

YEAR 2010 - 2011
CLASS VII

ENGLISH

April/May	<u>Chapter :</u>	Hanuman and I
	<u>Grammar:</u>	Conjunctions, , Adverbs
	<u>Project Work</u>	Types of sentences (chp 2 & 3), Extra reading.
	<u>Writing skills :</u>	Diary Entry , Informal letter Picture Description
July/August	<u>Chapter :</u>	Lynx, The secret workers
	<u>Poem :</u>	Silly Old Baboon
	<u>Grammar :</u>	Finites and non- finites (<u>chp</u> . 10, 15 & 16) Prepositions , jumbled sentences , missing & error words.
	<u>Writing –</u>	Paragraph writing
September/ October	<u>Chapter :</u>	Jalebis
	<u>Poem :</u>	A Prayer for my Home .
	<u>Grammar :</u>	Determiners
	<u>Writing Skills :</u>	Notice writing
November/ December	<u>Chapter : My Donkey Sally</u>	
	<u>Poem : After the storm</u>	
	<u>Grammar :</u>	Phrases and Clauses , <u>Active and Passive</u> , Modals .
	<u>Writing Skills :</u>	Formal letter
January/ February	<u>Play: Olaf and the Ogre</u>	
	<u>Grammar :</u>	Direct and Indirect Speech
	<u>Non-detailed :</u>	The secret workers
	Revision .	

Mathematics

Month

April

INTEGERS

- . State the closure property of Integers.
- . What is commutative property of integers ?
- . State the associative property of integers.
- . What is the additive identity of integers ?

Ex 1.2

- . How to multiply two or more integers .
- . State the distributive property of integers.
- . Verification of properties of multiplication
- . Find the product using suitable properties
- . Solving problems based on multiplication

Ex 1.3

- . How to divide integers ?
- . State the properties of division of Integers
- . Solve the problems based on division of integers
- . Divide decimals by 10 , 100 and 1000
- . Divide decimals by whole numbers
- . Divide decimals by decimals

Ex 1.4

Ex 2.7

May

VISUALISING SOLID SHAPES

- . What are plane figures :
- . What are solid shapes :
- . Define vertex face and edge of a solid shape
- . What is a net ?
- . Make solids using nets.

Ex 15.1

DIVISION OF DECIMALS

July

EXPONENTS AND POWERS

- . What is exponential notation ?
- . Why do we need exponents ?
- . Express the given number in exponential form .
- . Show the given numbers as product of powers of prime numbers .
- . Find the value of the given exponential form .

Ex 13.1

- . Learning the laws of exponents .
- . Simplify the exponential forms using laws of exponents.

Ex 13.2

RATIONAL NUMBERS

- . What is the need for rational numbers ?
- . What are rational numbers ?
- . Classify the given numbers as positive and negative rational numbers .
- . Writing equivalent rational numbers .
- . Expressing rational numbers in standard form
- . Differentiate between standard form and lowest form of rational numbers.

Ex 9.1

- . Find the rational numbers between two given rational numbers .
- . Comparing rational numbers.
- . Represent the rational numbers on number line



August

- . Add two rational numbers
- . Find the sum of two or more rational numbers.
- . What is an additive inverse ?
- . Write the additive inverses of the given numbers .
- . Subtract a rational number from another .
- . Find the product of two rational numbers .
- . What is the reciprocal of a rational number ?
- . Divide a rational number by another .



Ex 9.2

September

PRACTICAL GEOMETRY

- . Construct a line parallel to a given line through a point given not on the line , using ruler and compasses .
- . Construct a line parallel to a given line at a given distance
- . Construct triangles using :



Ex 10.1

- (a)
- (b) SSS criterion
- (c) SAS criterion
- (d) ASA criterion
- (e) RHS criterion

Ex. 10.2
Ex. 10.3
Ex. 10.4
Ex 10.5

October

CONGRUENCE OF TRIANGLES

- . What are congruent figures ?
- . Identify the congruence criterion in the given pairs of triangles

November

PERIMETER AND AREA

- . Find the area and perimeter of a :
 - (a) square
 - (b) rectangle
- . Determine whether to find area or perimeter in the given problems .
- . Calculate the area of a parallelogram .
- . Find : (a) the base (b) the height of a parallelogram



Ex 11.1

- . Calculate the area of a triangle using formula
- . Use the formula to find : (a) the base (b) the height of a triangle



Ex 11.2

- . Determine the value of π
- . Using formula , calculate :
 - (a) Circumference of a circle
 - (b) Radius of a circle
 - (c) Area of a circle



Ex 11.3

- . Convert one unit of area into another
- . Find the area of the following :
 - (a) path in and around a plot
 - (b) path around and outside a plot
 - (c) cross roads

Ex 11.4

LINES AND ANGLES

- . Define complementary angles.
- . Find the complement of a given angle.

