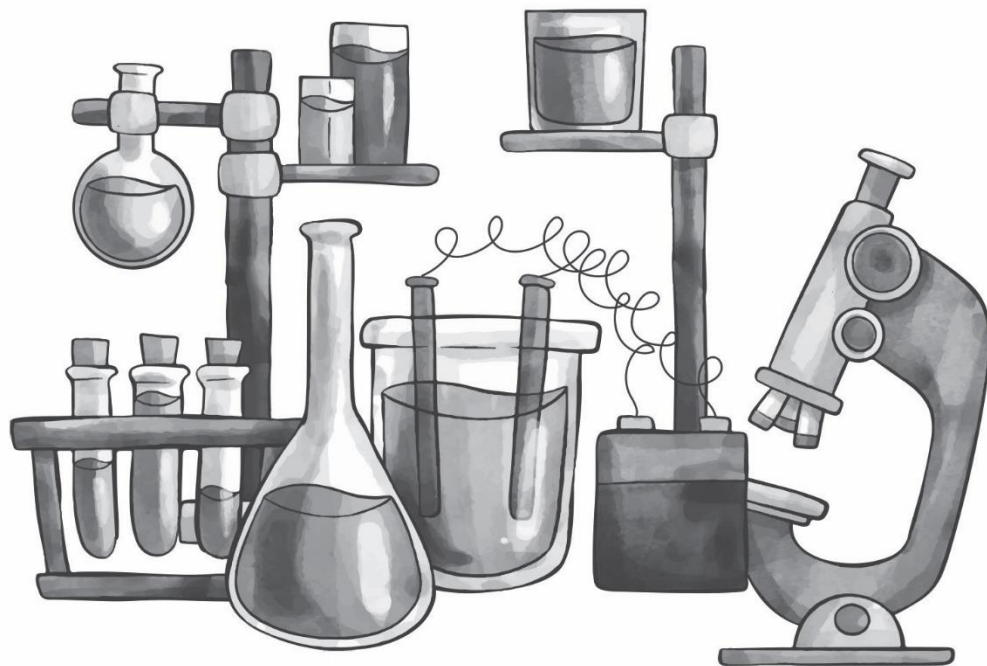




Teacher's Guide

LESSON PLANS

Science-5



Teacher's Guide 2022

1st Term

Unit # 1A

FIVE KINGDOM OF CLASSIFICATION

Lesson 1

Teaching objectives:

- Explain briefly about classification and introduction of main kingdoms.
- Describe the characteristics features of bacteria / monera .
- Describe the characteristics of Algae/ protista.

Materials required:

- Display pictures of anabaena and cyanobacteria
- Display pictures of volvox and Ulva as examples of algae
- Writing board (black or white), chalks or markers and duster

Background:

The purpose of this unit is to help the students to understand the basic concept of classification of living things. Students will have prior knowledge about the living things and their characteristics. They will be familiar with the terms classification, vertebrates, invertebrates, mammals, reptiles, fish, birds, amphibians, worms, insects, flowering plants (monocots and dicots) and non-flowering plants in this chapter.

Introduction: Ask students to name a few animals and plants.

- Ask them have they ever classified animals? If yes! On which basis?
- Ask the class about land animals and plants.
- Ask students if they can name any aquatic animal and plant.
- Ask students to identify why they are different.
- Ask about the building blocks of life.
- Write the responses on the writing board.
- Explain to students that today we will be learning about classification and main kingdoms of living organisms.

Classroom Activity:

The teacher will announce that we are going to study the Chapter 1 of Science 5 today. After that announcement, the teacher will write the name of chapter and the topic on the writing board.

The teacher will tell them that classification makes the study of organisms (plants and animals) easy. Classification projects before us a good picture of all life forms. Classification helps us to understand the interrelationship among different groups of creatures. It enables us to understand the characteristics of a big group of animals or plants by studying the characteristics of only one plant or animal of that group. It helps us to understand the similarities and differences among living organisms. It provides us the ways to know about different organisms. It allows the scientist to identify, group and properly name the particular organisms. Without classification, it would be impossible to know the exact number of living organisms on earth.

Enlist the benefits of classification on board by relating to messy room i.e.

- Makes study easy.
- Makes comparison easy.
- Makes identification easy

The teacher will tell students that in 1969, Robert Whittaker had classified the living organisms into five main kingdoms. These kingdoms are bacteria, algae, fungi, animals and plants.

Now the teacher will explain that these groups differentiate animals from each other in several ways. Some of them can produce their own food (autotrophic) i.e. algae and plants and some of them cannot produce their own food (heterotrophic) i.e. fungi, animals. The teacher will give the examples of all groups. Then the teacher will focus on characteristic features of first kingdom bacteria or monera.

- Bacteria are prokaryotes.
- Prokaryotes are organisms that have single cell with no membrane bounded nucleus.
- They are found everywhere e.g. fresh water, oceans, hot water springs, cold and frozen ice lands, stones and on the surface of other living organisms.
- They are of different shapes and sizes.

After this, the teacher will show the display pictures of anabaena and cyanobacteria to students as examples of bacteria.

Then the teacher will discuss the characteristic features of algae.

- Algae are the healthiest organisms on Earth.
- They can grow in a wide range i.e. damp places, water bodies and terrestrial environments.

- They can prepare their own food so termed as autotrophic.
- They are eukaryotes and have diverse range from single celled to multicellular bodied organisms.
- The most prominent groups of algae are brown, red and green algae.

After explaining these facts about the algae, the teacher will show the display pictures of volvox and Ulva as examples of algae.

The teacher will invite students for reading the text.

Developmental Activity:

After explaining the text from the book, the teacher will divide the class into 2 groups:

Group Algae and Group Bacteria.

- Group Algae will prepare their topic from the book. This group will prepare their topic in 5 minutes and will present this topic in front of the class.
- They can ask for any query or confusion from their teacher.
- The rest of the class will ask the questions about this topic.

In the same way, Bacteria Group will prepare and deliver their topic.

Conclusion: (5 minutes) A few students will revise the text in correct pronunciation.

- ✓ The teacher will correct the mistakes of the students (if any).
- ✓ The teacher will ask the students to learn all the difficult words they learn in this chapter.



Lesson 2

Teaching objectives:

- Explain briefly about the characteristics of Kingdom Fungi.
- Explain briefly about kingdom animals and plants.

Materials required:

- Display pictures of fungi, animals and plants
- Writing board (black or white), chalks or markers and duster

Introduction:

The teacher will revise the last day work in 5 minutes and may ask some students about the last day lecture.

Tell students that living organisms are much more complicated than bacteria and algae. Ask from students; can you name such organisms? Show them the models / real / display pictures of a

mushroom, a plant and an animal. Also show a piece of bread spoiled with mold / fungus. Inquire students about it.

Announcement of lesson:

The teacher will announce that today we will study and understand the Chapter 1 that is about fungi, plants and animals. After that announcement, the teacher will write the name of chapter and the topic on the writing board.

Explanation:

The teacher will explain that molds, yeasts and mushrooms are included in kingdom fungi. She will invite students to read text about Fungi from the book.

The teacher will ask that:

- Can an animal move from one place to another?
- Can a plant move from one place to another?
- Can an animal produce its own food?
- **Can** a plant produce its own food?
- How do animals depend on plants to fulfill their needs?
- How many different types of plants we can see around us?
- What is the importance of plants for us?
- What are the classes of animals?
- What are the classes of plants?

Developmental Activity:

Divide the class into three groups three. Provide each group with a model / picture of fungi, a plant and an animal. Ask them to observe these carefully and then note down the salient features and explain it to the group.

Conclusion:

Ask students to share what have they learned from the unit.



Lesson 3

Teaching objectives:

- Explain briefly about Plantae.

Materials required:

- Display pictures of some flowering and some non-flowering plants
- Display pictures of different types of seeds (monocot and dicot)

- Writing board (black or white), chalks or markers and duster
- Display picture of a messy room.

Introduction:

To reinforce the concept of classification, show them a picture of messy room or simply describe them the details of messy room. The room may contain some kitchen items, some laundry items, cloths, books, plants etc. Ask from students to describe picture first in their own words. Then ask them how the room could be neat. (Possible answer: By keeping the things in right place.) To make a link between their description and concept of classification, ask them where should the utensils be placed? (Ans. In kitchen). Why? (Ans. Because they belong to kitchen.) . Tell them this is called classification.

Announcement of lesson:

The teacher will announce that we are going to study the Chapter 1 of book today that is about classification and today we shall learn more about plants. After that announcement, the teacher will write the name of chapter and the topic on the writing board.

Explanation:

The teacher will retell that classification makes the study of organisms (plants and animals) easy. Classification projects before us a good picture of all life forms. Classification helps us to understand the interrelationship among different groups of creatures. It enables us to understand the characteristics of a big group of animals or plants by studying the characteristics of only one plant or animal of that group. It helps us to understand the similarities and differences among living organisms. It provides us the ways to know about different organisms. It allows the scientist to identify, group and properly name the particular organisms. Without classification, it would be impossible to know the exact number of living organisms on earth.

She will ask students to enlist the benefits of classification on board.

She will ask students to share their knowledge about plants.

She will encourage them to talk about the importance of plants.

She will invite them for text reading and explain it well to them.

Conclusion:

Conclude the lesson by revising / summarizing the text about plants.



Lesson 4

Teaching objectives:

- Classify animals in vertebrates and invertebrates.
- Explain the characteristics of fishes and amphibians.

Materials required:

- Display pictures of some animals in the forest, farms and in the water
- Display pictures of some birds and common insects

Introduction:

Ask from students what have they learnt about classification? After taking responses, explain to them that objects / organisms are classified on the basis of one or more common points. When we have done to classify objects / organisms on some basis, we study their characteristics, similarities and differences and make comparison with other groups.

So, in this class, we will discuss the classification of animals on the basis of presence or absence of backbone.

Explanation:

Tell students that all the animals that have backbone are called vertebrates. Such as fish, frog, snake, lion, sparrow etc. These vertebrates are further divided into sub groups on the basis of living place as well as structural modifications i.e. water, land etc.

1. Fish
2. Amphibian
3. Reptile
4. Birds
5. Mammals

In this class we will learn about fish and amphibians.

The teacher will ask the students about fish and summarize the information as:

- Fish live in oceans, lakes, ponds and rivers.
- **They** all breathe through gills, swim with fins.
- Fish have scales all over their bodies.

After explaining about the fish, the teacher will explain amphibians as these are animals that live in water when they are young and live on land as adult. Amphibians stay close to water for their whole life. Amphibians lay their eggs in water. When amphibians are young, they have gills. When they get old enough to go on land, their gills start to change into lungs.

