Grade: Five	Subject: Science	Term: 1 st	Time: 40mins
Teacher's Name:		Week: 6	Day: 1
Chap 1: Microorganisms		Topic: Microc	organisms

Student Learning Outcomes:

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

Define and describe microorganisms.

Resource Materials:

Chalk/marker, white/blackboard, wallchart, microscope, Science Textbook 5 **Teaching & Learning Activities:**

Warm-up Activities:

5mins

- Before beginning the lesson, ask students to say "Tasmiya."
- Ask students: What do you know about microorganisms? Can you see all types of organisms around you? Take their responses.

Teaching & Learning Activities:

25mins

- Begin your lesson by writing 'Microorganisms' on the board.
- Hand out color photograph of microbes to each group and ask students to make observations about microorganisms.
- Have groups share out and gather class thoughts on board.
- Some organisms are so small that we cannot see them with the naked eye. The organisms that cannot be seen with the naked eye are called microbes or microorganisms.
- Microorganisms can grow in any environment. Some of them are useful while some are harmful.
- A special tool called a microscope is used to see such organisms.
- Show students different types of microbes on the wallchart.

Activity 1:

Bring a microscope to the class and ask students to observe its different parts. Tell them how it works.

Review: 3mins

Discuss the main points about microorganisms.

Evaluation: 5mins

To check the understanding of students, ask them:

- What are microorganisms?
- What is a microscope?

Homework: 2mins

Ask students to learn the topic.

Grade: Five	Subject: Science	Term: 1 st	Time: 40mins
Teacher's Name: _		Week: 6	Day: 2

Student Learning Outcomes:

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

• Identify the main groups of microorganisms and give examples for each.

Resource Materials:

Chalk/marker, white/blackboard, wallchart, worksheet, Science Textbook 5

Warm-up Activities:

5mins

- Before beginning the lesson, ask students to say "Tasmiya."
- Ask students: What are microbes? Which instrument is used to see microorganisms? Take their responses.

Teaching & Learning Activities:

25mins

- Ask students what does your previous lesson tell you about microorganisms. Take their response.
- Tell them organisms that can be seen only through microscope are called microorganisms.
- Place the wallchart of groups of microorganisms on the board.
- Tell students they are divided on the basis of their characteristics such as shape, structure, etc.
- Microorganisms include viruses, bacteria and fungi.
- Now write 'Viruses' on the board. Tell students virus is a Latin word. Its meaning is 'poison'.
- Tell students the smallest microorganisms are viruses. They have different shapes, sizes and characteristics.
- Viruses cause different diseases in humans such as polio, influenza, etc.
- They are non-living out of the body of living organisms. They only grow inside the body of living organisms.

Activity 1:

Ask students to make simple diagram of microscope. Help them if need be. Check their work.

Review:	3mins
Recall the characteristics of viruses.	
Evaluation:	5mins

To check the understanding of students, ask them:

• What are the main groups of microorganisms?

Homework: 2mins

Ask students to learn the topic and solve the worksheet.

Grade: Five Sul Teacher's Name:	bject: Science	Term: 1 st Week: 6	Time: 40mins
	Worksheet		
Name:		Date:	
Q1. Name the groups of mi	croorganisms.		
Q2. Name three diseases ca	aused by viruses.		
Q3. Draw the diagram of Co	ovid-19 virus.		
Q4. Enlist the names of disc	eases-caused by virus	ses.	

Grade: Five	Subject: Science	Term: 1 st	Time: 40mins
Teacher's Name:		Week: 6	Day: 3
Chap 1: Microorganisms		Topic: Bacteria	

Student Learning Outcomes:

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

• Identify the main groups of microorganisms and give examples for each.

Resource Materials:

Chalk/marker, white/blackboard, wallchart, worksheet, Science Textbook 5

Warm-up Activities:

5mins

- Before beginning the lesson, ask students to say "Tasmiya."
- Ask students: What are the main groups of microorganisms? What are viruses? Name some diseases caused by viruses. Wait for their responses.