Ex 5.1

- . Define supplementary angles.
- . Find the supplement of a given angle.
- . Identify the pairs of angles as supplementary Or complementary.
- . What are adjacent angles ?
- . When do adjacent angles form linear pair ?
- . Find the missing angles in the given figures .
- . What are vertically opposite angles ?
- . Identify the angles formed when two lines intersect each other .
- . What is a transversal ?
- . Name the special angles formed by a transversal with two lines .
- . Identify the special angles formed by the transversal in the given figures .
- . What are the properties of special angles formed by a transversal with two parallel lines ?
- . Find the missing angles in the given figures using the Properties of special angles / pairs of angles.

Ex 5.2

December

COMPARING QUANTITIES

- . Recapitulation of Ratio & proportion

Ex 8.1

- . Solve the problems using proportion
- . Convert fractions into per cent and vice versa
- . Convert decimals into per cent and vice versa
- . Calculate the 'whole' when the value of a certain percent is given
- . Find the actual value when per cent is given
- . Solve problems based on per cent
- . Convert ratio into percentage.

Ex 8.2

- . Find the following :
 - (a) increase / decrease percent
 - (b) profit % or loss %
 - (c) calculate simple interest using formula .
 - (d) using formulae calculate rate/ time / principal .

Ex 8.3

January

TRIANGLE AND ITS PROPERTIES

- . Identify :
 - (a) the side opposite to a given vertex
 - (b) the vertex opposite the given side
- . Define and draw medians of a triangles .
- . What is an altitudes of a right triangle .

Ex 6.1

- . Locate the altitudes of a right triangle.
 - . Identify the exterior angle of a triangle.
 - . Establish the relationship between exterior angle and interior opposite angles of a triangle.
- } Ex 6.2
- . Finding the missing angles using the property of exterior angles and properties of angles of a triangle .
 - . State the properties of isosceles triangle.
- } Ex 6.3
- . Find the missing angles using isosceles triangle Property .
- Try these Pg. 123
- . State Pythagoras Theorem .
 - . Find the following using Pythagoras theorem :
 - (a) the length of hypotenuse
 - (b) one of the legs of a right triangle
 - (c) side of a rectangle
 - (d) side of a rhombus
 - . Solve problems based on Pythagoras theorem .
- } Ex 6.5
- ALGEBRAIC EXPRESSIONS
- . How are algebraic expressions formed ?
 - . What is a term ?
 - . Identify the terms of an expression .
 - . Make a factor tree using the given expression
 - . Identify the coefficients of the terms
 - . Distinguish between like and unlike terms .
 - . Classify the expressions according to the no. of terms they have
- } Ex 12.1
- . Add the given algebraic expressions .
 - . Subtract one expression from another .
 - . Solve problems based on algebraic expressions .
- } Ex 12.2
- . Find the value of the expressions .
- Ex 12.3
- February** SIMPLE EQUATIONS
- . What is an equation ?
 - . Setting up an equation .
 - . Changing an equation into verbal statement
- } Ex 4.1 & Ex 4.2
- . Solving of equations by using rules .
 - . Solve problems by setting up equations .
- Ex 4.3
Ex 4.4

PHYSICS

Water : A precious Resource

Month :- April

Concept

Importance of water in our daily lives

How much water is available on earth

Forms of water

- a) Solid
- b) Liquid
- c) Gas

- Ground water an important source

- Impact of Depletion of water table

-Water wise habits

- Effect of water on Plants

Objective

-List importance of water in our daily life

-Contrast it with shortage of water

-Conduct experiment to estimate the relative amount of water available.

-Suggest ways to save water

- Recall water cycle

- Solve water cycle puzzle

- State 3 forms of water .

- Define terms

- Explain importance of water table

- Draw ground water table

- List the causes

- Explain the causes

- List the ways to manage water and avoid wastage

- Define terms

- Tell ways in which individuals can save water .