After that the teacher will invite students to read the text in correct pronunciation and may explain it in idiomatic way.

Developmental Activity:

The teacher will provide a worksheet to each student to solve it in class regarding amphibians.

Worksheet

Name _____

- A frog can swim just like a fish. Can a frog be grouped with fish? Give reason in either case?

Conclusion:

The teacher will then ask students to conclude the session.



Lesson 5

Teaching objectives:

Explain briefly about reptiles and birds.

Materials required:

Writing board (black or white), chalks or markers , duster and pictures of reptiles.

Recapping:

The teacher will revise the last day work in 5 minutes and may ask some students about the last day lecture.

Announcement of lesson:

The teacher will announce that today we will study and understand the Chapter 1. After that announcement, the teacher will write the name of chapter and the topic on the writing board.

Introduction:

Show the pictures of some reptiles and ask students to name these.

Ask students if they can name some birds.

The teacher will ask about the animal that they see in summer season and it is not seen in winter season. That animal is normally visible on the walls near the electric light and this animal eats mosquitoes and other insects. The teacher will further describe that this animal crawls. After getting all these hints, the students will mention that the teacher is asking about the wall lizard. The teacher will ask the name of some other animals that crawls and that are quite similar to this wall lizard. At this point the students might mention alligator and snake.

Explanation: At this the teacher will explain that:

- ❖ Reptiles are the animals that live on land and water.
- ❖ All reptiles lay eggs and some like the snake; shed their skin.
- ❖ Reptiles are cold blooded i.e. they disappear in cold season and reappear in hot season.
- ❖ Most reptiles have scales on their body that serve as a type of protection.

After explaining about the reptiles, the teacher will ask questions about the birds as:

- Tell the names of some birds we see in our surrounding.
- Tell the names of some birds that cannot fly.

After getting different replies from the students, the teacher will summarize the information as:

- a. Birds are animals that have wings, feathers, and lay eggs.
- b. They have toothless beaks and hollow bones.
- c. They are warm blooded i.e. they can adjust the temperature of their body.
- d. They have scaly legs.
- e. Most of the birds can fly but some such as the ostrich and chicken cannot fly.

Developmental Activity:

The teacher will divide students into groups and ask them to write about birds and share their piece of writing with the other group.

The teacher will invite students for book reading.

Conclusion:

The teacher will encourage students to recap the lesson.



Lesson 6

Teaching objectives: Explain briefly about mammals.

Materials required:

- **Writing** board (black or white), chawks or markers, duster and pictures of mammals

Recapping:

The teacher will revise the last day work in 5 minutes and may ask some students about the last day lecture.

Announcement of lesson:

The teacher will announce that today we will study and understand the Chapter 1 After that announcement, the teacher will write the name of chapter and the topic on the writing board.

Introduction: Ask a student to name some animals which birth to other animals.

Explanation:

Explain to students that today we will be learning about mammals and their groups. The teacher will explain that:

- **Mammals** are animals that have hair and feed their babies with mother's milk.
- Mammals can live in water or on land.
- Mammals give birth to young once.
- Mammals have the biggest brains of all the animals.
- **Mammals** are warm blooded; they can adjust the temperature of their body according to environment.

Now the teacher will explain that a cat, dog, lion, elephant, hippo, rhino, monkey, bear and all other animals are mammals as these animals have hair on their bodies.

Now the teacher will ask the students to:

- Tell the names of some more animals that have hair on their body.
- Tell the names of some more animals that give birth to young ones.
- Tell the names of some more animals that feed their babies with mother's milk.
- Tell me if a fish is a mammal or not?
- Tell me if a snake is a mammal or not?
- Tell me if a sparrow is a mammal or not?
- Tell me if a frog is a mammal or not?

After getting different responses and replies from the students the teacher will explain the text from the book to the students and will ask for any query from the class.

Developmental Activity:

The teacher will divide students into groups. Each group will write about mammals and share the piece of writing with the other group.

Conclusion:

Ask students to recap the lesson.

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Lesson 7

Teaching objectives:

- Explain briefly about invertebrates (worms and insects) and biodiversity.

Materials required:

- Writing board (black or white), chalks or markers, duster and pictures of worms and insects

Recapping:

- Teacher will revise the last day work in 5 minutes and may ask some students about the last day lecture.

Announcement of lesson:

The teacher will announce that they will study and understand the Chapter 1. After that announcement, the teacher will write the name of chapter and the topic on the writing board.

Introduction

Introduce the invertebrates first. Tell them that there are many animals that do not have backbones. Such animals are called invertebrates.

- Ask students to name some worms and try to describe a worm.
- Ask students to name some insects from their surroundings.

Explanation

The teacher will explain about insects and worms as groups of invertebrates. The teacher will describe the differential features of each group. The teacher will read the text with correct pronunciation and may explain it in idiomatic way.

Introduce the word biodiversity on the board and ask students about it.

Let them read the text from the book about biodiversity.

Developmental Activity:

The teacher will divide the class into two groups. One group will prepare insects and the other group will prepare worms. Both the groups will present their topic in the form of the presentation and will discuss it then in the form of questions and answer session from rest of the class.

Conclusion:

- Ask students to conclude the lesson.
- In the next lessons, the teacher will invite students to do question 1 in pairs. She will
- provide the correct answers and help them to do the needful corrections.
- Then she will ask them to do question 2, 3 and 5 individually. She will provide them the correct answers. She will introduce question 4 and encourage them to answer the questions. She will share her answers and encourage students to write Q/A neatly in their notebooks.

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NOTE: use next periods for revision and test.

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Unit # 1B**CLASSIFICATION OF PLANTS****Lesson 1 and 2****Teaching objectives:**

- Enlist things that plants need to grow
- Identify and explain the function of each part of a plant

Materials required:

- Display pictures of parts of a plant
- Writing board (black or white), chalks or markers and duster

Introduction:

- Ask students to name a few plants.
- Ask them to name things we get from plants.
- Ask what they need to stay healthy.
- Ask what plants need to grow
- Write the responses on the writing board.
- Explain to students that today we will be learning about classification of plants.

Classroom Activity:

- The teacher will announce that we are going to study the Chapter 2 of Science 5 today. After that announcement, the teacher will write the name of chapter and the topic on the writing board.
- She will brief them about the needs of a plant and invite them to read page no. 15 of the book.
- She will ask them to name different parts of a plant and their roles in the life of a plant.
- The teacher will invite students for reading the text given on page no. 16.

Developmental Activity:

After explaining the text from the book, the teacher will ask them to do the role play of different parts of a plant.

Conclusion: (5 minutes) A few students will revise the text in correct pronunciation.

- ✓ The teacher will correct the mistakes of the students (if any).

- ✓ The teacher will ask the students to learn all the difficult words they learn in this chapter.

Lesson 3 and 4

Teaching objectives:

Identify two types of plants and compare their characteristics, classify flowering plant, compare and contrast the structure of a monocot and dicot plant and observe stages in the life of plants

Materials required:

- Display pictures of some flowering and some non-flowering plants
- Display pictures of different types of seeds (monocot and dicot)
- Writing board (black or white), chalks or markers and duster

Introduction:

The teacher will ask students to draw a plant and label its parts.

Announcement of lesson:

The teacher will announce that we are going to study the Chapter 1 of book today that is about classification and today we shall learn more about plants. After that announcement, the teacher will write the name of chapter and the topic on the writing board.

Explanation:

- The teacher will ask students to share their knowledge about plants.
- She will encourage them to talk about the types of plants.
- She will help them to understand the difference between monocots and dicots using pictures.
- She will invite them for text reading and explain it well to them.

Conclusion:

- Conclude the lesson by revising / summarizing the text about plants.
- In the next lessons, the teacher will invite students to do question 1 in pairs. She will provide the correct answers and help them to do the needful corrections.
- Then she will ask them to do question 3 individually. She will provide them the correct answers. She will introduce question 2 and encourage them to answer the questions. She will share her answers and encourage students to write Q/A neatly in their notebooks.

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NOTE: use next periods for revision and test.
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Unit # 2**MICROORGANISMS****Lesson 1****Teaching objectives:**

- **Explain** briefly about microorganisms and their identification.
- Describe the main groups of microbes.

Key vocabulary: Microorganisms, microscope, virus, bacteria, fungi.

Materials required:

- Display pictures showing the main groups of microorganisms
- Writing board (black or white), chalks or markers and duster

Background:

The purpose of this unit is to introduce the students to microorganisms. Students will have prior knowledge about the bacteria and fungi. They will be familiar with the main groups of microorganisms, their advantages and disadvantages in daily life, infection, identifying ways of entering microorganisms in human body and ways to avoid infections in this chapter.

Announcement of lesson:

The teacher will announce that we are going to study the Chapter 3 today about microorganisms and their identification and the main groups of microbes. After that announcement, the teacher will write the name of chapter and the topic on the writing board.

Introduction: The teacher may ask the students about:

- Ask students if they know about germs.
- Ask students can we see germs or not?
- Ask them why can't we see germs?
- Ask them name any germ.

Explanation:

The teacher will tell the students that all the above questions are studied under the heading 'microorganisms and their identification'. The teacher will explain that:

- The word 'micro' is originated from Greek language which means 'small'.
- They are not visible to human eye and can only be seen through special equipment known as microscope.

- The study of microorganisms or microbes is called microbiology.

Now the teacher will show them a chart showing detailed structure of microscope. Microorganisms are found everywhere and they include bacteria, viruses and certain microscopic animals. Then the teacher will focus on characteristic features of microorganisms in respect of size and significance.

After explaining these facts about the microorganisms, the teacher will show them the display pictures showing the main groups of microorganisms (virus, bacteria and fungi). She will invite them for reading.

Developmental Activity:

The teacher will provide a worksheet regarding microorganisms. Teacher will read the questions loudly and explain the meaning of these lines. Teacher will help them in finding correct answers. Students will fill the answers and submit them to the teacher.

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Activity-1 Microorganism

Exercise 1: Underline the Correct Answer.

1. Microorganisms are (living things / non-living things)
2. “Micro” means (tiny / large)
3. Organism means (living things / non-living things)
4. Microorganisms can be found only by (telescope / microscope)
5. They exist in different shapes, sizes and colour. They can be found in air, soil and water and in or on the plants and animals. They are (protozoa / bacteria)
6. They eat from live organisms. They are the smallest of all microorganisms. They are (yeast / viruses)
7. They can be found in lake, ponds (kolam), rivers and lakes. They eat food form other microorganisms. They are (Yeast / Protozoa)
8. They can be found on mouldy bread and rotten food. They are (Protozoa / Fungi)
9. All microorganisms breathe. During breathing, (carbon dioxide / oxygen) is taken in and (carbon dioxide / oxygen) is given out.
10. The similarity between bacteria and fungi is both are (non-living things / microorganisms).

