

Lesson Plan

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|--|-------------------------|------------------------------|--------------------|
| Grade: Five | Subject: Science | Term: 3 rd | Time: 40min |
| Teacher's Name: _____ | | Week: 3 | Day: 1 |
| Chapter 8: Structure of the Earth | | Topic: Soil | |

Students Learning Outcomes:

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

- Investigate the composition and characteristics of different soils.

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 physical states of water? Wait for their responses.

Teaching and Learning Activities:

25mins

- Write down the topic name 'soil' on board.
- Tell the students today we will learn about soil.
- Tell students soil is the uppermost layer of the Earth.
- It is very important for living things. For plants it provides nutrients and water. It holds plant strongly.
- Plant's roots develop inside soil.
- Soil provides shelter to many small animals and insects such as moles, rats, rabbits, ants, slugs, etc. They, in turn, help to replenish nutrients in soil.
- Humans grow crops in soil. They live at different places at land.
- Now tell the students about weathering.
- Weathering: Rocks break into smaller particles by the heavy rains, strong winds, frost and heat of the sun. This process is called weathering.
- Ask the students to open their textbooks and do the activity.

Review:

3mins

Explain the main points about soil.

Evaluation:

5mins

To check the understanding of students, ask them:

- What is weathering?
- What is soil?

Homework:

2mins

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

Worksheet

Q1. Answer the following questions.

i) What is soil?

ii) Why is soil important?

iii) What makes soil more fertile?

iv) What is weathering?

v) What is humus?

Lesson Plan

Grade: Five

Subject: Science

Term: 3rd

Time: 40min

Teacher's Name: _____

Week: 3

Day: 2

Chapter 8: Structure of the Earth

Topic: Characteristics of the Soil

Students Learning Outcomes:

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

- Investigate the composition and characteristics of different soils.

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 soil? Wait for their responses.

Teaching and Learning Activities:

25mins

- Write the topic name 'Characteristics of the Soil' on the board.
- Tell the students today we will learn about the Characteristics of the Soil.
- Tell students soil varies from place to place. The variation in soils is due to presence of humus, size of particles, water holding capacity, etc.
- **Colour:** Soils have a wide range of colours. Colour tells us what is present in soil. Soils high in organic matter are dark brown or black in colour while soils high in iron are deep orange brown to yellowish brown in colour. Dark coloured soils absorb more sunlight and encourage seed for germination and crop growth than light coloured soils.
- **Texture:** Take a fistful of soil in your hand and squeeze it. What did you feel? It may be soft or sticky. Texture describes the size of particles in the soil.
- **Water holding capacity:** Different soils have different capacity to hold water depending on size of its particles. It also affects the growth of the plants. Sandy soil does not hold much water while clayey soil absorbs a lot of water.
- We can check moisture in the soil by taking some soil in hand.
- If it is completely dry, it has no water.
- If it forms a ball and breaks apart after dropping on ground, it has a medium quantity of water.
- If it leaves a wet outline on your hand, it has a lot of water.

Review:

3mins

Explain the main points about characteristics of the soil.

Evaluation:

5mins

To check the understanding of students, ask them:

- What are characteristics of soil?
- What does colour of soil tell?

- What is water holding capacity?
- What is texture?

Homework:

2mins

Ask students to learn the topic.

Lesson Plan

| | | | |
|--|-------------------------|------------------------------|--------------------|
| Grade: Five | Subject: Science | Term: 3 rd | Time: 40min |
| Teacher's Name: _____ | | Week: 3 | Day: 3 |
| Chapter 8: Structure of the Earth | | Topic: Types of Soil | |

Students Learning Outcomes:

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

- Identify similarities and differences among the different types of soil.

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 characteristics of soil? Wait for their responses.

