



GRADE:5

SPLIT UP OF SYLLABUS (2017-18)

AL AIN JUNIORS Subject: Science
INDIAN SYSTEM

Teacher Name: Mrs.Sini & Mrs.Firdous

| T | A | M | Unit/Chapter | Concepts/Sub topic | Learning Outcomes | Essential Questions |
|--------|-----------------------|-------|--------------------------------------|---|--|--|
| TERM 1 | FORMATIVE ASSESMENT 1 | April | More about plants | <ul style="list-style-type: none"> Reproduction in plants Germination of seeds Seed dispersal Reproduction through body parts Kinds of crops Stages of agriculture | <ul style="list-style-type: none"> Recognise the different ways by which plants reproduce Identify and label hilum and seed coat as important external features of a seed. Explain the functions of the external parts of a seed. Dissect a seed to identify the presence of cotyledons. Explain the role of cotyledons in keeping the seed alive till germination takes place. Describe an experiment to identify the effects of sunlight, water and soil on the process of germination. Identify and label radicle, plumule and embryo as parts of a germinating seed. Explain the need for seeds to get dispersed away from the parent plant. Identify some common modes of seed dispersal, namely wind, water and animals. Describe the process of vegetative propagation through the different parts of a plant like stem, roots and leaves. Distinguish between the different types of crops. Know about the different stages of agriculture SKILLS DEVELOPED:-Experimenting, Interpreting data , Reasoning , Drawing and labelling | <ul style="list-style-type: none"> Mention the different ways by which plants reproduce Explain the functions of the external parts of a seed Explain the role of sunlight, water and soil on the process of germination. What is seed dispersal? Mention the different agents of seed dispersal. Explain the role of various agents of seed dispersal What is vegetative propagation? Give various examples of vegetative propagation. List the different stages of agriculture |
| | | | Animals in their surroundings | <ul style="list-style-type: none"> Body coverings Eating habits Breathing methods Movement Migration | <ul style="list-style-type: none"> Recognise the different types of habitats. Discuss the need for various kinds of body coverings in animals. Relate the body parts (teeth beaks ,etc) to the animals' eating habits. Know about the different ways of breathing and the organs involved in different animals Identify the body parts involved in movement of animals Explain migration SKILLS DEVELOPED:-Observation , Recording data , Reasoning , Classifying and Describing | <ul style="list-style-type: none"> Define the terms-Habitat , adaptation . Give various examples of terrestrial animals , aquatic animals , amphibians , arboreal animals , aerial animals. What is a food chain? Explain with few examples. What do you think will happen to the carnivores and plant population if all the herbivores are wiped out from a food chain? Differentiate between breathing and respiration. Mention the breathing organs of various animals. What is migration ? Why do animals migrate? |
| | | May | The skeletal and the Muscular system | <ul style="list-style-type: none"> *Analyse the various parts of the human skeleton *Describe the four basic functions of the human skeleton: * Describe the basic structure of a bone and label its three major parts: compact bone, bone marrow and spongy bone. | <ul style="list-style-type: none"> Enumerate the functions of a human skeletal system Explain the basic structure of a bone using a | |

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| SYSTEM | The Nervous system | | <p>* Discuss the structure and function of these parts.</p> <p>*Realise the significance of joints in our body.</p> <p>*Explain the importance of proper diet and exercise for the development of bones and muscles in the body.</p> <p>SKILLS DEVELOPED:-Observing and Identifying , Predicting , Reasoning , Drawing and Labelling</p> | <p>neat well labelled diagram</p> <ul style="list-style-type: none"> Describe with examples the four movable joints of our body. |
| | | <p>Nervous system Brain Spinal cord</p> <p>Nerves Reflex actions Sense organs</p> | <p>To identify and recognize the structure and functions of the nervous system</p> <p>*Identify the location and function of the three major parts of the brain: cerebrum, cerebellum and brain stem.</p> <p>*Recognise the location and function of the spinal cord.</p> <p>*Describe the different types of nerves and their functions associated with the nervous system.</p> <p>*Explain the role of the nervous system as a central governing organ of the human body.</p> <p>*Discuss the structure and function of the sense organs that connect us to our surroundings.</p> <p>*Illustrate the importance of the five sense organs in protecting the body through reflex actions.</p> <p>SKILLS DEVELOPED:-Observing , Predicting , Interpreting Data , Describing , Drawing and Labelling.</p> | <ul style="list-style-type: none"> What are nerves ? List the various kinds of nerves. Describe the different types of nerves and their functions. Distinguish between nerves and neurons. What are sense organs? Explain the structure of an eye. What is reflex action? Express the importance of the five sense organs in protecting the body through reflex actions. |