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Activity-2 Write 'TRUE' or 'FALSE' in the boxes provided.

1. Worms, bacteria and ants are three types of microorganisms.
2. We can see microorganisms with the naked eye.
3. Like humans, microorganisms breathe, grow and move
4. A magnifying glass can be used to see some of the microorganisms.
5. The names of bacteria are according to their shapes.
6. The smallest among all microorganisms is protozoa.
7. All microorganisms are harmful.

Conclusion:

A few students will revise the given text in correct pronunciation.

- ✓ The teacher will correct the mistakes of the students (if any).
- ✓ The teacher will ask the students to learn all the difficult words they learn in this chapter.



Lesson 2

Teaching objectives: Explain briefly about viruses.

Materials required:

- Display pictures of viruses
- Writing board (black or white), chalks or markers and duster

Recapping:

The teacher will revise the last day work in 5 minutes and may ask some students about the last day lecture.

Announcement of lesson:

- The teacher will announce that today we will study and understand the Chapter 2 about characteristics of viruses.
- After that announcement, the teacher will write the name of chapter and the topic on the writing board.

Explanation:

The teacher will start telling about the viruses and their abundance. The viruses are found almost everywhere. The study of viruses is known as virology. Viruses are considered as a link

between living and non-living things. The teacher will do the reading and explanation of the text.

She may show them a documentary about viruses.

Developmental Activity:

After explaining, the teacher will divide the class into 2 groups: **Group A** and **Group B**.

- Group A will prepare their topic ‘**Viruses**’.
- They can ask for any query or confusion from their teacher.
- This group will prepare their topic in 5 minutes and will present this topic in front of the class.
- The rest of the class will ask the questions about this topic.

In the same way, B Group will prepare and deliver their topic ‘**Diseases caused by viruses**’.

Conclusion: The teacher will ask students to conclude the lesson.

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Lesson 3

Teaching objectives: Explain briefly about bacteria.

Materials required:

- Display pictures of bacteria
- Writing board (black or white), chalks or markers and duster

Recapping:

The teacher will revise the last 2-days work in 5-6 minutes and may ask some students about the last day lecture.

Announcement of lesson:

The teacher will announce that today we will study and understand the Chapter 2, characteristics of bacteria. After that announcement, the teacher will write the name of chapter and the topic on the writing board.

Introduction:

Tell students that another group of microorganisms is of bacteria. As students are familiar with bacteria so you can also about bacteria as warm up activity.

- Ask a student to describe the definition of bacteria.
- Draw the structure of bacteria.
- Ask students about their shape and size.

Explanation:

The teacher will explain about second group of microbes i.e. bacteria. The teacher will ask that:

- What are bacteria?
- What is their size and shape?
- Are bacteria important to us?
- Do they harm us?

After taking this short interview from the students, the teacher will read out the text of the book. The teacher will explain the topic to the students. Show them a short video about bacteria.

Developmental Activity:

After explaining, the teacher will divide the class into 2 groups: **Group A** and **Group B**.

- Group A will prepare their topic '**Bacteria**' from the book.
- They can ask for any query or confusion from their teacher.
- This group will prepare their topic in 5 minutes and will present this topic in front of the class.
- The rest of the class will ask the questions about this topic.

In the same way, B Group will prepare and deliver their topic '**Diseases caused by bacteria**'.

Conclusion: Students will be asked to describe bacteria.

**Lesson 4**

Teaching objectives: Explain briefly about fungi.

Materials required:

- Display pictures of fungi
- Writing board (black or white), chalks or markers and duster

Classroom Activity:

The teacher will announce that we are going to study the Chapter 2 about characteristics of fungi. After that announcement, the teacher will write the name of chapter and the topic on the writing board. The teacher will ask the students to tell the name of some fungi. After that the teacher will ask the students to tell the characteristic features of this group. After getting these responses, the teacher will ask about the significance of these organisms. Tell students that fungi are another important group of microorganisms. Tell them that these are visible organisms. Tell them many of the fungi are microorganisms as well the teacher will ask the students to tell:

- What are fungi?

- Where can you see them?
- Can a fungus be seen through naked eye?
- Name some of the fungi?
- Can you name any diseases caused by fungi?

After getting different reply from the students, the teacher will show them a display picture of fungi and summarize the lecture.

After that the teacher will read the text in correct pronunciation and may explain it in idiomatic way.

Developmental Activity:

After explaining, the teacher will divide the class into 2 groups: **Group A** and **Group B**.

- Group A will prepare their topic 'Fungi' from the book.
- They can ask for any query or confusion from their teacher.
- This group will prepare their topic in 5 minutes and will present this topic in front of the class.
- The rest of the class will ask the questions about this topic.

In the same way, B Group will prepare and deliver their topic '**Diseases caused by fungi**'.

Each group will draw fungi on a chart paper.

Conclusion:

Teacher will ask the students with special needs to conclude the lesson.

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Lesson 5

Teaching objectives: Explain briefly about usefulness of microorganisms.

Materials required:

- Chart showing detailed usefulness of microorganisms
- Writing board (black or white), chalks or markers and duster

Recapping:

The teacher will revise the last day work in 5 minutes and may ask some students about the last day lecture.

Announcement of lesson:

The teacher will announce that today we will study and understand the Chapter 2 about usefulness of microorganisms. After that announcement, the teacher will write the name of chapter and the topic on the writing board.

Introduction:

The teacher will tell that the microorganism helps us in many ways e.g. in food production, in industry, in manufacturing of medicines, in agriculture, in environment, in digestion, in water treatment, as decomposers and in air.

Explanation: The teacher will further explain that:

- **Microorganisms help us in food:**

Bacteria and Fungi e.g. yeast, *Penicillium* and *Lactobacillus* etc. are used in the production of fermented food and beverages. Bacteria and fungus are used to make cheese, yogurt and bread.

- **Microorganisms help us in Industry:**

In industry, bacteria are important in sewage treatment. They are also used in the mining sector.

- **Microorganisms help us in Medicines:**

Bacteria make vitamins for us. Bacteria and fungus are used to make different medicines. They are used industrially for the production of antibiotics, vaccines and insulin.

- **Microorganisms help us in Agriculture:**

Microorganisms are used as Bio fertilizers and Bio pesticides.

- **Microorganisms help us in Environment:**

Microorganisms help to degrade the toxic materials like oil, petroleum, plastic etc.

- **Microorganisms help us in digestion:**

Bacteria live inside human intestine to help in the process of digestion.

- **Microorganisms help us in water treatment:**

Bacteria are also used to clean our drinking water.

- **Microorganisms act as decomposers:**

Fungi are decomposers. They increase the fertility of soil and hence proved to be beneficial not only for animals but also for plants.

- **Microorganisms help us in air:**

They are also responsible for degradation of dead cells shed from the skin of humans. The teacher will further describe each use in detail with the help of chart showing detailed usefulness of microorganisms.

Developmental Activity:

The teacher will provide a worksheet regarding usefulness of microorganisms. Teacher will read the question loudly and explain the meaning. Teacher will help them in finding correct answers. Students will fill the answers and submit them to the teacher.

Name: _____

Q. Describe at least two benefits of each of the following.

- i. Bacteria _____
- ii. Fungi _____
- iii. Virus _____

Conclusion: The teacher will ask the students with special needs to conclude the lesson.

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Lesson 6

Teaching objectives: Explain briefly about harmful effects of microorganisms.

Materials required:

- Chart showing detailed harmful effects of microorganisms with relevant pictures.
- Display pictures of diseases caused by bacteria, fungi and virus
- Writing board (black or white), chalks or markers and duster

Recapping:

The teacher will revise the last day work in 10 minutes and may ask some students about the last day lecture.

Announcement of lesson:

The teacher will announce that today we will study and understand the Chapter 2 about harmful effects of microorganisms. After that announcement, the teacher will write the name of chapter and the topic on the writing board.

Introduction:

Write the names of diseases caused by viruses, bacteria and fungi on the writing board. Ask students to share their views about these diseases.

Explanation:

The teacher will explain that there are following harmful effects of microorganisms.

- Microorganisms spoiling food, causing plant diseases, animal diseases and diseases.

Now the teacher will explain each effect with the help of chart showing harmful effects of microorganisms, display pictures of diseases caused by bacteria and display pictures of diseases caused by fungi. Now the teacher will ask the students to:

- Tell the names of some more viral human diseases.
- Tell the names of some more bacterial human diseases.
- Tell the names of some more fungal human diseases.
- How can we avoid infections?

After getting different responses and replies from the students the teacher will explain the page # 26, 27 and 28 to the students and will ask for any query from the class.

Developmental Activity:

The teacher will provide a worksheet regarding harmful effects of microorganisms. Teacher will read the question loudly and explain the meaning. Teacher will help them in finding correct answers. Students will fill the answers and submit them to the teacher.

Conclusion: Students will conclude the lesson.

In the next lessons, the teacher will invite students to do question 1 in pairs. She will provide the correct answers and help them to do the needful corrections.

Then she will ask them to do question 3 individually. She will provide them the correct answers. She will introduce question 2 and encourage them to answer the questions. She will share her answers and encourage students to write Q/A neatly in their notebooks.

NOTE: Use next periods for revision and test.



UNIT: 3**Topic:****Flowers and Seeds****Period: 1****Teaching objectives:**

By the end of this lesson, students will be able to:
Examine and describe the structure of flowers.

Resources:

Board, Marker, Duster, book, Flip chart of structure of flowers.

Approach:

- Greet students
- Encourage students to share prior knowledge regarding parts of a flower.

Methodology:

- 1- Announce the topic.
- 2- Teacher will show a flip chart of a structure of flower and encourage the students to say and recognize the parts of a flower.
- 3- She will ask students to open their books at page no 33 & 34 and read the content.
- 4- Explain the content to them.
- 5- Let them underline the difficult words.
- 6- Teacher will write parts of flowers on the board and will encourage the students to write down their function on the board.
- 7- Teacher will provide needful corrections.
- 8- Teacher will guide the students to write down the parts of flowers and their functions in note books. (from the board)
- 9- Peer checking will be encouraged.

Activity:

Tell the students to get divided into groups and discuss the structure of flowers done today

Evaluation

- 1 - By reading
- 2- By questioning
- 3- From the written work

Wrap -up:

Ask students to share what they have learnt today and what they like the best about it.