Teaching & Learning Activities:

25mins

- Tell students today they are going to learn about bacteria.
- Tell students another group of microorganisms is bacteria. They are bigger than viruses but cannot be seen with the naked eye. Bacteria are the oldest life-form on Earth.
- They are single-celled organisms.
- They are found in different shapes such as spherical, rod-shaped, spiral and comma-shaped.
- Show students flash cards of different shapes of bacteria and tell them names of these different shapes.

Activity 1:

Ask students to draw shapes of bacteria in their notebook. Help them if need be. Check their work.

Review: 3mins

Sum up the lesson by telling students the beneficial uses of bacteria.

Evaluation: 5mins

To check the understanding of students, ask them:

- What are bacteria?
- What are the shapes of bacteria?

Homework: 2mins

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

Grade: Five Subject: Science Teacher's Name:	Term: 1 st Time: 40mins Week: 6		
Works	heet		
Name:	Date:		
Q1. Draw different shapes of bacteria.			
Rod-shaped	Comma-shaped		
Spherical	Spiral		
Q2. Define bacteria.			
Q3. Write the names of diseases caused by	by bacteria.		
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Grade: Five	Subject: Science	Term: 1 st	Time: 40mins
Teacher's Name:		Week: 6	Day: 4
Chap 1: Microorganisms		Topic: Fungi	

Student Learning Outcomes:

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

• Identify the main groups of microorganisms and give examples for each.

Resource Materials:

Chalk/marker, white/blackboard, flash cards, Science Textbook 5

Warm-up Activities:

5mins

- Before beginning the lesson, ask students to say "Tasmiya."
- Ask students: What are bacteria? What are the shapes of bacteria? Take their responses and appreciate them.

Teaching & Learning Activities:

25mins

- Tell students another group of microorganisms is fungi.
- These are multi-cellular organisms. Some fungi are multi-cellular and we can see them with the naked eye.
- Ask them if they have ever seen mushrooms. Let them respond.
- Tell them mushrooms are fungi. We can eat some type of mushrooms (edible mushrooms). We can see them with the naked eye.
- Fungi cannot prepare their food so they obtain food from living organisms.
- Fungi cause diseases in living organisms.
- Show students flash cards of some fungi.
- Tell students fungi help in decomposition of dead bodies into simpler substances. Fungi (yeast) are used in baking.
- Discuss the importance of bacteria and fungi that if there is no decomposition, there would be piles of dead bodies and garbage on each and every side of earth. Soon, there will be no place for living and growing crops.

Review: 3mins
Sum up the lesson by discussing the main key points of fungi.

Evaluation: 5mins

To check the understanding of students, ask them:

• What are fungi?

Homework: 2mins

Ask students to learn the topic.

Grade: Five	Subject: Science	Term: 1 st	Time: 40mins
Teacher's Name:		Week: 6	Day: 5

Chap 1: Microorganisms Topic: Role

Topic: Role of Microorganism as decomposers

Student Learning Outcomes:

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

• Identify the role of microorganisms in decomposition and discuss their harmful and beneficial effects.

Resource Materials:

Chalk/marker, white/blackboard, worksheet, Science Textbook 5

Warm-up Activities:

5mins

- Before beginning the lesson, ask students to say "Tasmiya."
- Ask students: What do you know about fungi? Give some examples of fungi.
 Take their responses.

Teaching & Learning Activities:

25mins

- Write 'Role of microorganism as decomposers on the board.
- Tell students decomposition is a process in which organic matter is broken into simpler components.
- Microorganisms such as bacteria and fungi play an important role in decomposition. They act on dead organisms and break down their complex substances into simpler ones.
- Because of this, they have beneficial as well as harmful effects on the environment.
- Now write 'Useful effects' on the board.
- Tell students due to decomposing nature of microorganisms they have beneficial effects on the environment. They Increases the soil fertility and keep the environment clean.

Review: 3mins
Revise the role of microorganisms in decomposition.

Evaluation: 5mins

To check the understanding of students, ask them:

• What is the role of microorganisms in decomposition?

Homework: 2mins

Ask students to learn the topic.