

Dawood Public School
Course Outline 2018-2019
Science
Grade V

Book and Work book:

- International Primary Science-5 (Ho Peck Leng)
- Marshall Cavendish Education

Months	Contents	Pages
August	Sounds all around	119-139
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Syllabus Content

August:

Chapter 5: Sounds all around

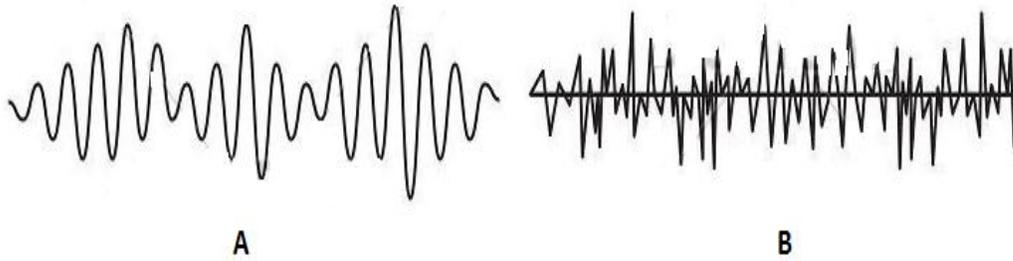
Pages 119-139

Contents	Learning Objectives
<p>Sounds around us Sound is a form of energy. It surrounds us at all times. Sounds are used for communication and to express feeling.</p>	<ul style="list-style-type: none"> • Define sound. • Develop awareness that sounds are all around us. • Describe what sound is used for.
<p>Sounds are produced by vibrations</p> <ul style="list-style-type: none"> • Vibrations are invisible waves that move rapidly up and down and create sound. • Frequency is the number of vibrations made in one second. • A loud sound carries more energy than a soft sound. 	<ul style="list-style-type: none"> • Define the following: <ul style="list-style-type: none"> ➤ frequency ➤ vibration • Describe how sound is produced. • Describe different types of sounds. • Differentiate between the energy levels of different sounds.
<p>How our ears hear sounds? Sound is a form of energy that can be detected by our ears. Main parts of human ear are:</p> <ul style="list-style-type: none"> • External ear • Middle ear • Internal ear 	<ul style="list-style-type: none"> • Identify the organ which detects sound. • Identify the different parts of a human ear and relate these parts to their functions. • Label the internal structure of human ear.
<p>Sound needs a medium Sound travels via a medium, such as:</p> <ul style="list-style-type: none"> • Solids • Liquids • Gases <p>Vacuum is a place that does not contain any matter therefore sound cannot travel through it.</p>	<ul style="list-style-type: none"> • Define 'sound waves'. • Explain how sound uses a medium to travel. • Describe the role of 'vacuum' in sound travel.
<p>Reflecting sound</p> <ul style="list-style-type: none"> • A reflecting sound is called an echo. • Hard surfaces reflect sound better than soft surfaces. 	<ul style="list-style-type: none"> • Define 'echo'. • Explain the occurrence of echo. • State that hard surfaces can reflect sound better than soft sounds.
<p>Pitch</p> <ul style="list-style-type: none"> • Pitch is the rate at which vibrations are produced. • High pitched sound has a high frequency and a low pitched sound has a low frequency. 	<ul style="list-style-type: none"> • Define 'pitch'. • Differentiate between low pitched and high pitched sounds.
<p>Pleasant and unpleasant sounds</p> <ul style="list-style-type: none"> • Pleasant sounds have regular wave patterns and unpleasant sounds like noises do not have regular wave pattern. 	<ul style="list-style-type: none"> • Differentiate the wave patterns for pleasant and unpleasant sounds. • Identify and list some pleasant and unpleasant sounds. • Draw the wave pattern of: <ul style="list-style-type: none"> ➤ pure note ➤ pleasant sound ➤ unpleasant sound ➤ noise
<p>Key Words: communication, expression, tuning Fork, frequency, hertz, vibrations, vacuum, ripples, ear canal, ear drum, hammer, anvil, stirrup, semi circular canal, cochlea, auditory nerve, echo, pitch, oscilloscope</p> <p>Types of Questions:</p> <ul style="list-style-type: none"> • Multiple Choice Questions • Differences • Short reasoning questions • Experimental questions • Drawing and Labeling 	

Sample Questions:

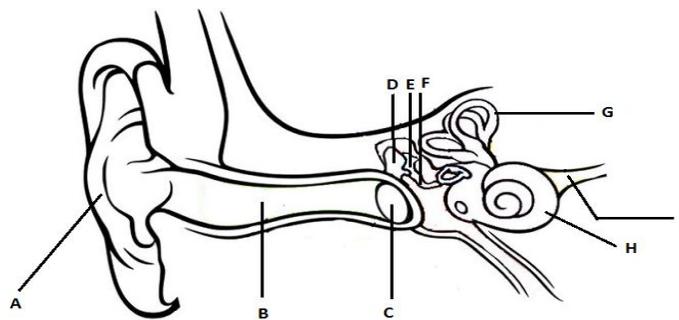
1. A tuning fork of frequency 328Hz vibrates for 1 minute and 2 seconds, what will be the total number of vibrations?
- The following waves of the sound are being observed in the oscilloscope.

H



How are the waves A different from waves B? Give reason

2. Draw the sound waves with the help of the given instructions.
Frequency : 15 Hz
Pitch : High
Pleasant
- Label the diagram below and answer the following questions.



- a. Color the external ear with brown.
- b. Color the middle ear with blue.
- c. Color the inner ear with yellow.
- d. Color the part red that contains blood.

Workbook activities:

- Activity 5.1, 5.2, 5.3, 5.4, 5.6

Activities/Experiments:

- Students will be taken to a room with plastic chairs on one side and nothing on another side, to hear the reflecting sounds.

Practical Applications:

- To examine the movement of sound waves through the three states of matter.
- To examine the vibrations produced by tuning fork and to check whether those vibrations can cause the movement of any object – perhaps a tennis ball.
- To examine the reflection of sound produced by a ticking clock by using a glass or ceramic plate.
- To examine the difference in the pitch of the sound wave travelling through air and increasing volume of water.

Surf I.T:

- <https://www.youtube.com/watch?v=AGjxfx8sy6s>
- <https://www.youtube.com/watch?v=HMXoHKwWmU8>

Contents	Learning Objectives
<p>Changes of state Heat gain or heat loss can cause changes in state. Water exists in three different states as:</p> <ul style="list-style-type: none"> • Solid • Liquid • Gas 	<ul style="list-style-type: none"> • Develop awareness that heating or cooling is needed for a change of state to take place from one state of matter to another state. • Recognize that water exists in three interchangeable states of matter.
<p>When water loses heat</p> <ul style="list-style-type: none"> • Freezing is change of a liquid into a solid. • Condensation is change of a gas into a liquid. 	<ul style="list-style-type: none"> • Define 'freezing'. • Define 'condensation'. • Identify the pictures showing process of condensation.
<p>When water gains heat</p> <ul style="list-style-type: none"> • Melting is change of solid into liquid. • Boiling is change of liquid into gas. 	<ul style="list-style-type: none"> • Define 'boiling'. • Define 'melting'.
<p>Evaporation Evaporation is a change of liquid into gas below its boiling point. Factors affecting the rate of evaporation are:</p> <ul style="list-style-type: none"> • The temperature of surrounding • The presence of wind • The surface area • Humidity 	<ul style="list-style-type: none"> • Explain the process of evaporation. • List the factors affecting the rate of evaporation. • Describe how surrounding temperature affects rate of evaporation. • Explain the effect of wind on evaporation of water. • Describe the role of surface area on evaporation. • Explain how humidity affects the process of evaporation.
<p>The water cycle It is the continuous movement of water from the Earth's surface into the air and back to the Earth's surface again. Different processes involved in water cycle are:</p> <ul style="list-style-type: none"> • Evaporation • Transpiration • Condensation • Precipitation • Collection 	<ul style="list-style-type: none"> • List the steps involved in the process of water cycle. • Describe the importance of water cycle. • Draw the water cycle. • Differentiate between transpiration, condensation and precipitation.
<p>Purifying and treating water Water is one of the most important substances on Earth. Apart from drinking it has many other uses. Water is cleaned and purified in many ways.</p> <ul style="list-style-type: none"> • Distillation is the process of obtaining pure water. • Filtration is the process of separating suspended solid matter from a liquid by the use of filter paper. <p>Different ways of keeping drinking water clean:</p> <ul style="list-style-type: none"> • Boiling • Filtration • Distillation • Chlorination 	<ul style="list-style-type: none"> • State the importance of clean water. • List the ways of keeping water clean. • Differentiate between the filtration and distillation processes. • List the steps involved in the following water purifying processes: <ul style="list-style-type: none"> ➤ distillation ➤ filtration • List the methods of cleaning water to make it suitable for drinking.
<p>Water borne diseases Consumption of unclean water may lead to illness. Some common water related illnesses are:</p> <ul style="list-style-type: none"> • Cholera • Typhoid • Dysentery • Malaria • Gastroenteritis 	<ul style="list-style-type: none"> • List some water borne diseases. • Suggest some lifestyle habits which can prevent water borne diseases.