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| FORMATIVE ASSESSMENT 4 | TEM | | Formation of eclipses | Communicating , drawing and labeling. | <ul style="list-style-type: none"> Who was the first man to land on the Moon? |
| | November | Natural disasters | Earth quake Volcanoes & its types Other natural disasters | <ul style="list-style-type: none"> Recognise the various types of natural disasters Classify the different types of volcanoes as active volcano , dormant volcano , extinct volcano Learn about the natural disasters-Tsunami, Hurricane , Typhoon , Cyclone , Floods droughts and forest fires <p>SKILLS DEVELOPED:-Observing , Identifying , Interpreting data , Reasoning and Inferring.</p> | <ul style="list-style-type: none"> How does an earthquake occur? Explain the types of volcanoes. |
| | November | Changes in Our Environment | Pollution Air pollution Water pollution Noise pollution Soil pollution Biodegradable and non biodegradable waste | *Identify and learn about the different types of pollution *Explain the effects of air pollution:- Acid rain , global warming and depletion of ozone layer. *Discuss the importance of saving our environment. *Differentiate between biodegradable and non biodegradable waste SKILLS DEVELOPED:- Awareness about environment , Observing , Reasoning and Speaking skill | *Give some examples of how man pollutes the environment. *List some ways in which we can prevent pollution. |
| December | Rocks and minerals | Rocks Igneous rocks Sedimentary rocks Metamorphic rocks Minerals | *Identify Igneous , Sedimentary and Metamorphic rocks *Describe the texture and uses of the three types of Igneous rocks – Granite ,Pumice , Basalt *Describe the texture and uses of the four types of metamorphic rocks- Marble , Quartzite , Slate , Gneiss SKILLS DEVELOPED:- Observing , Predicting and Classifying | <ul style="list-style-type: none"> How are rocks formed? How are rocks useful to us? Name the different types of rocks. | |

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| TEM | January | Soil States of matter | Formation of soil Soil erosion Soil conservation States of matter Solutions Physical change Chemical change | <p>*Explain the role that soil plays in our life.</p> <p>*Know about the layers of soil</p> <p>*Describe the factors causing soil erosion</p> <p>SKILLS DEVELOPED:-Observing , Reasoning and Inferring</p> <p>*Distinguish between the properties of the three states of matter.</p> <p>*Infer and demonstrate how one state of matter changes into another</p> <p>*Infer and illustrate solids that dissolve in liquids to form a solution.</p> <p>SKILLS DEVELOPED:-Experimenting , Predicting , Observing , Interpreting data , Reasoning and Hypothesizing.</p> | <ul style="list-style-type: none"> Describe the role that soil plays in our life. How is soil important to us? List the different ways by which soil erosion can be prevented. <p>*Why are solids hard to touch?</p> <p>*Differentiate between three states of matter.</p> <p>*Give some examples of miscible and immiscible liquids.</p> |
| | February | More about force energy and simple machines | Force Types of forces Energy Machines | <p>*Define force and learn about the types of forces</p> <p>*Identify the importance of machines in everyday life.</p> <p>*Identify the importance of machines in everyday life.</p> <p>SKILLS DEVELOPED:-Observing , Predicting , Classifying ,Describing and Inferring</p> | <ul style="list-style-type: none"> What are the main types of force? How are simple machines different from complex machines? Give an example of daily use of each of the following- wheel and axle,pulley,wedge |
| | March | Revision and Exam | | | <ul style="list-style-type: none"> |

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