Unit: 3**Flowers and Seeds****Period: 2****Topic:****Teaching objectives:**

By the end of this lesson, students will be able to:
Define pollination and describe its type with examples types.

Resources:

Board, Marker, Duster, Book.

Start / Approach:

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding structure of flowers.

Methodology:

- 1- Announce the topic
- 2- Teacher will take the students out of the class and will show some flowers in the garden.
- 3- Teacher will explain pollination to the students. She will also describe the types of pollination.
- 4- Teacher will ask students to open their books at page no 35 to 36 and read the content.
- 5- Explain the content to them.
- 6- Let them underline the difficult words.
- 7- Teacher will make groups of students and will guide them to make their presentation regarding pollination. She will encourage them to present their work in front of the whole class.
- 8- Needful corrections will be provided by the teacher.

Activity:

Tell the students to get divided into groups and discuss the process of pollination and its types read today.

Evaluation:

- 1- By reading
- 2- By questioning
- 3- From the presentation

Wrap – up:

Ask students to share what they have learnt today and what they like the best about it.

Unit: 3**Flowers and Seeds****Period: 3****Topic:****Teaching objectives:**

By the end of this lesson, students will be able to:

Define reproduction and differentiate between sexual and asexual reproduction in plants.

Resources:

Board, Marker, Duster, Book,

Start / Approach:

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding pollination and its type.

Methodology:

- 1: Announce the topic

2: Teacher will:

- Ask students to open their books at page no 37 and read the content.

3: Explain the content to them.

4: Let them underline the difficult words.

5: Teacher will encourage the students to share their understanding about reproduction as whole class discussion.

6: Teacher will guide the students to find and write the answer of the following question with the help of their pair.

What is meant by Reproduction?

What is Sexual Reproduction?

What is Asexual Reproduction?

7- Need full guidance and correction will be provided by the teacher

Activity:

Tell the students to get divided into groups and discuss the topic reproduction and its types read today.

Evaluation:

1- By reading

2- By questioning

3- From the written work

Wrap – Up:

Ask students to share what they have learnt today and what they like the best about it .

Unit: 4

Flowers and Seeds

Period: 4

Topic:

Teaching objectives:

By the end of this lesson, students will be able to:

Describe the structure of a seed and demonstrate its germination.

Resources:

Board, Marker, Duster, Book, Seeds,

Start /Approach:

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding reproduction and its types.

Methodology:

1 – Announce the topic

2 – Teacher will show different seeds to structure and will ask about the importance of seeds from the students.

3-Teacher will encourage the students to observe the diagram given on page 37.

4-She will draw a picture of seed on the board and will invite the students to label it.

5-She will ask students to open their books at page no 37 and read the content.

6-Explain the content to them.

7-Let them underline the difficult words.

8-Teacher will have a fruitful discussion with the students about the four main parts of a seed.

9-Teacher will guide the students to write the main parts of seeds in detail in their note book.

10-Teacher will do the corrections.

Activity:

Tell the students to get divided into groups and discuss the part of seed read today.

Evaluation:

- 1- By the reading
- 2- By questioning
- 3- From the written work

Wrap –up:

Ask students to share what they have learnt today and what they like, the best about it.

**Unit: 3
Flowers and Seeds**

Period: 5

Topic:

Teaching objectives:

By the end of this lesson, students will be able to:

Illustrate the condition necessary for seed germination.

Resources:

Board, Marker, Duster, Book,

Start / Approach:

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding parts of seeds.

Methodology:

- 1- Announce the topic.
- 2- Teacher will explain seed germination to structure.
- 3- Teacher will show peas seed to students and will grow it. She will guide the students to observe its growth keenly on every Friday.
- 4- Teacher will ask students to open their books at page no 38 and read the content.
- 5- Explain the content to them.
- 6- Let them underline the difficult words.
- 7-Teacher will encourage the students to write down the process of seed germination on the board in steps.
- 8-Teacher will guide the students to sit in pairs and write down the stages of seed germination in their notebook.
- 9-Teacher will do corrections

Activity:

Tell the students to get divided into groups and discuss seed germination read today.

Evaluation:

- 1- By reading

- 2- By questioning
- 3- From the written work

Wrap – Up:

Ask students to share what they have learnt today and what they like the best about it.

UNIT: 3**Flowers and Seeds****Period: 6****Topic:****Teaching Objectives:**

By the end of this lesson, students will be able to:

Compare and contrast the structure and function of a chick pea and Maize seed.

Resources:

Board, Marker, Duster, Book.

Start / Approach:

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding Seed Germination.

Methodology:

- 1- Announce the topic
- 2- Ask students to open their books at page no. 38 and read the content.
- 3- Explain the content to them.
- 4- Let them underline the difficult words
- 5- Teacher will make two groups of students. One group will be given a name of chick pea group and the other will be given a name of Maize Seed Group.
- 6- Teacher will guide, both the groups to describe their difference.
- 7-Teacher will guide the students to write the difference on the board.
- 8-Needfull correction will be provided by the teacher.

Activity:

Tell the students to get divided into groups and discuss the differences between chick pea and Maize Seeds.

Evaluation:

- 1- By reading
- 2- By questioning
- 3- From the written work

Wrap –Up:

Ask students to share what they have learnt today and what they like the best about it.

Unit: 3**Flowers and Seeds****Period: 7****Topic:**

Teaching Objectives:

By the end of this lesson, students will be able to:
Solve the exercises individually to express their learning.

Resources:

Board, Marker, Duster, Book

Start /Approach:

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding the main points of the lesson.

Methodology:

1-Announce the topic

2-Teacher will introduce Ex 1, 2, 3, to students. She will encourage the students to solve them individually.

3-She will do corrections.

Activity:

Tell the students to get divided into groups and discuss the exercises done today.

Evaluation:

1-From the written work

Wrap –Up:

Ask students to share what they have learnt today and what they like the best about it.

Unit: 3
Flowers and Seeds

Period: 8

Topic:**Teaching objectives:**

By the end of this lesson, students will be able to:
Answer the question.

Resources:

Board, Marker, Duster, Book

Start / Approach:

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding the main points of the topic.

Methodology:

1-Announce the topic.

2-Teacher will write one question on the board and will invite the students to write the answer randomly.

3-Teacher will do correction.

4-She will guide the students to do all the Q/A of Ex 4, in the same way.

5-Teacher will check their work.

Activity:

Tell the students to get divided into groups and discuss the Q/A done today.

Evaluation:

1-By questioning

2-By the written work

Wrap – Up:

Ask students to share what they have learnt today and what they like the best about it

Unit: 4

Environmental Pollution

Period: 1

Topic:

Teaching Objective:

By the end of this lesson, students will be able to:

Define pollution and its types. (Land, water, and air pollution)

Resources:

Board, Marker, Duster, Book

Start /Approach:

- Greet students
- Encourage students to share their prior knowledge regarding pollution.

Methodology:

1-Announce the topic

2-Teacher will introduce the term pollution to students and will encourage the students to share their understanding and prior knowledge regarding the topic.

3-She will ask students to open their books at page no. 431 and read the content.

4-Explain the content to them.

5-Let them underline the difficult words.

6-Teacher will write a question on the board.

What is meant by pollution? How many types of pollution are there? She will invite the random students to write the answer on the board.

7-Teacher will do corrections side by side.

8-She will encourage the students to write about pollution and its types in their notebooks.

9-She will provide guidance and corrections to students.

Activity:

Tell the students to get divided into groups and discuss the types of pollution read today.

Evaluation:

1-By reading

2-By questioning

3-From the written work

Wrap – Up:

Ask students to share what they have learnt today and what they like the best about it .

Unit: 4

Environmental pollution:

Period: 2

Topic:**Teaching Objectives:**

By the end of this lesson, students will be able to:
Explain main causes of land, water and air pollution.

Resources:

Board, Marker, Duster, Book

Start /Approach:

- Greet students
- Draw a bubble map on the board and encourage the students to share their learning regarding pollution and its types.

Methodology:

1-Announce the topic.

2-Teacher will hold a discussion regarding the causes of land, water and air pollution as a whole class discussion.

3-She will ask the students to open their books at page no. 46 ,47 and read the content.

4-Explain the content to them.

5-Let them underline the difficult words.

6-Teacher will encourage the students to write down the causes of land, water and air pollution in pairs

7-Teacher will provide corrections.

Activity:

Tell the students to get divided into groups and discuss the causes of land, air and water pollution done today .

Evaluation:

1-By reading

2-By questioning

3-From the written work

Wrap – Up:

Ask student to share what they have learnt today and what they like the best about it.

Unit: 4**Environmental pollution:****Period: 3****Topic:****Teaching Objectives:**

By the end of this lesson, students will be able to:
Explain main effects of land, water and air pollution on the environment and human life.

Resources:

Board, Marker, Duster, Book

Start /Approach:

- Greet students

- Draw a bubble map on the board and encourage students to share their learning regarding the main causes of land, water and air pollution.

Methodology:

1-Announce the topic

2-Teacher will introduce the topic.

3-Teacher will ask the students to open their book at page no. 46 & 47 and read the content.

4-Explain the content to them.

5-Let them underline the difficult words.

6-Teacher will divide the students in groups. Each group will get a title of water, air, land pollution. She will guide the students to make plans to reduce pollution.

7-Teacher will encourage the students to write down the effects of land, air and water pollution on human health in the following way.

Land

Air

Water

8-Teacher will do correction

Activity:

Tell the students to get divided into groups and discuss the effect of land, air and water pollution done today.

Evaluation:

1-By reading

2-By questioning

3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it.

Unit: 4
Environmental Pollution.
Period: 4
Topic:
Teaching Objective:

By the end of this lesson, students will be able to :

Suggest some ways to reduce different types of pollution.

Resources :

Board, Marker, Duster, Book.

Start /Approach :

- Greet students
- Encourage students to share their learning regarding effect of land, water and air pollution on human life.

Methodology :

1-Announce the topic.

2-Teacher will have a discussion with the students about the ways we can reuse the objects.

3-She will ask the students to open their book at page no. 45 and read the content.

- 4-Explain the content to them.
- 5-Let them underline the difficult words.
- 6-Teacher will introduce the concept of 3 Rs to students.
- 7-Teacher will guide the students to list down some ways to reduce the impact of non – biodegradable substance in pairs.
- 8-Teacher will encourage students to share their work with the whole class.
- 9-Teacher will provide needful corrections to students.

Activity :

Tell the students to get divided into groups and discuss the ways to reduce the impact of non – biodegradable substance.