Key Words:

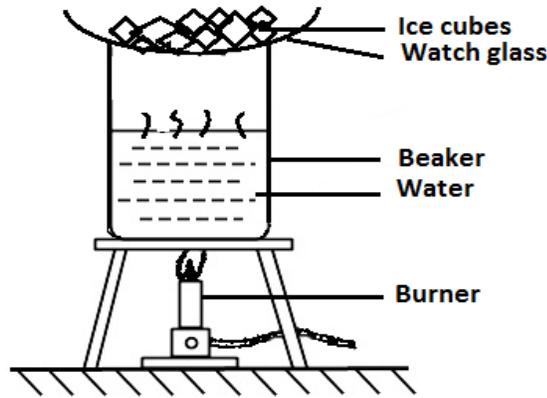
freezing, condensation, melting, boiling, evaporation, variable, temperature, humidity, condense, distillation, distilled, filtration, filtrate, residue.

Types of Questions:

- Multiple Choice Questions
- Differences between different processes
- Questions with illustrations
- Descriptive questions
- Drawing and Labeling

Sample Questions:

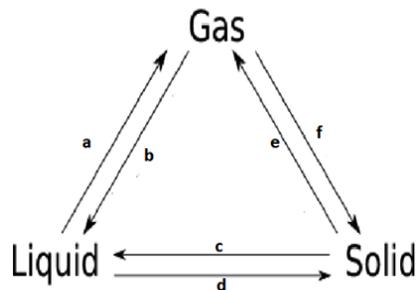
1. The diagram below shows an experiment which is having simulation with the water cycle in nature.



- a. Where will the water droplets be formed? Mention in the diagram.
- b. Complete the table.

Apparatus Of The Experimental Setup	Resemblance To The Nature
Sun	
Ozone layer	
	Clouds
	Water in the beaker

2. Identify the processes in the following diagram.



A :	B :
C :	D :
E :	F :

Workbook activities:

- Activity 3.1, 3.2, 3.3, 3.5, 3.6

Activities/Experiments:

- Students will engage in particle formation activity.
- Students will engage in mirror activity.
- Students will make popsicles.
- Students will visit the laboratory for boiling water activity.
- Students will make a virtual water cycle.

Practical Applications:

- To visualize the phenomenon of condensation in hot and cold water in a closed system.
- To measure the initial and final temperature of water before and after boiling.
- To compare the boiling points of three different liquids. (water, cooking oil, salt solution)
- To construct a virtual water cycle in laboratory by using hot water and ice cubes in order to understand the phenomenon of water cycle.

Surf I.T:

- ✓ **Changing states**
 - <http://www.bbc.co.uk/schools/scienceclips>
 - <http://www.crickweb.co.uk/ks2science.html>
- ✓ **The water cycle**
 - <http://www.crickweb.co.uk/ks2science.html>
- ✓ **Water treatment, pollution and conservation**
 - <http://pulitzercentre.org/downstream>

October:**Chapter 4:** Discovering plants

Pages 81-117

Contents	Learning Objectives
<p>Processes involved in the reproduction of flowering plants are:</p> <ul style="list-style-type: none"> • Pollination • Fertilisation • Seed dispersal • Germination <p>Flowers are the parts of the plants responsible for reproduction; they turn into fruit after fertilization.</p> <p>Parts of flower</p> <ul style="list-style-type: none"> • Petal • Sepal • Pedicel <p>Female parts</p> <ul style="list-style-type: none"> • Pistil <ul style="list-style-type: none"> ➤ Stigma ➤ Style ➤ Ovary ➤ Ovule ➤ Eggs/Female reproductive cells <p>Male parts</p> <ul style="list-style-type: none"> • Stamen <ul style="list-style-type: none"> ➤ Pollen ➤ Anther ➤ Filament 	<ul style="list-style-type: none"> • Name different processes involved in the reproduction of flowering plant. • Label, draw and write the function of different parts of flower. • Differentiate between male and female parts of flower.
<p>Pollination</p> <p>It is the transfer of pollen from the anther of a flower to the stigma of the same flower.</p> <p>Types of pollination</p> <ul style="list-style-type: none"> • Self pollination • Cross pollination <p>Pollinators</p> <ul style="list-style-type: none"> • Animals like birds, bats and insects • Wind 	<ul style="list-style-type: none"> • Explain the process of pollination. • Differentiate between self and cross pollination with their respective illustrations. • List some pollinators and identify the flowers' pollinator on the basis of their specific features.
<p>Fertilization</p> <p>The fusion of the male reproductive cell with the egg to form a fertilised cell.</p> <p>Steps involved in the process of fertilisation are:</p> <ul style="list-style-type: none"> • Pollination • Fusion of male and female reproductive cells • Fertilisation • Development of ovules into seeds 	<ul style="list-style-type: none"> • List the steps involved in the process of fertilization with their respective illustrations.

