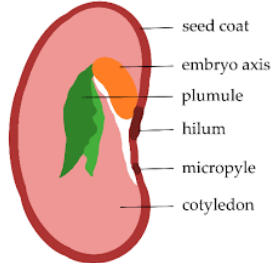


**DELHI POLICE PUBLIC SCHOOL**

**SCHOLASTIC SYLLABUS**

**SESSION 2024- 2025**

**SCIENCE CLASS 5**

MONTH	APRIL/MAY	TERM - I
LESSON 1	Plant Reproduction	
<ul style="list-style-type: none"><li>• Germination</li><li>• Dispersal of seeds</li><li>• Vegetative Propagation</li><li>• Cultivation</li></ul>		
<p><b>LEARNING OBJECTIVES:</b></p> <ul style="list-style-type: none"><li>• Understand the structure of a seed,</li><li>• Distinguish between a monocotyledonous and a dicotyledonous seed.</li><li>• Describe the various stages of seed germination.</li><li>• Describe the methods used to grow new plants from stem, roots, leaves.</li><li>• List the features of seeds dispersal of various agents.</li><li>• Know the various steps involved in cultivation.</li></ul>		
<p><b>LEARNING OUTCOMES:</b></p> <ul style="list-style-type: none"><li>• Describe different ways plants reproduce.</li><li>• Analyse the structure of a seed.</li><li>• Demonstrate the conditions required for seed germination.</li><li>• Explain the different methods of seed dispersal.</li><li>• Differentiate between different kinds of crops.</li><li>• List different stages of cultivation.</li></ul>		

Value: To grow and take care of plants.



**ACTIVITY:** Germinate seeds of kidney beans, green gram or chickpea

**MONTH:** JULY

## LESSON 2 Animals And Their Varying Lifestyles



- Habitat
- Adaptations
- Body covering of animals
- Eating habits of animals
- Migration of animals

### LEARNING OBJECTIVES:

- Comprehend adaptations possessed by animals for breathing, movement and feeding.
- Understand migration.
- Recognise the different reasons for migration among animals.

## LEARNING OUTCOMES:

- Identify different types of habitats.
- Identify various kinds of body coverings of animals.
- Discuss various eating habits of animals.
- Describe ways of breathing in different animals.
- List the body parts involved in movement of animals.
- Explain seasonal migration.

VALUE: To protect the habitats of animals and feeding stray animals.



ACTIVITY: In a world map plot the journey of any one migratory animal on it.

Discuss amazing facts of animals in the class.

## LESSON 5 FOOD AND HEALTH



- Nutrients
- Balanced Diet
- Exercise and rest
- Diseases

### LEARNING OBJECTIVES:

- Define the term nutrients.
- List five main nutrients and their functions.
- Identify foods rich in carbohydrates, fats, proteins, vitamins and minerals.
- Plan a balanced diet
- Follow a routine of exercise.

### LEARNING OUTCOMES:

- Classify various types of nutrients – carbohydrates, fats, proteins,, vitamins, minerals and roughage.
- Describe the importance of a balanced diet and exercise,

### VALUE:

- \* Do not waste food.
- Eat healthy food to stay healthy and to protect oneself from diseases.
- Keeping our surroundings clean.



**ACTIVITY:** Children will make balanced diet for themselves.

Cut and paste nutritional value of any two products – milk, butter, Maggi, chocolate, jam, biscuits.

MONTH

AUGUST

LESSON 6 Health and Diseases

LEARNING OBJECTIVES:

- List the causes of communicable and non- communicable diseases.
- Differentiate between communicable and non- communicable diseases.
- Follow the protective measures to prevent diseases.
- Identify different vaccines for preventing diseases.

LEARNING OUTCOMES:

- List types of diseases their causes and prevention.

VALUE: Wash hands before and after eating food.

Take care of sick and old people.



LESSON 3 The Skeletal System

- Human skeleton
- Joints
- Muscles

LEARNING OBJECTIVES:

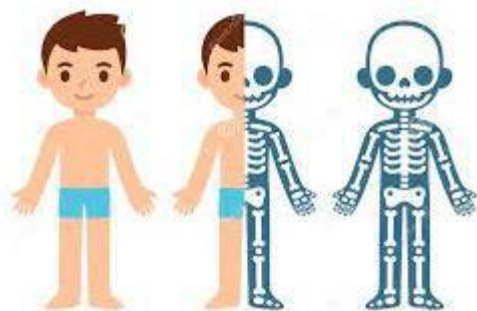
- Understand the composition and functions of bones.

- List the major functions of the skeleton.
- Identify the main parts of the skeleton.
- Compare the movement of different types of joints in the body.
- Compare and contrast voluntary and involuntary muscles.
- Distinguish between skeletal, smooth, and cardiac muscle fibre.

**LEARNING OUTCOMES:**

- Identify the various parts of human skeletal.
- Describe the structure and functions of skeletal.
- Recognise various types of joints in our body.
- Discuss the significance of joints in our body.