Evaluation :

- 1-By reading
- 2-By questioning
- 3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it.

Unit :4

Environmental Pollution.

Period : 5

Topic:
Teaching Objective :

By the end of this lesson, students will be able to :

Explain the effect of burning fossil fuels and releasing greenhouse gases in the air.

Resources :

Board, Marker, Duster ,Book .

Start /Approach :

- Greet students
- Encourage students to share their learning regarding 3Rs.

Methodology :

- 1-Announce the topic.
- 2-Teacher will introduce ozone layer to students. She will inform them about the harmful effect caused by burning of fossil fuels on human health and ozone layer .
- 3-Teacher will ask the students to open their books at page no . 48 and read the content .
- 4-Explain the content to them .
- 5-Let them underline the difficult words .
- 6-She will make pairs of students and will encourage them to share their learning in written form .
- 7-She will do correction .

Activity :

Tell the students to get divided into groups and discuss the effects of burning of fossil fuels .

Evaluation :

- 1-By reading
- 2-By questioning
- 3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit :4
Environmental Pollution .
Period : 6
Topic:
Teaching Objective :

By the end of this lesson , students will be able to :
Differentiate between biodegradable and non biodegradable materials .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Encourage students to share their learning regarding the burning of fossil fuels and their effects .

Methodology :

- 1-Announce the topic .
- 2-Teacher will introduce the term of biodegradable and non biodegradable to students .
- 3-She will ask the students to open their books at page no . 48 and read the content .
- 4-Explain the content to them .
- 5-Let them underline the difficult words .
- 6-She will encourage the students to write down some differences between biodegradable and non biodegradable substance in pairs .
- 7-Teacher will provide needful corrections .

Activity :

Tell the students to get divided into groups and discuss the biodegradable and non biodegradable substances.

Evaluation :

- 1-By reading
- 2-By questioning
- 3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit :4
Environmental Pollution .
Period : 7
Topic:
Teaching Objective :

By the end of this lesson , students will be able to :
Explain the impact of non biodegradable materials on the environment .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Encourage students to share their learning regarding the differences between biodegradable and non biodegradable substance .

Methodology :

1- Announce the topic .

2-Teacher will explain the impact of non –biodegradable materials on the environment .

3-She will make pairs of students and will guide them to write the impacts of non biodegradable materials on the environment .

4-Teacher will provide needful correction .

Activity :

Tell the students to get divided into groups and discuss the impact of non biodegradable materials son on the environment .

Evaluation :

1-By reading

2-By questioning

3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit :4
Environmental Pollution .
Period : 8
Topic:
Teaching Objective :

By the end of this lesson , students will be able to :

Suggest some ways to reduce the impact of non biodegradable material on the environment.

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Encourage students to share their learning regarding the impacts of non biodegradable materials on the environment.

Methodology :

1- Announce the topic .

2-Teacher will introduce Ex no ≠1, 2, 3 to students and will guide them to solve the exercises.

3-Teacher will do correction .

Activity :

Tell the students to get divided into groups and discuss the way to reduce the impact non biodegradable material on the environment .

Evaluation :

1-By reading

- 2-By questioning
- 3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit :4

Environmental Pollution .

Period : 9

Topic:

Teaching Objective :

By the end of this lesson , students will be able to :
Solve the exercise to express their learning .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Encourage students to share their learning regarding the main points of the lesson .

Methodology:

1-Announce the topic.
2-Teacher will ask the students to open their book at page no . 49 and read the content .

4-Explain the content to them .

5-Let them underline the difficult word.

2-Teaching will introduce Ex 1 & 3 to students and will guide them to solve the exercise individually .

Activity :

Tell the students to get divided into groups and discuss the exercise done today .

Evaluation :

- 1-By reading
- 2-By questioning
- 3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit :4

Environmental Pollution .

Period : 10

Topic:

Teaching Objective :

By the end of this lesson , students will be able to :
Answer the question .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students

- Draw a bubble map on the board and encourage students to share their learning regarding the main points of the lesson .

Methodology :

1.the topic .

2-Teaching will write a question on the board and will invite the students to write the answer of that question on the board .

3-Teacher will provide needful correction .

4-Teaching will guide the students to write down that Q/A in their notebook .

5-All the question /answers will be done in the same way .

Activity :

Tell the students to get divided into groups and discuss the Q/A done today .

Evaluation :

1-By questioning

2-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit :5
Physical and Chemical changes of Matter.
Period : 1
Topic:
Teaching Objective :

By the end of this lesson , students will be able to :

Describe and demonstrate the states of water .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their prior knowlege regarding Matter.

Methodology :

1-Announce the topic .

2-Teacher will take the students to science lab (or will provide the things in the class)

3-Teacher will show the process of changing solid into liquid then gas .

4-She will melt ice cubes into water by melting it . Then she will boil the water to turn it into gas .

5-Teacher will encourage the students to demonstrate the process in their own words .

6- Ask students to open their books at page no. 56 and read the content .

7-Explain the content to them .

8-Let them underline the difficult words .

Activity :

Tell the students to get divided into groups and discuss the state water.

Evaluation :

1-By reading

2-By questioning

3-From presentation .

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit :5

Physical and Chemical changes of Matter.

Period : 2

Topic:

Teaching Objective :

By the end of this lesson , students will be able to :

Identify ways of accelerating the process of dissolving materials in given amount of water and provide reasoning .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Encourage students to share their learning regarding states of water .

Methodology :

1-Announce the topic .

2-Teacher will perform dissolving of materials in different ways in front of the students by increasing the temperature ,by stirring ,by breaking the solid .

3-She will guide the students to observe the changes and share their observation with the whole class .

4- Ask students to open their books at page no. 56 and read the content .

5-Explain the content to them .

6-Let them underline the difficult words .

Activity :

Tell the students to get divided into groups and discuss the dissolving Of different materials through different ways .

Evaluation :

1-By reading

2-By questioning

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit :5

Physical and Chemical changes of Matter.

Period : 3

Topic:

Teaching Objective :

By the end of this lesson , students will be able to :

1-Identify different mixtures and solutions in surroundings .

2-Enlist the uses of solutions and mixtures in daily life .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding process of dissolving materials in water .

Methodology :

1-Announce the topic .

2- Teacher will ask students to open their books at page no.60+61 and read the content .

3-Explain the content to them .

4-Let them underline the difficult words .

5-Teacher will encourage the students to enlist the uses of solution and mixtures in daily life in pairs .

6-She will do corrections .

7-She will encourage the students to share their understanding and learning and learning with the whole class .

Activity :

Tell the students to get divided into groups and discuss the uses of solutions and mixture in daily life .

Evaluation :

1-By reading

2-By questioning

3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit :5
Physical and Chemical changes of Matter.
Period : 4
Topic:
Teaching Objective :

By the end of this lesson , students will be able to :

1-Identify chemical changes through examples .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding uses of solution and mixture .

Methodology :

1-Announce the topic .

2-Teacher will take the students out of the class .She will lit a match stick and will show the students that it is a chemical changes ,it is irreversible changes .

3-She will show some rusty objects ,a rotten fruits .

4-She will make it very clear to students that chemical changes are irreversible changes .

5- She will ask students to open their books at page no.60+61 and read the content .

6-Explain the content to them .

7-Let them underline the difficult words .

She will guide the students to write down about some examples of chemicals changes in pairs .

8-Teacher will provide needful corrections.

She will encourage the students to present their work in front of the whole class .

Activity :

Tell the students to get divided into groups and discuss the chemical changes done today .

Evaluation :

1-By reading

2-By questioning

3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit :5

Physical and Chemical changes of Matter.

Period : 5

Topic:

Teaching Objective :

By the end of this lesson , students will be able to :

Differentiate between physical and chemical changes with examples .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Encourage students to share their learning regarding the chemical changes.

Methodology :

1-Announce the topic .

2- She will ask students to open their books at page no.63 and read the content .

3-Explain the content to them .

4-Let them underline the difficult words .

5-Teacher will make two groups of students . She will guide the students to have a discussion about the physical and chemical changes .

6-Teacher will make two columns on the board

Physical changes

Chemical changes

7-She will invite the students from each group to write the difference between physical and chemical changes .

8-She will provide needful corrections .

9-She will guide the students to write down the differences in their notebooks from the board .

Activity :

Tell the students to get divided into groups and discuss the difference between physical and chemical changes .

Evaluation :

1-By reading

2-By questioning

3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit :5
Physical and Chemical changes of Matter.
Period : 6
Topic:
Teaching Objective :

By the end of this lesson , students will be able to :

Express their learning through written work .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding the main points of the topic .

Methodology :

Announce the topic .

- Teacher will introduce Ex 1,2,3,4,5. to students and will guide them to solve these exercises individually .
- Teacher will do corrections .

Activity :

Tell the students to get divided into groups and discuss the exercises done today .

Evaluation :

1-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit :5
Physical and Chemical changes of Matter.
Period : 7
Topic:
Teaching Objective :

By the end of this lesson , students will be able to :

Answer the question .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding the main points of the lesson .

Methodology :

1-Announce the topic

2-Teacher will write a question on the board (Q , 1 , Q , 6. Page 67)and will invite random students to write the answer .She will provide needful corrections and will guide the whole class to write that Q/A in their notebooks .

3-All the question /Answers will be done in the similar way .

Activity :

Tell the students to get divided into groups and discuss the Q/A read today .

Evaluation :

1-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit :6 A
Light and Shadow
Period : 1
Topic:
Teaching Objective :

By the end of this lesson , students will be able to :

- 1-Describe that light is a form of energy.
- 2-Identify natural and artificial source of light .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Encourage students to share their learning regarding light a form of energy .

Methodology :

1-Announce the topic

2-Teacher will ask some question from the students .

What is a light ?

How do we get light ?

What are artificial means or sources of light ?

What is the biggest source of light ?

3- Teacher will ask students to open their books at page no.69 and read the content .

4-Explain the content to them .

5-Let them underline the difficult words

6-Teacher will guide the students to draw and name the natural and artificial source of light on loose sheets .

7-Teacher will display the best work in the class .

Activity :

Tell the students to get divided into groups and discuss the sources of light .

Evaluation :

- 1-By reading
- 2-By questioning
- 3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit :6 A
Light and Shadow
Period : 2
Topic:
Teaching Objective :

By the end of this lesson , students will be able to :
Justify that light emerges from a source and travel in straight line .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Encourage students to share their learning regarding natural and artificial sources of light .