<p>Fruits are defined as the parts of plants that developed from the ovaries of flowers after fertilisation.</p> <p>Fruits and their types</p> <ul style="list-style-type: none"> • Edible or inedible • Fleshy or non-fleshy • Juicy or dry 	<ul style="list-style-type: none"> • Identify the fruits on the basis of their specific characteristics. • State the importance of fruits in plant growth.
<p>Seed dispersal is the movement or transport of seeds away from the parent plant.</p> <p>Seed dispersal methods</p> <ul style="list-style-type: none"> • Wind • Animals • Water • Splitting open 	<ul style="list-style-type: none"> • Describe the different methods of seed dispersal. • Give examples of fruits formed by each type of seed dispersal.
<p>The development of seeds into young plant is called germination.</p> <p>Conditions required for germination:</p> <ul style="list-style-type: none"> • Water • Oxygen in air • Warmth <p>Parts of bean and maize seeds:</p> <ul style="list-style-type: none"> • Seed coat • Cotyledon root • Shoot • Embryo • Endosperm <p>Life cycle of plant</p> <p>The different stages of growth and development, from a seed to an adult plant, make up the life cycle of a flowering plant.</p>	<ul style="list-style-type: none"> • List the necessary conditions required for seed germination and plant growth. • Label, distinguish and state the functions of parts of bean and maize seeds. • List the stages involved in plant's life cycle.

Key Words:

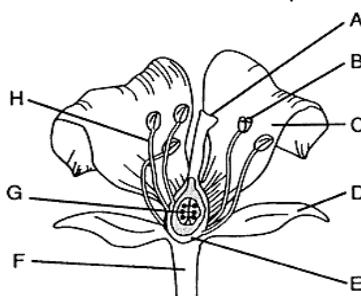
reproduction, pollination, fertilization, seed dispersal, germination, nectar, pollinators, nutrients, overcrowding, dicotyledonous, monocotyledon

Types of Questions:

- Multiple Choice questions
- Differences between different processes
- Questions with illustrations
- Descriptive questions
- Diagrams and Labeling
- Short reasoning questions

Sample Questions:

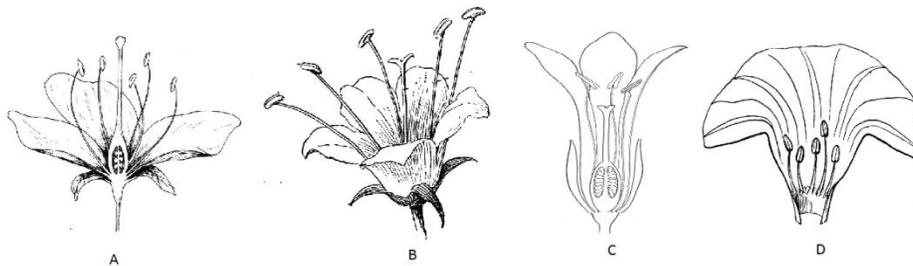
1. Label the parts of flower and state the function of each part.



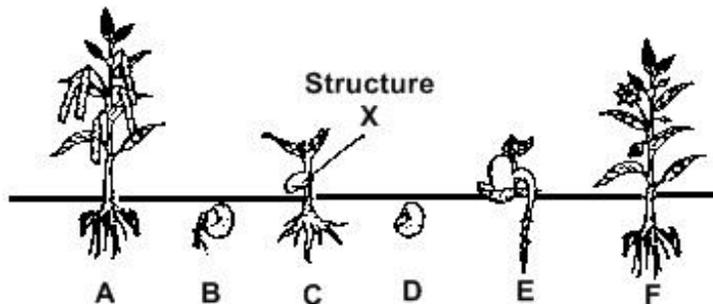
	Label	Function
A		
B		
C		
D		
E		
F		

G		
H		

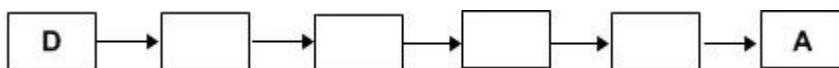
- Which of the flowers above can never develop into a fruit? Explain why.