- Write a slogan to save water .

- Contrast effect of availability & scarcity of water on plants .

Waste water story

Month :- May

Concept

Water , our life line

What is Sewage ?

Treatment of polluted water

Waste water treatment plant

Become an active citizen

Sanitation & disease

Alternative arrange for sewage Disposal

Objective

- Make a mind map of many uses of water.

- Define terms

- Define terms

- Suggest ways to reduce wastage of water

- List different types on contaminants .

- List steps for treatment of water .

- Explain the steps involved in treatment of waste water .

- List various ways to minimize waste and pollutant at homes and factories.

- Tell ways in which water is polluted

- Name the diseases spread by water pollution .

- List ways for proper disposal of sewage.

- Discuss the importance of sanitation at public places .

- Make a poster to spread sanitation at public places (in groups)

Heat

Month :- July/ Aug

Concept

What is hot ?
What is cold ?

Measuring temperature

Conduction

Convection

Clothes we wear in summer and winter

Objective

- Observe different objects which are hot & cold around
- Define terms .
- Do an activity to record the temperature using a thermometer .
- Compare the observations recorded on a clinical thermometer & a laboratory thermometer .
- Conduct experiment and write observations .
- Collect some materials & classify them as conductors or insulators .
- Perform an activity and record the observations .
- Apply the knowledge of convection to understand the phenomena of land breeze and sea breeze
- Explain the process of transfer of heat from sun to earth .
- Select and suggest use of proper clothes that are comfortable to wear in summer and winter .
- Justify the use of dark coloured containers in a solar cooker .

Motion and Time

Month:- September

Concept

Slow or fast

Speed

Measuring speed

Measurement of time

Distance-time graph

Objective

- Observe the surrounding & classify the slow & fast moving objects .
- Identify the type of motion of the object .
- Defining terms .
- Analyze the data for judging the motion as uniform or non-uniform
- List various units of speed .
- Observe the devices that are used to measure speed in vehicles .
- Calculate the speed .
- Conversion of speed from km/hr to m/sec .
- List some time measuring devices .
- Define terms
- Justify the use of periodic events to measure time.
- Calculate time period .
- List various units of time .
- Draw distance time graph .
- Interpret distance-time graph .

Winds , Storms & Cyclones

Month :- Oct

Concept

Air exerts pressure

Objective

- Observe examples showing air exerts pressure .
- List experiences that show that air has pressure .

Relation between high speed winds and pressure

- explain that high speed winds are accompanied by reduced air pressure by performing activities .

Air expands

- Explain why smoke always rises up.

Wind currents generated due to uneven on earth

- Discuss how convection current in air lead to situations heating like
 - a) Uneven heating between the Equator and the poles .
 - b) Uneven heating of land and water .

Thunderstorms and Cyclones

- Understand and tell about some natural disasters like thunderstorm and Cyclone .
- List precautions to be taken if a storm is accompanied by lightning.
- Discuss the destruction caused by cyclones .
- Define the terms .

Effective Safety measures

- List out the effective safety measures on the part of Government & on the part of people staying in cyclone hit areas.

Soil

Month :- Nov

Concept

Importance of Soil

Objective

- Discuss the importance of Soil .
- Define terms .

Soil profile

- Record the observations for a given sample of soil .
- Explain the importance of various layers of Soil .
- Draw the diagram of Soil Profile .

Soil Types

- Distinguish between sandy soil, clayey soil and loamy soil
- Collect samples of various types of soil .

Percolation rate of Soil

- Compare the percolation rate of sandy soil and clayey soil .
- Calculate the percolation rate of soil .

Moisture in Soil

- Carry out experiment to study moisture content of soil .

Soil & Crops

- Match the type of soil and the crop grown on it .

Soil Pollution

- Carry out a survey on soil pollution
- Recommend steps taken to prevent soil pollution .
- Collect information on soil erosion & steps to prevent soil erosion .

Light

Month :- Dec

Concept

Light travels along a straight line

Reflection of Light

Spherical lenses

Sunlight

Objective

- Observe the rectilinear propagation of light .
- Justify the property on the basis of activities .
- Observe reflection of light
- Record the observations regarding image formed by a plane mirror .
- Tell the relation between the distance of image from the mirror and that of object in front of it .
- Observe the side mirrors used in scooters .
- Compare the image formed by concave & convex mirrors.
- Distinguish between the different type of mirrors without touching them.
- Tell the uses of convex and concave mirrors on the basis of their image formation .
- Distinguish between convex lens and concave lens by touching & feeling them & the type of images formed.
- List the devices in which lenses are used.
- Observe different colors in a rainbow.
- Explain that white light consists of seven colors .