Methodology :

- 1-Announce the topic
- 2-Teacher will turn off the light in the classroom and turn on a torch. She will show it to students that light always travels in a straight line .
- 3-She will take the students to the sun light along with the sun glasses and will emphasize to observe the direction of light .
- 4- Ask students to open their books at page no.71 and read the content .
- 5-Explain the content to them .
- 6-Let them underline the difficult words .
- 7-She will invite the students to share their findings and observation with the whole class .

Activity :

Tell the students to get divided into groups and discuss the way the light travel read today .

Evaluation :

- 1-By reading
- 2-By questioning

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit :6 A
Light and Shadow
Period : 3

Topic:
Teaching Objective :

By the end of this lesson , students will be able to :
Investigate luminous and non –luminous objects in daily life .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding the way light travel .

Methodology :

1-Announce the topic

2-Teacher will introduce luminous and non – luminous objects to students . She will guide the students that luminous objects generate their own light like sun and non – luminous objects are only capable of reflecting the light that falls on their surface for example moon

3- She will ask students to open their books at page no.69, 70 and read the content .

4-Explain the content to them .

5-Let them underline the difficult words

6-Teacher will write on the board .

What are luminous objects ?

She will invite the students randomly to write the answer on the board . She will provide needful corrections .

7-She will guide the whole class to write the Q/A in their notebooks from the board .

8-Peer checking will be encouraged .

Activity :

Tell the students to get divided into groups and discuss the luminous and non luminous objects.

Evaluation :

1-By reading

2-By questioning

3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit :6 A
Light and Shadow
Period : 4
Topic:
Teaching Objective :

By the end of this lesson , students will be able to :
Identify and differentiate between transparent ,opaque and translucent objects in your surroundings .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students

- Draw a bubble map on the board and encourage students to share their learning regarding luminous and non luminous objects .

Methodology :

1-Announce the topic

2-Teacher will collect different objects and will put light on them with a torch .Teacher will guide the students to observe the objects carefully. She will guide the students that the objects which let the light pass through them are called transparent objects .The objects that does not allow light to pass through them are called opaque objects .

3- Ask students to open their books at page no.72+73 and read the content .

4-Explain the content to them .

5-Let them underline the difficult words

6-Teacher will guide the students to write their understanding about transparent , translucent and opaque objects in their notebooks.

7-Teacher will guide the students to collect transparent , translucent and opaque objects from the surroundings .

Activity :

Tell the students to get divided into groups and discuss the transparent , translucent and opaque objects read today .

Evaluation :

1-By reading

2-By questioning

3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit :6 A
Light and Shadow
Period : 5
Topic:
Teaching Objective :

By the end of this lesson , students will be able to :

- 1- Explain the formation of shadows .
- 2- Predict the location ,size and shape of a shadow from a light source related to the position of objects .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding transparent ,translucent and opaque objects .

Methodology :

1-Announce the topic

2-Teacher will explain the formation of shadows to students .

She will practice it with students that the size , position ,location and shape of a shadow differs due to the light source in relevance to the position of an object .

3-Teacher will ask students to open their books at page no.73+74and read the content .

4-Explain the content to them .

5-Let them underline the difficult words

6-Teacher will invite the students to present their understanding through practical . Teacher will make groups of students and will guide them to present the formation of shadows and its size ,shape ,location ,by using concrete materials .

7-Teacher will guide the students to experience the shadows in a darkness place and observes the change and differences

Activity :

Tell the students to get divided into groups and discuss the formation of shadows .

Evaluation :

1-By reading

2-By questioning

3-From the presentation .

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 6 A

Light and Shadow

Period : 6

Topic:

Teaching Objective :

By the end of this lesson , students will be able to :

Demonstrate that shiny surfaces reflect light better than dull surfaces .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Encourage students to share their learning regarding formation of shadows .

Methodology :

1-Announce the topic

2-Teacher will guide the students to put light (with a torch) on different surfaces and observes the differences

Teacher will guide the students to share their findings with the whole class .

Activity :

Tell the students to get divided into groups and discuss the topic read today .

Evaluation :

1-By questioning

2-From the presentation .

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 6 A**Light and Shadow****Period : 7****Topic:****Teaching Objective :**

By the end of this lesson , students will be able to :

Answer the questions .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding the main points of the topic .

Methodology :

1-Announce the topic

2-Teacher will write a question on the board and will invite the random students to write the answer of that question on the board .Teacher will do corrections and guide the whole class to write that Q/A in their note books .

3-Students will do all the questions/answers in the same way .

Activity :

Tell the students to get divided into groups and discuss the Q/A done today .

Evaluation :

1-From the written work .

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 6 A**Light and Shadow****Period : 8****Topic:****Teaching Objective :**

By the end of this lesson , students will be able to :

Express their learning through written book .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding Q/A .

Methodology :

1-Announce the topic

2-Teacher will introduce Ex 1,2,3,5 to students and will encourage them to solve the above mentioned exercises individually.

3-She will provide guidance and needful corrections.

Activity :

Tell the students to get divided into groups and discuss the exercises done today .

Evaluation :

1-From the written work .

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 6 B
Sound
Period : 1
Topic:
Teaching Objective :

By the end of this lesson , students will be able to :

Describe and demonstrate how sound is produced by a vibrating body .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Encourage students to share their prior knowledge regarding sound.

Methodology :

1-Announce the topic

2- Ask students to open their books at page no.82+83 and read the content .

3-Explain the content to them .

4-Let them underline the difficult words

5-Teacher will take a bell and tunnel folk and will make sound by banging them with each other .Teacher will guide the students to observe the tunnel folk . Teacher will guide the students to share their observations with the class .

6-Teacher will guide the students to write down the answer of these questions in their notebooks?

1-What is meant by Intensity?

2-How do sound travels?

3-How do sound produce?

Activity :

Tell the students to get divided into groups and discuss the objects read today .

Evaluation :

1-By reading

2-By questioning

3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 6 B
Period : 2
Sound
Topic:
Teaching Objective :

By the end of this lesson , students will be able to :

- 1- Identify a variety of materials through which sound can travel .
- 2- Define the intensity of sound with examples .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Encourage students to share their learning regarding sound.

Methodology :

1-Announce the topic

2-Teacher will show a video of sound to students and will guide the students about the intensity of sound .She will make it clear to students that sound can travel through different mediums but its intensity is different at different medium .

3- Ask students to open their books at page no.82 and read the content .

4-Explain the content to them .

5-Let them underline the difficult words

6-Teacher will guide the students to share their learning with the whole class .

Activity :

Tell the students to get divided into groups and discuss the medium through sound can travel .

Evaluation :

1-By reading

2-By questioning

3-From the presentation .

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 6 B
Sound
Period : 3
Topic:
Teaching Objective :

By the end of this lesson , students will be able to :

Identify the that the speed of sound differs in solids ,liquids and gaseous medium .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding medium through sound can travel .

Methodology :

1-Announce the topic

2-Teacher will make it clear to students that the speed of sound is different in solid ,liquid and gaseous mediums .

3-She will ask students to open their books at page no.83 and read the content .

4-Explain the content to them .

5-Let them underline the difficult words

6-Teacher will make pairs of students and encourage them to write the reasons of difference of speed of sound in different mediums.

7-She will provide needful correction .

Activity :

Tell the students to get divided into groups and discuss the speed of sound in different mediums .

Evaluation :

1-By reading

2-By questioning

3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 6 B

Sound

Period : 4

Topic:

Teaching Objective :

By the end of this lesson , students will be able to :

- 1- Define noise,its harmful effects on human health .
- 2- Appreciate the role of human beings in reducing noise pollution .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Encourage students to share their learning regarding speed of sound in different medium .

Methodology :

1-Announce the topic

2-Teacher will ask the students about the difference between sound and noise .

3-She will make groups of students and will encourage them to write down the effects of noise on human health .

4-Group leaders will be encouraged to present their work .

5-Ask students to open their books at page no.85 and read the content .

6-Explain the content to them .

7-Let them underline the difficult words

8-Teacher will guide the students to write the role of human beings in reducing noise pollution in points

9-She will encourage the students to present their learning in front of the whole class .

Activity :

Tell the students to get divided into groups and discuss about noise pollution and its effects on human health.

Evaluation :

- 1-By reading
- 2-By questioning
- 3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 6 B
Sound
Period : 6
Topic:
Teaching Objective :

By the end of this lesson , students will be able to :
Solve the exercises to express their learning .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding the main points of topic .

Methodology :

- 1-Announce the topic
- 2-Teacher will introduce Ex 1,2,4 to students and guide them to solve the above mentioned exercises individually .
- 3-She will provide proper guidance and corrections .

Activity :

Tell the students to get divided into groups and discuss the exercises done today .

Evaluation :

- 1-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 6 B
Sound
Period : 7
Topic:
Teaching Objective :

By the end of this lesson , students will be able to :
Answer the question .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students

- Draw a bubble map on the board and encourage students to share their learning regarding the main points of topic .

Methodology :

1-Announce the topic

2-Teacher will discuss the main points of the topic with the students .

3-She will make groups of students and will encourage them to find the answer of Ex 3 and write them in their notebooks .

4-Teacher will do corrections .

Activity :

Tell the students to get divided into groups and discuss the Q/A done today .

Evaluation :

1-By reading

2-By questioning

3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 7
Electricity and Magnetism
Period : 1
Topic:
Teaching Objective :

By the end of this lesson , students will be able to :

Explain the phenomenon of static electricity in everyday life .

Resources :

Board ,Marker ,Duster ,Book .

Start /Approach :

- Greet students
- Encourage students to share Prior knowledge regarding uses of electricity in everyday life .

Methodology :

1-Announce the topic

2-Teacher will introduce static electricity to students .She will guide them that static electricity builds up a charge by gaining or losing electrons on the surface of the insulator.

3-She will ask students to open their books at page no.93 and read the content .

4-Explain the content to them .

5-Let them underline the difficult words

6-She will encourage the students to write down their understanding regarding static electricity in their notebooks in the form of pairs .

7-Teacher will provide needful corrections .

Activity :

Tell the students to get divided into groups and discuss the static electricity read today .

Evaluation :

1-By reading

2-By questioning

3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 7

Electricity and Magnetism

Period : 2

Topic:

Teaching Objective :

By the end of this lesson , students will be able to :
Describe changes and their properties .

Resources :

Board ,Marker ,Duster ,Book , flip of chart changes .

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding static electricity .

Methodology :

1-Announce the topic

2-Teacher will introduce positive and negative charges to students .

3-She will show a flip chart to students to make their concept clear about positive or negative charges and how do they work .(Teacher can use the diagrams given on page 91, 92 as well)

4-She will ask students to open their books at page no. 91 ,92 and read the content .

