait for their responses. Appreciate them for good responses.

Teaching and Learning Activities:

30mins

- Write down the topic name "Properties of Metals" on board.
- Tell students today we are going to learn about remaining properties of metals.
- **Color:** Metals have different colors. Gold is yellow, copper is red. But most of the metals have grey color. Some metals can change their color.
- The copper changes its color from red to green when placed in air
- **Density:** Density is defined as mass per unit volume of an object. Two things having same volume can have different densities due to difference in their mass. Metals have high density due to which they sink in water.
- Ask the students: "What is density"? Wait a minute for their response.
- And write down answer on board: "Density is defined as mass per unit volume of an object.
- It tells how tightly packed particles are in matter.
- **Appearance:** Tell the students metals have glossy and shiny surfaces, unless get rusted. Therefore, metals like gold and silver are used to make jewelry.

Review:

3mins

Explain the main points about metals color, density, and appearance.

Evaluation:

0mins

To check the understanding of students, ask them:

- What do you know about color of metals?
- What is density?
- Do metals have high density?

Homework:

2mins

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

Worksheet

Q1: Write the color name of given metals.

	
Zinc: _____	Aluminum: _____
	
Chromium: _____	Silver: _____
	
Tin: _____	Gold: _____

Q2: Write the properties of the following metals in.

Metal	Appearance	Texture	Color
Steel			
Iron			
Silver			
Aluminum			
Copper			

Lesson Plan

Grade: Four

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Time: 40min

Teacher's Name: _____

Week: 2

Day: 4

Chap 4: Matter and Its Characteristics

Topic: Exercise

Students Learning Outcomes

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

- Solve exercises.

Resource Materials:

Chalk/marker, white/black board, Science Textbook

Teaching and Learning Activities:

30mins

- Before beginning the lesson, ask students to say "Tasmiya."
- Tell students they are going to solve the exercise of chapter 4.
- Briefly explain all topics and ask questions related to exercise. Wait for their responses. Ask the student to open their textbooks and solve MCQ's.
- Help them to match the column.
- Ask the students to open their textbooks and help the students to make the project. Help them if needed.

Review:

0mins

N/A

Evaluation:

5mins

To evaluate the understanding of students, check their work.

Homework:

5mins

Ask the students to revise the exercise of chapter 4.

Lesson Plan

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Teacher's Name: _____

Week: 2

Day: 5

Chap 4: Matter and Its Characteristics

Topic: Exercise

Students Learning Outcomes

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

- Solve exercises.

Resource Materials:

Chalk/marker, white/black board, Science Textbook

Teaching and Learning Activities:

30mins

- Before beginning the lesson, ask students to say "Tasmiya."
- Tell students they are going to solve the exercise of chapter 4.
- Briefly explain all topics and ask questions related to them. Wait for their responses. Ask the student to open their textbooks and solve MCQ's.
- Help them to match the columns.
- Ask the students to open their textbooks and help the students to make the project.

Review:

0mins

N/A

Evaluation:

5mins

To evaluate the understanding of students, check their work.

Homework:

5mins

Ask the students to revise the exercise of chapter 4.