3. The diagram below shows the different stages of a bean plant's life cycle.



- Arrange the letters in the boxes below to depict the life cycle of a bean plant from a seed to an adult plant.



- Name the part labeled X. What is its function?

Workbook activities:

- Activity 3.1, 3.2, 3.3, 3.5, 3.6

Activities/Experiments:

- Identify different parts of flower.
- Be engaged in 'Cheetos' pollination activity with finger puppet.
- Have fun with fruits and vegetables.
- Play Sultana game in school garden.
- Sow seeds.

Practical Applications:

- To perform paper chromatography in order to separate chlorophyll from leaf.
- Seed dissection of monocot seed.
- Seed dissection of dicot seed.
- To prepare a slide of pollen and to visualize it under microscope.

Surf I.T:

✓ **Plants and flowers**

- <http://www.theteachersguide.com/plantsflowers.htm>

✓ **Pollination**

- <http://www.neok12.com/Pollination.htm>

✓ **Seed dispersal**

- <http://theseedsite.co.uk/dispersal.html>

✓ **Interactive activities on life cycles of plants**

- <http://www.crickweb.co.uk/ks2science.html#lcycles5b>

✓ **Germination video**

- <http://www.teachersdomain.org/asset/lsp07-int-plantmovies/>

Contents	Learning Objectives
<p>Atoms are the basic units of matter and the defining structure of elements.</p> <p>Atom and its sub atomic particles</p> <ul style="list-style-type: none"> • Protons (Positively charged) • Neutrons (No charge) • Electrons (Negatively charged) 	<ul style="list-style-type: none"> • Define ‘atom ‘. • Draw the arrangement of the sub atomic particles in an atom. • Identify the location and charges present on sub atomic particles. • Draw structure of atom.
<p>Static electricity</p> <p>Static electricity is an imbalance of electric charges within or on the surface of a material.</p> <p>Law of electric charges</p> <p>“Like charges repel and opposite charges attract”.</p> <p>Uses of static electricity</p> <ul style="list-style-type: none"> • Charged filters in air conditioners • Electrostatic wipes • Photocopiers • Spray painting 	<ul style="list-style-type: none"> • Define ‘static’ electricity. • Differentiate between electricity and static electricity. • Describe how things get charged up. • State the law of electric charges. • Observe the occurrence of static electricity through different experiments. • Explain the scientific reasons for occurrence of static electricity during winter. • List the different uses of static electricity in our daily life.
<p>Conductors</p> <p>A conductor is a material that allows electric charge to move through it as an electric current.</p> <p>Examples of conductors</p> <ul style="list-style-type: none"> • Silver • Gold • Copper • Steel • Water • Lemon juice • Graphite <p>Insulators</p> <p>Insulators are materials that inhibit the flow of electrical current.</p> <p>Examples of insulators</p> <ul style="list-style-type: none"> • Glass • Air • Plastic • Rubber • Wood 	<ul style="list-style-type: none"> • Differentiate between conductors and insulators. • Identify the materials as insulator and conductor.

<p>Using and Saving Electricity</p>	<ul style="list-style-type: none"> • List the different ways of using and saving electricity. • Discuss why saving electricity is important.
<p>Renewable energy resources Renewable energy is energy that is generated from natural processes that are continuously replenished.</p> <p>Examples of renewable energy</p> <ul style="list-style-type: none"> • Solar energy • Wind energy • Hydropower • geothermal energy <p>Non-renewable energy resources. Non-renewable energy comes from sources that will run out or will not be replenished.</p> <p>Examples of non- renewable energy</p> <ul style="list-style-type: none"> • Coal • Oil • Natural gas 	<ul style="list-style-type: none"> • Name the non renewable and renewable energy resources. • Differentiate between renewable and non renewable energy resources. • Suggest how non renewable energy resources are used. • Suggest how renewable energy is used.
<p>Key Words: atom, proton, electron, neutron, nucleus, negatively charged, positively charged, neutral, attract, repel, humidity, energy resources, fossil fuels, renewable</p> <p>Types of questions:</p> <ul style="list-style-type: none"> • Multiple Choice questions • Differences • Short reasoning questions • Experimental questions • Drawing structure of atom <p>Sample Questions:</p> <p>1. Label the diagram along with their charges.</p> <div data-bbox="435 1392 1172 1671" data-label="Image"> </div> <p>2. Differentiate between conductors and insulators.</p> <p>3. Ali was combing his hairs after combing he took the comb near to some pieces of paper.</p> <div data-bbox="548 1757 1071 1999" data-label="Image"> </div> <p>a) Why do the pieces of paper are showing attraction toward the comb? b) From where the comb got charged up?</p> <p>Workbook activities:</p> <ul style="list-style-type: none"> • Activity 6.1, 6.2, 6.3, 6.4, 6.5. <p>Practical Applications:</p> <ul style="list-style-type: none"> • To create an electrical circuit in laboratory by using vinegar. • To investigate whether same charges and opposite charges attract, by charging two suspended balloons. • To observe the phenomenon of losing electrons and gaining electrons by charging different types of materials (glass and plastic). 	