**VALUE :** Regular physical exercise keeps our joints and muscles strong.



**ACTIVITY:** Move different body parts to identify different joints in our body.

MONTH                      SEPTEMBER

Revision for Mid- Term Exams

PROJECT – Staying Safe

CONCEPTUAL TALK - Animals in their Varying lifestyles

MONTH

OCTOBER

TERM - II

Lesson 4 The Nervous System



- Brain
- Spinal Cord
- Nerves
- Reflex Action
- Sense Organs

LEARNING OBJECTIVE:

- Identify and describe the functions of the different parts of the nervous system.
- Describe the structure of a nerve cell.
- Understand the role of different types of nerves,
- Explain reflex action.
- Gain knowledge about the structure of the sense organs and their care.

LEARNING OUTCOME:

- Identify various parts of muscular system.
- Describe the structure and functions of muscular system.
- Recognise various types of muscles and their functions.

VALUE: Taking care of sense organs.



Activity: Make a list of some animals that have remarkable sense of hearing, smell, vision.

MONTH

NOVEMBER

TERM - II

LESSON 8 Wonders of Air

- Layers of atmosphere
- Composition of air
- Properties of air

LEARNING OBJECTIVES:

- Understand that air is present all around us.
- Identify the components of air.
- Understand the properties of air.
- Comprehend the causes and effects of air pollution.

LEARNING OUTCOMES:

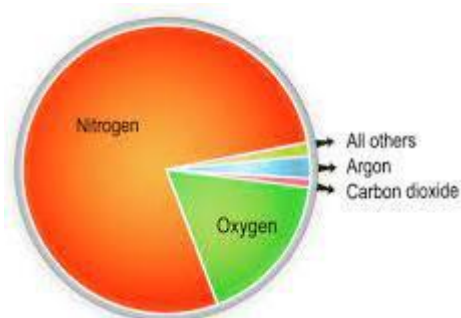
- Recognise the various layers of the atmosphere.
- Describe the composition of air.
- Demonstrate the properties of air.



- Realise the causes of air pollution.

VALUE: Growing plants to reduce air pollution.

Carpooling is a simple and effective way to reduce carbon footprints.



ACTIVITY: Children will blow a balloon to observe the properties of air.

Use a straw , syringe or a fountain pen to observe air exerts pressure.

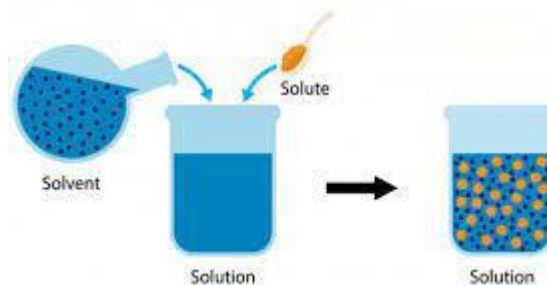
MONTH

NOVEMBER

LESSON 9

Matter

**Solute + Solvent → Solution**



- Properties of matter
- Different states of matter
- Solutions

- Physical and chemical change

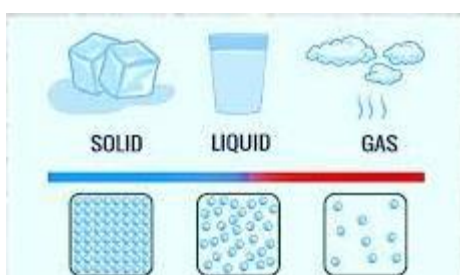
**LEARNING OBJECTIVES:**

- Understand matter.
- Identify different states of matter.
- Classify matter.
- Understand what are solutions.
- Understand that matter can change state on heating or cooling.
- Identify physical and chemical changes around them.

**LEARNING OBJECTIVES:**

- Describe the properties of different states of matter.
- Explain that states of matter are interconvertible.
- Differentiate between soluble and insoluble substances.
- Compare properties of different states of matter.
- Distinguish between physical and chemical changes.

**VALUE:** The matter is all around us and plays an essential role in our daily lives. The point is an integral part of our existence, from air we breathe to the food we eat. We should not pollute them or waste them.

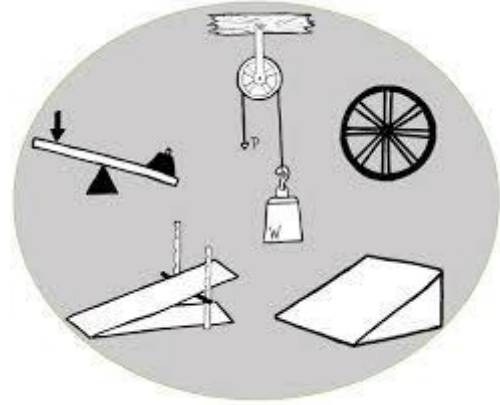


**ACTIVITY:** Forming solution with water and salt, water and sugar.

Mixing liquids like water and lime juice or water and oil to observe miscible and immiscible liquids.

