

GENERAL SCIENCE SYLLABUS

6th CLASS

1. OUR FOOD

- Different types of food materials
- Food ingredients
- Different sources of food materials. (Plant parts and animals productions)
- People and food habits
- Different methods of preparing food
- Preservation of food

2. PLAYING WITH MAGNETS

- Why pins and metal sticking attached to pin holder and iron almainahs
- Magnets of different shapes. (Bar, ring, Horse shoe, disc)
- Finding materials attracted by magnets
- Separation by using magnets
- Poles of bar magnet
- Finding directions with a bar magnet
- Earth as a magnet
- Know about Magnetic compass make your own compass
- Magnetic attraction and repulsion
- Finding if an object is magnetic or not
- Making your own magnet
- Magnetic induction

3. RAIN - WHERE DOES IT COME FROM

- How we predict about rain
- Water and it's forms
- Formation of clouds - process of evaporation
- Condensation
- How clouds gives rain

- Clouds in kitchen
- Monsoons
- Water cycle

4. WHAT DO ANIMALS EAT

- How animals find food
- Animals and it's food habits (Herbivores, Carnivores, Omnivores)
- From animals finding meal to eating it
- Body parts used in taking food in animals like hen, cow, dog, frog etc.
- Birds have different types of beaks to get different food items in different ways (picking food with beaks)
- Getting food by using tongue (Frog, ...)
- Hunting is a way to get food
- Getting food without hunting (Filtering, sucking)
- Food chain
- Animal colonies and food

5. MATERIAL AND THINGS

- Breakable and non-breakable objects
- Materials used to make different objects
- Objects made from different materials
- Same material is used for different objects
- Properties of materials
- Transparent and opaque objects
- State of the materials
- Classification of materials (Solids, Liquids, Gases)
- Sinking and insoluble substances in water

6. HABITAT

- Habitat is a place where organism live
- Organisms live under ground, on ground, in water, on water
- Pond as habitat
- Organisms that lives in different levels of a pond
- Tree is habitat
- Various levels of tree is suitable to live various organisms
- Our house is a good habitat not only for us but also for different organisms
- Orchard is a wonderful avenue
- Terrestrial, aquatic, desert habitats
- Diversity of habitats in Telugu States
- Good habitat - Good life
- We should never destruct - destroy any habitat

7. SEPARATION OF SUBSTANCES

- Substances - Mixtures
- Components of natural / Man made mixtures
- Methods of separation
- Hand picking
- Winnowing
- Sedimentation
- Decantation
- Sieving
- Filtration
- Crystallization
- Distillation
- Sublimation
- Chromatography
- Using water in separation of materials from the mixture

8. FIBRE TO FABRIC

- Types of fabrics
- Salesman explains something about quality of a fabric to the customers
- We use different types of fabrics in different seasons
- Selection and priority of dress
- Things made up of fabric
- Types of fibres - natural, artificial
- Characteristics of fibres
- Jinning
- Spinning - Making of cotton yarn from cotton fibre
- Weaving
- Power looms and hand looms
- Making jute yarn
- Jute - jute yarn characters
- Mat making

9. PLANTS: PARTS AND FUNCTIONS

- Parts of Plants
- Identification of plants parts
- Roots: Different types of roots, functions of roots
- Absorption of water
- Are all leaves alike?
- Venation
- Types of venation
- Functions of a leaf
- Stomata observation
- Transpiration
- Stem provides support
- Carrying food materials

10. CHANGES AROUND US

- Observation of changes around us
- Changing of milk in to curd
- Comparing milk and curd
- Finding the conditions for making curd
- Changing seasons
- Comparing duration of day in December and May
- Does the sun rise exactly in the east in all seasons?
- Observing the changes in shadow during the winter and summer seasons
- Indicators and causes for change
- Compare the change of milk to curd with change of seasons
- Categorising the changes

11. WATER IN OUR LIFE

- Water and its uses
- Measuring the volume of water
- Quantity of water
- How much water do we use daily?
- Where do we get water from?
- Safe drinking water and it's stages
- Water on the earth
- How the well was dug
- Droughts - water scarcity
- Drought affects our life
- How much water we waste
- Floods - a natural hazard

12. SIMPLE ELECTRIC CIRCUITS

- Cell
- Bulb

- What is a circuit
- A simple electric circuit
- Switch
- Electric switch
- Torch-light
- Identify the conductors and insulators
- The story of bulb

13. LEARNING HOW TO MEASURE

- Measurements in daily life
- Measuring Lengths
- The story of scale
- How do we measure our height
- How to measure length accurately with meter scale
- Precautions while using meter sale
- Measuring the thickness of a thin object
- Measuring the thickness of a coin
- Measuring the length of a curved path
- Measurement of area
- Standard units of area
- Measuring the area of a regular surface
- Measuring of irregular place surface
- Measurement of volume
- Measurement of volume of liquids
- Measuring cylinder
- Measuring of volume of irregular solids using a measuring cylinder

14. MOVEMENTS IN ANIMALS

- Human body and its movement
- Muscles

- Touch your sholder
- Fold and un-fold
- How do muscles work
- Bones
- Jaw bone
- The clavicle
- The ribs
- Backbone
- Pelvic girdle
- Skull
- Flexible bones-cartilage
- Different types of joints
- Your backbone is a spring
- Ball and socket joint
- Hinge joint
- Neck joint
- Fixed joints
- Movements in other animals
- Locomotion in fish
- Locomotion in birds
- Locomotion in snake
- Locomotion in snail

15. LIGHT, SHADOWS AND IMAGES

- How can we see the objects
- Do all objects form shadows?
- Can we guess the object by observing it's shadow?
- Colour of a shadow
- Shape of shadow

- Getting different shapes of shadows of a single
- Making a pinhole camera
- Images with a magnifying lens
- Reflection of light

16. LIVING AND NON-LIVING

- Living things and non living things
- Compare characteristics of living and Non-living things
- Movement in living beings
- Food and living beings
- Growth in living beings
- Grow - Doesn't Grow
- Do all living things breath
- Plant breath
- Do all living things get rid of their waste?
- Living things giving birth to young ones
- Oviparous or viviparous (egg or baby)
- Response to stimulus in plants - Touch-me-not (*Mimosa pudica*)
- Response to light by earthworms
- Seeds - Living or not
- Prepare your own magnifier
- What is a microscope?
- Compound microscope and it's parts
- Bread Mold
- Microscopic organisms
- Bacteria
- Micro organisms in water