Surf I.T:

- <https://www.youtube.com/watch?v=G-vX4GHNEuo>
- <https://www.youtube.com/watch?v=wMOpMka6PJI>
- <https://www.youtube.com/watch?v=8eKxgRnRRug>
- <https://www.youtube.com/watch?v=G-vX4GHNEuo>

February

Chapter 1: Keeping healthy

Pages 1-26

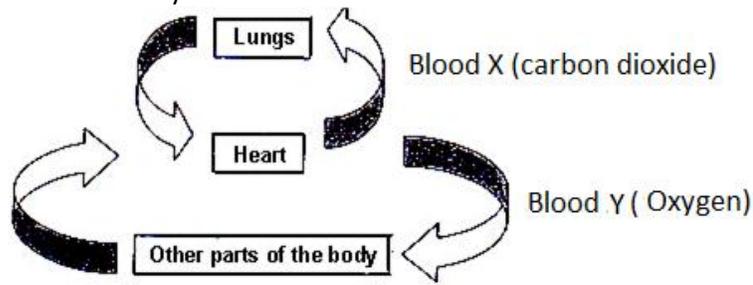
Contents	Learning Objectives
<p>Circulatory system in human body</p> <p>Blood is a specialized body fluid. Its main components are:</p> <ul style="list-style-type: none"> • Plasma • Red blood cells • White blood cells • Platelets <p>Blood vessels are intricate networks of hollow tubes that transport blood throughout the entire body. They include:</p> <ul style="list-style-type: none"> • Arteries • Veins • Capillaries <p>Heart is a muscular organ that pumps blood around the entire body. Different parts of heart are:</p> <ul style="list-style-type: none"> • Atria • Ventricles • Septum • Vena cava • Pulmonary artery • Pulmonary vein • Aorta • Valves 	<ul style="list-style-type: none"> • Describe the main components of blood. • Relate the adaptation of blood cells with its functions. • Name the different types of blood vessels present in the human body. • Describe the function and adaptations of arteries, veins and capillaries. • Differentiate between arteries, veins and capillaries. • Identify the location of heart in the body. • Explain the structure and function of the different parts of human heart. • Distinguish between parts carrying oxygenated and deoxygenated blood. • Draw the pathway of blood from the heart throughout the body. • With the city transport system.
<p>Contagious Diseases</p> <p>Contagious diseases, such as the flu, colds, or sore throat, spread from person to person in several ways.</p> <p>Non-contagious diseases, such as cancer, obesity, Alzheimer's, asthma, diabetes do not spread from one person to another.</p>	<ul style="list-style-type: none"> • Define contagious and non-contagious diseases. • Classify diseases as contagious and non-contagious. • Describe how contagious diseases are transmitted. • State the causes, symptoms, preventions and cures of common contagious and non-contagious diseases.
<p>Drugs</p> <p>Drugs are substances that can change the way the body behaves when taken into the body.</p> <ul style="list-style-type: none"> • Useful and harmful drugs • Medicinal drugs <p>Drug abuse is the use of drugs in ways that harms the body.</p>	<ul style="list-style-type: none"> • Define the term 'drug'. • Recognize the harmful and useful drugs. • Classify medicinal drugs based on their uses. • Recognize that drugs, even medicinal drugs, can be abused or misused. • Suggest some lifestyle precautions to avoid getting trapped into drug use.
<p>Harmful effects of tobacco</p> <ul style="list-style-type: none"> • Heart disease • Lung cancer • Bronchitis • Coughing • Blood clotting • Mood stimulation 	<ul style="list-style-type: none"> • Describe the harmful effects of tobacco on human health. • List some common diseases caused by prolonged use of tobacco.
<p>Key Words: arteries, pulmonary, coagulation, leukocytes, deoxygenated, capillaries, platelets, erythrocytes, vena cava, microscope</p>	

Types of Questions:

- Multiple Choice questions
- Differences
- Short reasoning questions
- Experimental questions

Sample Questions:

1. Study the diagram below carefully.



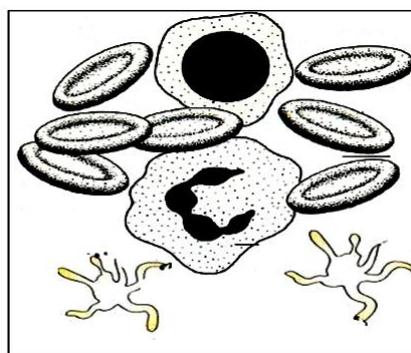
- Which of the following correctly represents the blood vessel that carries blood X and Y?