5-Explain the content to them.

6-Let them underline the difficult words

7-She will encourage the students so share their understanding with the whole class .

Activity :

Tell the students to get divided into groups and discuss the changes and their properties .

Evaluation :

1-By reading

2-By questioning

3-From presentation .

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 7

Electricity and Magnetism

Period : 3

Topic:

Teaching Objective :

By the end of this lesson , students will be able to :
Differentiate between conductors and insulators from daily life .

Resources :

Board ,Marker ,Duster ,Book

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding changes and their properties .

Methodology :

1-Announce the topic

2-Teacher will introduce conductors and insulators to students .She will show some conductors and insulators to students .

6-Teacher will guide the students to take a round of the school and make a list of objects that are conductors or insulators .

3-She will ask students to open their books at page no. 92 & 91 and read the content .

4-Explain the content to them .

5-Let them underline the difficult words

7-Teacher will write a question on the board about conductors and insulators .

What are conductors and insulators ?

She will invite the students to write their learning on the board .

Teacher will provide needful corrections .

8-She will guide the students to write the differences between insulators and conductors in their notebooks .

9-Peer checking will be encouraged .

Activity :

Tell the students to get divided into groups and discuss about the conductors and insulators .

Evaluation :

1-By reading

2-By questioning

3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 7
Electricity and Magnetism
Period : 4
Topic:
Teaching Objective :

By the end of this lesson , students will be able to :

- 1- Describe the flow of electric current in an electrical circuit .
- 2- Describe and design an electrical circuit and explain its components .

Resources :

Board ,Marker ,Duster ,Book

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding conductors and insulators .

Methodology :

- 1-Announce the topic
- 2-Teacher will show an electrical circuit to students and will introduce its components .
- 3-Teacher will guide the students about the working of different components in a circuit .
- 4-She will ask students to open their books at page no. 94,95,96 and read the content .
- 5-Explain the content to them .
- 6-Let them underline the difficult words
- 7-Teacher will guide the students to present their learning in front of the whole class .

Activity :

Tell the students to get divided into groups and discuss the electrical circuit .

Evaluation :

- 1-By reading
- 2-By questioning
- 3-From presentation .

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 7
Electricity and Magnetism
Period : 5
Topic:
Teaching Objective :

By the end of this lesson , students will be able to :

- 1- Recognize that magnets can be used to attract some metallic objects .
- 2- Describe and demonstrate that magnets have two poles and like poles repel and opposite poles attract each other .

Resources :

Board ,Marker ,Duster ,Book , Magnets

Start /Approach :

- Greet students
- Encourage students to share their learning regarding electrical circuit .

Methodology :

- 1-Announce the topic
- 2-Teacher will show a magnet to students and will tell them about the two poles . Teacher will demonstrate that like poles repel and opposite poles attract each other .
- 3-She will ask students to open their books at page no. 96 and read the content .
- 4-Explain the content to them .
- 5-Let them underline the difficult words
- 6-Teacher will ask the students to write about what is a magnet ? in their notebooks . Teacher will provide needful corrections .

Activity :

Tell the students to get divided into groups and discuss about the magnets and their poles .

Evaluation :

- 1-By reading
- 2-By questioning

3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 7

Electricity and Magnetism

Period : 6

Topic:

Teaching Objective :

By the end of this lesson , students will be able to :

- 1- Identify earth as a huge magnet and demonstrate it with an experiment .
- 2- Describe the working of magnetic compass .

Resources :

Board ,Marker ,Duster ,Book

Start /Approach :

- Greet students
- Encourage students to share their learning regarding magnets .

Methodology :

1-Announce the topic

2-Teacher will introduce earth as a magnet to the students .She will show a picture of milky ways or planets to students and will discuss that these planets are hanging in the universe without any string or helpful object .

3-She will let them think about the power that has sustain the planets in the air .

4-She will ask students to open their books at page no. 98 and read the content

5-Explain the content to them .

6-Let them underline the difficult words

7-Teacher will ask the following questions from the students to assess their learning .

- Why does a magnet compass always point towards north?
- Which power is keeping the earth and other planets in the air?
- How do compass be helpful to find the directions?

Activity :

Tell the students to get divided into groups and discuss about the compass read today .

Evaluation :

1-By reading

2-By questioning

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 7

Topic :

Electricity and Magnetism

Period : 7

Teaching Objective :

By the end of this lesson , students will be able to :

Explain different types of magnets permanent magnet ,temporary magnet and electro magnet .

3- Resources :

Board ,Marker ,Duster ,Book, different types of magnet

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding compass .

Methodology:

1-Announce the topic

2-Teacher will show different types of magnets to students and demonstrate their properties .

3-She will ask students to open their books at page no. 99 and read the content.

4-Explain the content to them .

5-Let them underline the difficult words

6-Teacher will encourage the students to write down the types of magnet and their properties in their notebooks in pairs .

7-Teacher will do checking of student's work .

Activity :

Tell the students to get divided into groups and discuss about the types and properties of magnet .

Evaluation :

1-By reading

2-By questioning

3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 7
Topic :
Electricity and Magnetism
Period : 8
Teaching Objective :

By the end of this lesson , students will be able to :
Answer the question .

4- Resources :

Board ,Marker ,Duster ,Book

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding the main points of the topic .

Methodology :

1-Announce the topic

2-Teacher will write a question of the board and will ask the students to write the answer .

She will do needful corrections and will guide the whole class to write that Q/A in their notebook .

All the questions /answers will be done in the similar way .

Teacher will do copy checking .

Activity :

Tell the students to get divided into groups and discuss about the Q/A .

Evaluation :

1-By questioning

2-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 7
Topic :
Electricity and Magnetism
Period : 9
Teaching Objective :

By the end of this lesson , students will be able to :
Solve the exercises to express their learning .

Resources :

Board ,Marker ,Duster ,Book

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding the main points of the topic .

Methodology :

1-Announce the topic

2-Teacher will introduce Ex land 2 to students and will encourage them to solve them individually .

3-She will provide needful corrections and guidance .

Activity :

Tell the students to get divided into groups and discuss about the exercises .

Evaluation :

1-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 8 A
Topic :

Structure of the Earth

Period : 1

Teaching Objective :

By the end of this lesson , students will be able to :

Describe the structure of the earth (i-e crust ,mantle and core)and characteristics of these distinct parts of the earth .

Resources :

Board ,Marker ,Duster ,Book,flip chart of earth structure .

Start /Approach :

- Greet students
- Encourage students to share their prior knowledge regarding earth and its structure .

Methodology :

1-Announce the topic

2-Teacher will show a flip chart of Earth's internal structure .

She will introduce the main parts and their names to the students .

3-She will ask students to open their books at page no.106,107 and read the content .

4-Explain the content to them .

5-Let them underline the difficult words.

6-Teacher will write the names of first layer of earth 'crust' on the board and will invite the students to write the details they have read about it on the board .

7-Teacher will provide needful corrections .

8-She will guide the class to write down about crust in their notebooks .

9-She will adopt the same way for the rest of the other parts as well .

10-She will check their notebooks and will do the corrections .

Activity :

Tell the students to get divided into groups and discuss the internal structure of the earth .

Evaluation :

1-By reading

2-By questioning

3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 8 A
Topic :

Structure of the Earth

Period : 2

Teaching Objective :

By the end of this lesson , students will be able to :
Describe the sources of water on earth .

Resources :

Board ,Marker ,Duster ,Book

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding the internal structure of the earth .

Methodology :

1-Announce the topic

2-Teacher will shows a video regarding source of water on earth to the students .

3-She will invite the students to share their understanding as whole class discussion .

4-Teacher will ask students to open their books at page no.,107 ,108,109 and read the content .

5-Explain the content to them .

6-Let them underline the difficult words.

7-teacher will make pairs of students and will encourage them to write about the source of water in their notebooks .

8-Teacher will do needful corrections .

Activity :

Tell the students to get divided into groups and discuss the source of water on earth .

Evaluation :

1-By reading

2-By questioning

3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 8 A
Topic :

Structure of the Earth

Period : 3

Teaching Objective :

By the end of this lesson , students will be able to :
Express their learning through written book .

Resources :

Board ,Marker ,Duster ,Book

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding the main points of the topic .

Methodology :

1-Announce the topic

2-Teacher will introduce Ex 1,2,3 to students and will encourage them to solve them individually .

3-Teacher will do corrections in students work.

Activity :

Tell the students to get divided into groups and discuss the exercises .

Evaluation :

1-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 8 A

Topic :

Structure of the Earth

Period : 4

Teaching Objective :

By the end of this lesson , students will be able to :

Answer the question .

Resources :

Board ,Marker ,Duster ,Book

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding the main points of the topic .

Methodology :

1-Announce the topic

2-Teacher will write a question on the board and will invite the students randomly to write down the answer .Teacher will do corrections and will guide the students to do it in their notebooks .

3-She will help the students to do all the questions /answers in the similar way .

4-She will do corrections in students notebooks .

Activity :

Tell the students to get divided into groups and discuss the Q/A . done today .

Evaluation :

1-By questioning

2-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 8 B

Topic :

Soil

Period : 1

Teaching Objective :

By the end of this lesson , students will be able to :

Identify similarities and differences among the different types of soil .

Resources :

Board ,Marker ,Duster ,Book

Start /Approach :

- Greet students
- Encourage students to share their prior knowledge regarding soil .

Methodology :

1-Announce the topic

2-Teacher will take the students out of the classroom and show them different types of soil .

3-Teacher will introduce different types of soil to the students .

4-She will ask students to open their books at page no.,115+116 and read the content .

5-Explain the content to them .

6-Let them underline the difficult words

7-Teacher will guide the students to write down the similarities and differences among the different types of soil in their notebooks .

8-Teacher will provide needful corrections .

9-She will encourage the students to collect different types of soil and paste them in their notebooks in small transparent bags .

Activity :

Tell the students to get divided into groups and discuss the different types of soil done today .

Evaluation :

1-By reading

2-By questioning

3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 8 B
Topic :

Soil

Period : 2

Teaching Objective :

By the end of this lesson , students will be able to :

Investigate the composition and characteristics of different soils .

Resources :

Board ,Marker ,Duster ,Book

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding different types of soil .

Methodology :

1-Announce the topic

2-Teacher will show different types of soil to students and will teach them about different characteristics of different types of soil .

3-Teacher will guide the students that different types of soil can be differ from each other in their colour ,texture , structure ,and organic matter .