**MONTH**      **DECEMBER**

**LESSON 12 :**      **Force, Energy and Simple Machines**



- Types of forces
- Forms of energy
- Different types of simple machines

#### LEARNING OBJECTIVES:

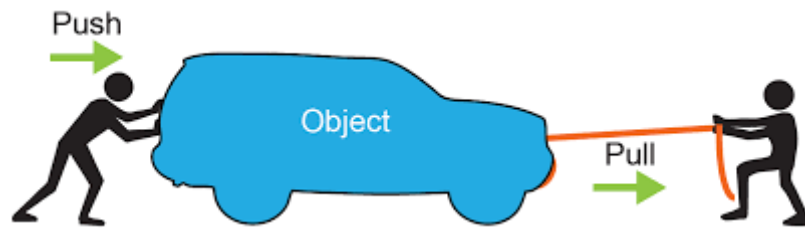
- Understand what is force.
- Know the effects of force.
- Understand different types of forces.
- Know the different forms of energy.
- Distinguish between the three classes of levers.
- Comprehend the working the working of simple machines.

#### LEARNING OUTCOMES:

- Explain the different types of forces.
- Describe the different forms of energies.
- Discuss the law of conservation of energy.
- Identify the different types of simple machines.

Value: Use solar energy for cooking, generating electricity.

Utilise natural resources like sun, wind and water and prevent the environment.



Activity: Make a working model of any one simple machine.

MONTH

DECEMBER

### LESSON 11 Soil Erosion and Conservation



- Formation of soil
- Importance of soil
- Properties of soil
- Soil profile
- Soil erosion
- Soil conservation

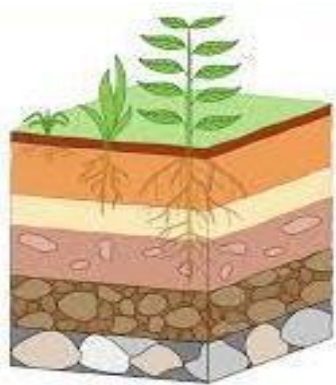
#### LEARNING OBJECTIVES:

- Appreciate the role of soil in supporting life.
- Explain the process of soil formation.
- Identify factors that cause soil erosion.
- List the harmful effects of soil erosion.
- Recognise the ways to prevent soil erosion and practice them.
- Identify the causes of soil pollution.
- Understand the importance and methods of soil conservation.

#### LEARNING OBJECTIVES:

- Describe the process of soil formation.
- Identify different layers of soil.
- Explain the occurrence of soil erosion.
- Discuss the factors that cause soil erosion.
- Recognise the methods of soil conservation.

Value: Growing more and more plants/trees to conserve our soil.  
Protecting top layer of the soil.



ACTIVITY: Make a model of layers of soil in a transparent jar using mud, pebbles, grass etc.  
Use clayey soil to make any object. Keep it in the sun to dry and harden.

MONTH JANUARY

LESSON 13 Universe

- The sun



- The moon
- Phases of the moon
- Landing on the moon
- Solar and Lunar eclipse
- Artificial satellites

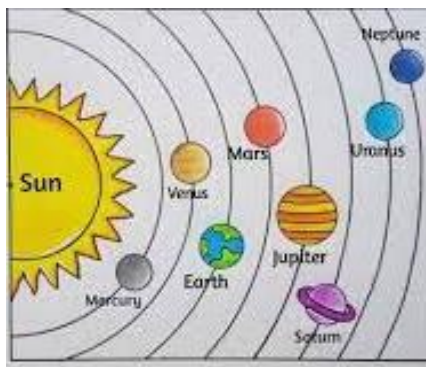
#### LEARNING OBJECTIVES:

- Comprehend conditions persisting on the Moon.
- Differentiate between solar and lunar eclipse.
- Acquire knowledge about space travel.
- List the importance of artificial satellites.

#### LEARNING OUTCOMES:

- Discuss some important facts about sun.
- Describe the surface of and conditions present on the moon.
- Recognise man's first landing on moon.
- Explain the formation of eclipses.
- Name different artificial satellites.

Value: Never see a Solar eclipse with naked eyes.



Activity: Role model: Imagine yourself as one of the planet and speak few lines on it in the class.  
Discuss 5 myths related to eclipses in the class.

MONTH FEBRUARY

LESSON 14 Natural Disasters

- Earthquakes and their effects
- Volcanoes and their kinds
- Tsunami and its effects

**LEARNING OBJECTIVES:**

- Learn about various types of natural disasters.
- Understand the cause of natural disasters.
- Know about the effects of natural disasters.

**LEARNING OUTCOMES:**

- Discuss various types of natural disasters.
- Explain how earthquakes occur and volcanoes erupt.
- Identify different types of volcanoes.
- List various other natural disasters.

VALUE: Be helpful during natural disasters.  
Do not panic.

Drop. Cover and hold on. – Golden rule during earthquake.

## NATURAL DISASTERS



**ACTIVITY:** Practice of mock drill on earthquake.

Paste pictures of different natural disasters showing their after effects.

Revision for Final exams

MONTH

MARCH

Final Exams

**PROJECT:**

Universe

**CONCEPTUAL TALK:**

Simple Machines