	X	Y
A.	Pulmonary Vein	Vein
B.	Pulmonary Artery	Arteries
C.	Pulmonary Vein	Arteries
D.	Pulmonary Artery	Vein

2. Match the column.

	Column A		Column B	Answers
1	I maintain the immune system of the body.	A	Cardiac	
2	I heal wounds and maintain the viscosity of blood.	B	Aspirin	
3	I carry gases and the protein known as hemoglobin.	C	White blood cells	
4	I give red color to the blood.	D	Hemoglobin	
5	I separate the left and right side of the heart.	E	Antibiotics	

3. Color and label the components of the blood in the following diagram.



Workbook activities:

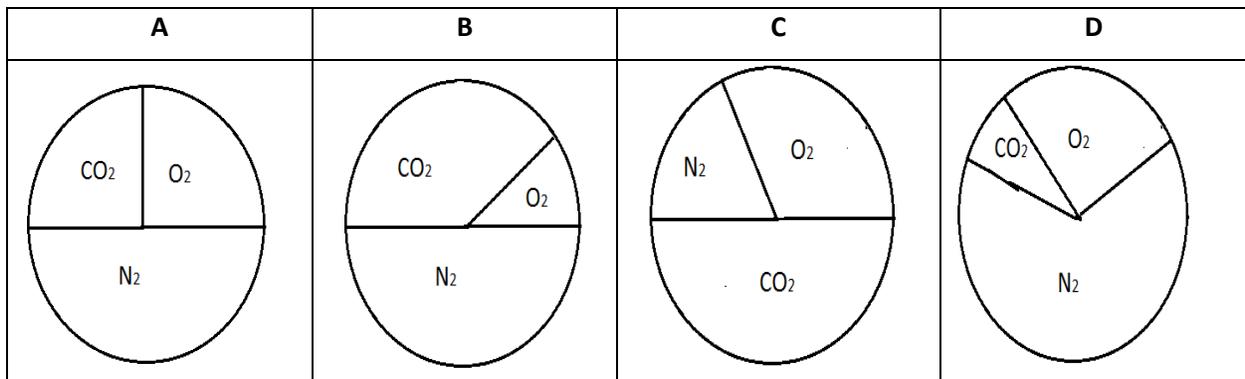
- Activity 1.1, 1.2, 1.3,1.4, 1.5, 1.6, 1.7, 1.8

Practical Applications:

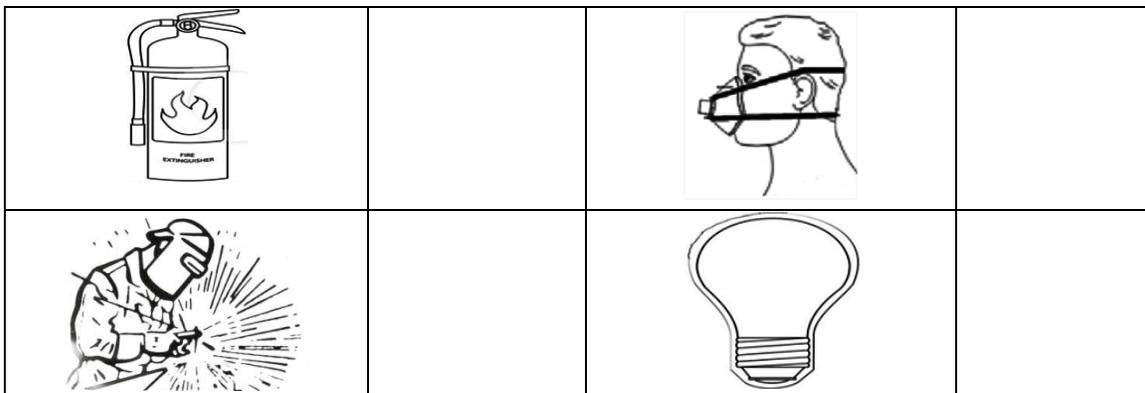
- To examine different types of blood cells under microscope.
- To prepare a slide of plant cell (stem) by performing section cutting.
- To analyze your physical health by measuring your body mass index. (BMI)
- To perform a Benedict's test to detect the presence of sugar.