4-Ask students to open their books at page no.,116,117,118 and read the content .

5-Explain the content to them .

6-Let them underline the difficult words.

7-Teacher will encourage students to differentiate among the samples of soil they have brought.

8-Teacher will help the students to solve Ex 1 & 2 individually .

9-She will provide needful corrections and guidance .

Activity :

Tell the students to get divided into groups and discuss the composition of soil .

Evaluation :

1-By reading

2-By questioning

3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 8 B

Topic :

Soil

Period : 3

Teaching Objective :

By the end of this lesson , students will be able to :

Answer the question

Resources :

Board ,Marker ,Duster ,Book

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding the main points of the lesson .

Methodology :

1-Announce the topic

2-Teacher will guide the students about the answer of the question . She will encourage the students to write down the answers on the board .

She will do corrections .She will guide the students to do all the questions /answers in their notebooks.

Peer checking will be encouraged

Activity :

Tell the students to get divided into groups and discuss the Q/A .

Evaluation :

1-By questioning

2-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 9

Topic :

Space and Satellites

Period : 1

Teaching Objective :

By the end of this lesson , students will be able to :

- 1-Define the term space and emphasize the need to explore it .
- 2-Recognize the role of NASA in space exploration .

Resources :

Board ,Marker ,Duster ,Book

Start /Approach :

- Greet students
- Encourage students to share their Prior knowledge regarding the main points of the lesson .

Methodology :

1-Announce the topic

2-Teacher will hold a discussion in the class about the topic why it was needed to explore the space .

3-Teacher will emphasize on the importance of NASA in space exploration .She will introduce NASA as an organization to explore space to students .She will introduce the working of NASA .

4-Ask students to open their books at page no.,121,122 and read the content .

5-Explain the content to them .

6-Let them underline the difficult words.

7-She will invite the students to present their learning about space and NASA in front of the class .

Activity :

Tell the students to get divided into groups and discuss the importance and role of NASA in space exploration .

Evaluation :

1-By reading

2-By questioning

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 9

Topic :

Space and Satellites

Period : 2

Teaching Objective :

By the end of this lesson , students will be able to :

- 1-Define the term satellite and describe its importance .

Resources :

Board ,Marker ,Duster ,Book ,picture of satellite .

Start /Approach :

- Greet students
- Encourage students to share their learning regarding NASA and its role in space exploration .

Methodology :

1-Announce the topic

2-Teacher will show pictures of satellite to students and will introduce them that satellite is a heavenly body that revolves around the planet in an orbit .

3-Teacher will guide the students about the importance of satellites .

4-She will ask students to open their books at page no.,123 and read the content .

5-Explain the content to them .

6-Let them underline the difficult words.

7-Teacher will make groups of students and will guide them to write about the importance of satellite in their notebooks .

8-Teacher will do corrections .

9-She will encourage the group leaders to present their work in front of the whole class .

Activity :

Tell the students to get divided into groups and discuss the importance of satellites .

Evaluation :

1-By reading

2-By questioning

3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 9

Topic :

Space and Satellites

Period : 3

Teaching Objective :

By the end of this lesson , students will be able to :

1-Define artificial satellites and explain their importance in exploring the earth and space .

Resources :

Board ,Marker ,Duster ,Book

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding satellites and their importance .

Methodology :

1-Announce the topic

2-Teacher will guide the students that to explore the earth and space we need satellites .

Scientists have sent different artificial satellites in the space to explore the space , the earth and the universe .

3-She will ask students to open their books at page no.,124,125 and read the content .

4-Explain the content to them .

5-Let them underline the difficult words.

Teacher will write a heading of importance of satellites on the board and will invite the random students to add details to the topic .

Teacher will provide needful corrections and details.

She will guide the class to note down the importance of satellites in their note book from the board .

Peer checking will be encouraged .

Activity :

Tell the students to get divided into groups and discuss the importance of satellites .

Evaluation :

1-By reading

2-By questioning

3-From the written work

Wrap – Up :



Ask students to share what they have learnt today and what they like the best about it .

Unit : 9

Topic :

Space and Satellites

Period : 4

Teaching Objective :

By the end of this lesson , students will be able to :
Recognize the key milestones in space technology .

Resources :

Board ,Marker ,Duster ,Book

Start /Approach :

- Greet students
- Encourage students to share their learning regarding artificial satellites .

Methodology :

1-Announce the topic

2-Teacher will show picture of Page 126 as the key milestones in space technology .

3-She will ask students to open their books at page no.,126 and read the content .

4-Explain the content to them .

5-Let them underline the difficult words.

6-Teacher will guide the students to make a timeline of space technology on loose sheets . Best work will be displayed in the class .

Activity :

Tell the students to get divided into groups and discuss the milestone in space technology read today .

Evaluation :

1-By reading

2-By questioning

3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 9

Topic :

Space and Satellites

Period : 5

Teaching Objective :

By the end of this lesson , students will be able to :

Describe the uses of various satellites in space i[e geostationary weather ,communication and global positional system (GPS)

Resources :

Board ,Marker ,Duster ,Book

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding the key milestone in space technology .

Methodology :

1-Announce the topic

2-Teacher will show a video of satellites to students .She will describe the various satellites in space to students . She will introduce the uses and importance of weather geostationary ,communication and global positioning system to students .

3-Ask students to open their books at page no.,125 and read the content .

4-Explain the content to them .

5-Let them underline the difficult words.

6-She will reinforce the concept by asking different questions .

1-Why do we use weather satellites ?

2-How geostationary satellites are useful ?

3-What are the benefits of global positionary system ?

4-What is the abbreviation of global positioning system ?

Activity :

Tell the students to get divided into groups and discuss the uses of various satellites read today .

Evaluation :

1-By reading

2-By questioning

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 9

Topic :

Space and Satellites

Period : 6

Teaching Objective :

By the end of this lesson , students will be able to :

Express their learning through written book .

Resources :

Board ,Marker ,Duster ,Book

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding the main points of the topic .

Methodology :

1-Announce the topic

2-Teacher will introduce Ex 1,2,3 to students and will encourage them to solve them individually .

3-Teacher will provide needful guidance and corrections .

Activity :

Tell the students to get divided into groups and discuss the exercises done today .

Evaluation :

1-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 9
Topic :
Space and Satellites
Period : 7
Teaching Objective :

By the end of this lesson , students will be able to :

Answer the question .

Resources :

Board ,Marker ,Duster ,Book

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding the main points of the topic .

Methodology :

- Announce the topic
- Teacher will ask the answer of the question (Ex =4) from the students randomly . She will encouraged the students to find and write the answer to their notebooks in pairs .
- Teacher will do correction .

Activity :

Tell the students to get divided into groups and discuss the Q/A .

Evaluation :

1-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 10
Topic :
Technology in Everyday Life
Period : 1
Teaching Objective :

By the end of this lesson , students will be able to:

Enlist and practice safety procedure while carrying out the activities .

Resources :

Board ,Marker ,Duster ,Book

Start /Approach :

- Greet students
- Encourage students to share their prior knowledge regarding technology in everyday life .

Methodology :

1-Announce the topic

2-Teacher will make pairs of students and will guide them to enlist and practice safety procedure while carrying out the activities .

3-She will ask students to open their books at page no.,132 and read the content .

4-Explain the content to them .

5-Let them underline the difficult words.

6-Teacher will guide the students to present their work in front of the whole class .

7-Teacher will provide needful corrections .

Activity :

Tell the students to get divided into groups and discuss the safety procedure .

Evaluation :

1-By reading

2-By questioning

3-From the written work

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 10

Topic :

Technology in Everyday Life

Period : 2

Teaching Objective :

By the end of this lesson , students will be able to:

Design and make different models .

Resources :

Board ,Marker ,Duster ,Book

Start /Approach :

- Greet students
- Encourage students to share their prior knowledge regarding safety procedure .

Methodology :

1-Announce the topic

2-Teacher will make groups of students and will guide them to make different models .

3-Teacher will provide instructions to students .

4-She will ask students to open their books at page no.,134,134,138,139,140,141 and read the content .

5-Explain the content to them .

6-Let them underline the difficult words.

7-Teacher will guide the students to present their work in front of the whole class .

Activity :

Tell the students to get divided into groups and discuss the models made today .

Evaluation :

1-By reading

2-By questioning

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 10

Topic :

Technology in Everyday Life

Period : 3

Teaching Objective :

By the end of this lesson , students will be able to:

- 1- Use a plumb line to install a flag pole vertically .
- 2- Use spirit level to level the surface of an object .

Resources :

Board ,Marker ,Duster ,Book , spirit ,level ,plumb line .

Start /Approach :

- Greet students
- Encourage students to share their learning regarding the models they made .

Methodology :

1-Announce the topic

2-Teacher will guide the students to use plumb line and spirit level .

3-She will give a chance to all the students to use the spirit level and plumb line .

4-Ask students to open their books at page no.,135,136,137 and read the content .

5-Explain the content to them .

6-Let them underline the difficult words

Activity :

Tell the students to get divided into groups and discuss the topic read today .

Evaluation :

1-By reading

2-By questioning

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .

Unit : 10

Topic :

Technology in Everyday Life

Period : 4

Teaching Objective :

By the end of this lesson , students will be able to:

- 1- Use a first aid box to dress to dress a wound.
- 2- Practice shifting a person to hospital .
- 3- Practice earth quake ,fire flood , drill .

Resources :

Board ,Marker ,Duster ,Book

Start /Approach :

- Greet students
- Encourage students to share their learning regarding using junk materials to make useful things .

Methodology :

1-Announce the topic

2-Teacher will practice the earth quake ,fire ,flood drill with the students .

3-She will guide the students about how to use first aid box .

4-She will practice the shifting a person to hospital on a strature .

Activity :

Tell the students to get divided into groups and discuss the topic read today .

Evaluation :

1-Through practical

Wrap – Up :

Ask students to share what they have learnt today and what they like the best about it .



Unit : 10**Topic :****Technology in Everyday Life****Period : 5****Teaching Objective :**

By the end of this lesson , students will be able to:
Express their learning through written work .

Resources :

Board ,Marker ,Duster ,Book

Start /Approach :

- Greet students
- Draw a bubble map on the board and encourage students to share their learning regarding the main points of the lesson .

Methodology :**1-Announce the topic**

Teacher will introduce exercises to students .She will encourage them to solve the exercises in pairs .
Teacher will provide needful guidance and correction .

Activity :

Tell the students to get divided into groups and discuss the exercises .

Evaluation :**1-From the written work****Wrap – Up :**

Ask students to share what they have learnt today and what they like the best about it .