Electric Current and its effects

Month :- Jan

Concept

Symbols of electric components

Heating effect of electric current

Electric Fuse

Magnetic effect of electric current

Objective

- Draw symbols of electric components.
 - Draw circuit diagram of electric circuit .
 - Locate (-)ve terminal & (+)ve terminal of a cell .
 - Differentiate between a cell and a battery .
 - Classify the objects in which a cell is used and in which battery is used.
 - Understand and describe the effect .
 - Identify & list some appliances where heating effect is used .
 - Justify the use of electric fuse as a safety device .
 - List some precautions while handling an electric circuit .
 - Suggest ways to minimize the wastage of electricity.
 - Observe the magnetic effect of electric current through an activity.
 - Apply this effect to make an electromagnet .
 - List some appliances where magnetic effect of current is made use of .
- Construction and working of an electric bell.

Bio/ Chem

Month	Chapters
April	Nutrition in Plants
May	Nutrition in animals
July	Fibre to Fabric

September	Weather climate . Climate and adaptation of animals to climate
October	Respiration in organisms
November	Transportation in animals and plants
December	Reproduction in plants
January	Physical and chemical changes
February	Forests – our life line

HISTORY

Month	Chapters
April	Tracing changes through a thousand years, new and old terminologies . Sources of history, archiver, new social groups and empires and religions.
May	New kings and kingdoms, administration land grants, Cholas , warfare
July	Delhi Sultanate Rajputs , Kjaliji , Tughluq, Sayyid lodhi dynasties.

August	The Mughal Empire , Babur, Humanyun , Akbar, Jahangir, Shah Jahan, Auranzeb
September	Rulers and Buildings Towns traders and craftsperson
October	Tribes nomads and settled communities
November	Devotional paths to the divine in Bhakti movement.
December	The making of religious cultures
January	Eighteenth century political formation

CIVICS

Month	Concepts
April / May	Equality in Democracy
July	The Role of government in Health
August	Structure of State government

September	Gender distinction Women change the world.
October	Role of Media and Advertising
November	Understanding advertising. Markets around us

GEOGRAPHY

MONTH	TOPIC
APRIL	Components of the environment. Inside of the Earth
May	Our changing Earth
July	Composition of the atmosphere ,

August	Water
September	Natural Vegetation belts of the World

October	.Human Enviornment settlement , transport and Communication.
November	Human Environment Interactions – The tropical and the subtropical region.
December	Life in the temperate grasslands.

January	Life in the Desert
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COMPUTER SCIENCE

Month	Topic
April / May	Elements of a computer system
July	Introduction to Visual Basic VB environment, Concept of program Form events, Controls in VB, Writing programs using PRINT statement, Designing interface, Writing simple programs for the interface.
August/	Computer Software

September	Classification of computers Digital computers, Hybrid computers, Analog computers.
October	Visual Basic If Then Else statement, Writing programs using Input box.
November	Creating professional documents in Word Need and usage of Word, Introduction to the Document window, Checking the spellings, Find and Replace, Formatting text, Printing a document, Inserting pictures in a document, Inserting wordart, Borders and Shading, Inserting tables and hyperlinks.
December	Working with Spreadsheets Meaning and use of spreadsheets, Starting Excel, The Excel window, Opening a workbook, Types of data, Entering and editing data, Autofill, Formatting the data, Some functions, printing a worksheet, Quitting excel.
January	Internet and the World Wide Web The birth of Internet, Internet, protocol, Modem, Internet connection, WWW, Browsers, servers, Internet addresses, Browsing, Search engines, E-mail.
February	Revision.

G.K

Month	Units
April	Units 1 to 8
May	Units 9to 13 and Model test paper I
June & July	Units 14 to 20

August	Units 21 to 24 .
September	Units 25 to 28 & model Test Paper II Current Affairs of June, July, August
October	Units 29 to 32
November	Units 33to 42 and Model Test Paper III
December	Units 43 to 50
January	Units 51 to 54 and Model Test Paper IV
February	Current affairs of Nov, Dec, 2010 and Jan 2011