Contents	Learning Objectives						
<p>Properties of matter: Matter is anything that has mass and occupies space. It exists in three states as:</p> <ul style="list-style-type: none"> • Solid • Liquid • Gas <p>Properties of solids, liquids and gas.</p>	<ul style="list-style-type: none"> • Define 'matter'. • List the properties of solids, liquids and gas. • Differentiate between solids, liquids and gases on the basis of their properties. • Draw the particle arrangement model of solids, liquids and gas. 						
<p>Atmosphere and gases around us 'The atmosphere is a thin layer of gases that surrounds the Earth'. It consists of several different gases like:</p> <ul style="list-style-type: none"> • Oxygen • Carbon dioxide • Nitrogen • Noble gases 	<ul style="list-style-type: none"> • Define the term 'atmosphere'. • Identify the composition and percentage of different gases in the atmosphere. • List the uses of different gases present in atmosphere. • Identify the pictures showing multiple uses of different gases. 						
<p>Global warming and its multiple effects on the environment. Global Warming is the increase of Earth's average surface temperature.</p>	<ul style="list-style-type: none"> • Define global warming. • List the harmful effects of global warming. • Suggest some lifestyle changes which can help the environment. • Describe some effects of global warming in the recent past of the world. 						
<p>Air content in soil. Air is trapped within the spaces between soil particles and is essential for the survival of organisms living in the soil.</p>	<ul style="list-style-type: none"> • Explain the benefits of air content in soil. • State the ways animals survive in the soil. 						
<p>Soil and types. Soil has different types, depending on its make-up and the amount of air content in each:</p> <ul style="list-style-type: none"> • Loamy • Clayey • Sandy 	<ul style="list-style-type: none"> • List the different types of soil. • State the variations in air content in each type of soil. 						
<p>Key Words: matter, space, volume, solid, liquid, gas, atmosphere, oxygen, carbon dioxide, extinguish, nitrogen, helium, neon, argon, aerate, sandy, clayey, loamy garden, conductor, insulator</p> <p>Types of Questions:</p> <ul style="list-style-type: none"> • Multiple Choice questions • Differences • Short reasoning questions • Experimental questions <p>Sample Questions:</p> <p>1. The table below shows the mixture of gases we inhale from the surrounding air.</p> <table border="1" data-bbox="435 2145 1185 2233"> <thead> <tr> <th data-bbox="435 2145 659 2196">Nitrogen</th> <th data-bbox="659 2145 885 2196">Oxygen</th> <th data-bbox="885 2145 1185 2196">Carbon dioxide</th> </tr> </thead> <tbody> <tr> <td data-bbox="435 2196 659 2233">78%</td> <td data-bbox="659 2196 885 2233">21%</td> <td data-bbox="885 2196 1185 2233">0.03%</td> </tr> </tbody> </table>		Nitrogen	Oxygen	Carbon dioxide	78%	21%	0.03%
Nitrogen	Oxygen	Carbon dioxide					
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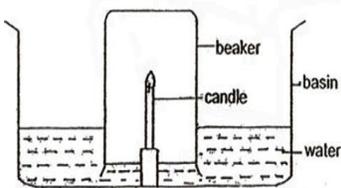
- Which of the following pie diagram shows the correct composition of gases in air?



- Identify the gas used in the following.



4. Look at the following experiments and write down the justified conclusions.

Picture	Description	Justified Conclusion
	A lighted candle is placed in the inverted beaker which is in the basin filled with water. After 15 – 20 minutes the flame goes out and the water level rises up in the beaker.	

Workbook activities:

- Activity 2.1, 2.2, 2.3, 2.4, 2.5

Activities/Experiments:

- Students will observe the uses of different gases.

Practical Applications:

- To prepare oxygen gas in laboratory by using yeast.
- To investigate which type of soil has the highest air content and water holding capacity.
- To observe the conduction of heat in different materials:
 - plastic
 - paper
 - glass
 - cloth

Surf I.T:

✓ **Gases**

- <http://www.sciencekids.co.nz/gamesactivities/gases.html>
- <http://www.chem4kids.com/files/matter-gas.html>

✓ **Air**

- <http://www.eo.ucar.edu/kids/sky/air1.htm>
- <http://www.clean-air-kids.org.uk/globalwarming.html>

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