Teaching and Learning Activities:

25mins

- Write the topic name 'Types of Soil' on the board.
- Tell the students today we will learn about types of soil.
- Tell students different types of soils are found at different places. Soils can be:
 - Sandy soil
 - Silty soil
 - Clayey soil
- Explain the types of soil one by one.
- Now write 'Sand' on the board.
- Bring sand to the class and show it to students. Ask them to feel its texture and observe its colour. Let them respond.
- Tell students sand is usually light in colour.
- It feels coarse and does not stick with your hands even after getting moist.
- Its particles are bigger in size.
- Sand does not hold water that's why plants roots cannot grow well in it.
- It is usually found in deserts or near the seas.

Review:

3mins

Explain the main points about the types of soil.

Evaluation:

5mins

To check the understanding of students, ask them:

- What are types of soil?
- What are characteristics of soil?

Homework:

2mins

Ask students to learn the topic.

Lesson Plan

| | | | |
|--|-------------------------|------------------------------|--------------------|
| Grade: Five | Subject: Science | Term: 3 rd | Time: 40min |
| Teacher's Name: _____ | | Week: 3 | Day: 4 |
| Chapter 8: Structure of the Earth | | Topic: Types of Soil | |

Students Learning Outcomes:

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

- Identify similarities and differences among the different types of soil.

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 the types of soil? Wait for their responses.

Teaching and Learning Activities:

25mins

- Write the topic name 'Types of soil' on the board.
- Tell the students today we will learn about the silty soil and clayey soil.
- Now write 'Silt' on the board.
- Bring silt to the class and show it to students. Ask them to feel its texture and observe its colour. Let them respond.
- Tell students silt is usually brown or dark brown.
- It has smooth texture and feels sticky.
- Its particles are smaller than sand particles.
- Due to small size of particles it retains more water content than sandy soil.
- Therefore, it is best for agricultural purposes and farming.
- It is usually found in flood plains.
- Now tell them about clayey soil.
- Clay particles are very fine in size.
- It is sticky when wet.
- Wet clay can hold its shape after drying. So it is good for making pots and bricks. It is not good for plant growth.
- Ask the students to open their textbooks and do the activity.

Review:

3mins

Explain the main points about the types of the soil.

Evaluation:

5mins

To check the understanding of students, ask them:

- Why is silty soil suitable for farming and growth of crops?
- What are characteristics of clay?

Homework:

2mins

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

Worksheet

Q1. Write the types of soil?

1. _____
2. _____
3. _____

Fill in the information about types of soil.

Silty Soil

Found in: _____

Texture: _____

Colour: _____

Water holding capacity: _____

Sticky/Unsticky: _____

Sandy soil

Found in: _____

Texture: _____

Colour: _____

Water holding capacity: _____

Sticky/Unsticky: _____

Clayey Soil

Found in: _____

Texture: _____

Colour: _____

Water holding capacity: _____

Sticky/Unsticky: _____

Lesson Plan

| | | | |
|--|-------------------------|--|--------------------|
| Grade: Five | Subject: Science | Term: 3 rd | Time: 40min |
| Teacher's Name: _____ | | Week: 3 | Day: 5 |
| Chapter 8: Structure of the Earth | | Topic: Similarities and Differences among Different Types of Soil | |

Students Learning Outcomes:

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

- Identify similarities and differences among the different types of soil.

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 silty soil and clayey soil? Take their responses. Appreciate them for good response.

Teaching and Learning Activities:

25mins

- Write the topic name 'Similarities and Differences among different types of soil' on the board.
- Tell the students today we will learn about the differences and similarities of types of soil. Tell them about one by one.
- Sandy Soil: It consists of bigger particles and large air spaces among them.
- It cannot hold water and nutrients. Only used for making glass.
- Clayey Soil: It consists of tiny particles.
- It is soft and sticky.
- It has tiny air spaces and can hold water.
- It is used for bricks and pottery.
- While silty soil consists of medium sized particles.
- It is smooth and has fine texture. It has tiny air space and can hold more water. It is useful for plants growth.
- **Similarities:** Air space are present among the particles of each type of soil.
- Ask the students to open their textbooks and read the contents.

Review:

3mins

Explain the main points about Similarities and Differences among different types of soil.

Evaluation:

5mins

To check the understanding of students, ask them:

- What is the difference between sandy soil and clayey soil?

Homework:

2mins

Ask students to learn the topic.