

ACADEMIC HEIGHTS PUBLIC SCHOOL

Session 2019-20

Subject - Physics

Month	W. Days	Chapter/Topics	Activity
April	24	Force and Pressure : Idea of Force – Push or Pull:change in speed, direction of moving objects and shapes of objects by applying force, contact and non contact forces, forces are due to an interaction.	To investigate frictional force.
		Types of forces : Muscular force,	To measure pressure at different length
		Gravitational force, Electrostatic force,	
		Magnetic force, force of friction.	
		Pressure (Define & Unit), Idea of pressure exerted by air/liquid,	
		Atmospheric pressure, Daily life experiences	
		Pressure exerted by liquid/gases(Contd.)	Group discussion
May	15	Friction : Definition, force of friction, factors affecting force of friction, friction-a necessary evil. Advantage and Disadvantages of friction for the movement of automobiles, aero planes and friction. Methods of reducing friction.boats. Ships: Increasing and decreasing	Group discussion
June	8	Fluid friction	
		Revision	
Periodic Test - 1			
July	27	Sound : Introduction, sound is produced by a vibrating body, sound produced by humans, sound needs a medium for propagation, amplitude, time period and frequency of a vibration, sounds.characteristics of sound, we hear sound through our ears (human ear), audible and inaudible	To show that sound requires medium to propagate
Aug+Sept	24+22	Chemical Effect of Electric Current : Do liquids conduct Electricity, chemical effect of electric current, conductors and insulators, electrolysis, electroplating.	To demonstrate a primary cell to test which substance is conductor and insulator.
		Good and poor conductors.	Activity 14.6/177
Half Yearly			
Oct	21	Some natural phenomena charging	Group discussion
		Charging by rubbing	
		Types of charge	
		Transfer of charge	
		Lightning	

		Lithning conductor		
		Earthquaker		
Nov	22	Light	To show disperssion by prism	
		Light Laws of reflection		
		Regular and diffused reflection		
		Multiple Images		
		Kaleidoscope		
		Human eye		
		Braille	Group discussion	
Dec	24	Revision		
Periodic Test - 2				
Jan	22	Stars and the solar system	To make project on solar system	
		The moon		
		Moon's Surface		
		Constellahom		
		Ursa major		
		Cassion peia		
		The solar system		Disussion
		The placements		
		Asteroids		
		Meteorites		
		Revision		
Annual Examl				

ACADEMIC HEIGHTS PUBLIC SCHOOL

Session 2019-20

Subject - Chemistry

Month	W. Days	Name of the Chapter/Topics	Activity
April	24	Synthetic fibres and plastics	Testing various materials for action of water, reaction on heating, effect of flame, tensile strength
May+Jun	23	Coal and Petroleum	To study the products obtained by destruction distillation of coal.
Periodic Test - 1			
July+Aug	44	Materials: Metals and Non-metals	Experiments involving reactions with acids and bases.
Half Yearly Exam			
Sept + Oct + Nov	45	Combustion and Flame	Experiments with candles
Periodic Test - 2			
Dec + Jan + Feb	50	Pollution of air and water	Survey for pollution check at different times and different location, Discussion on environment concerns
Annual Exam			

ACADEMIC HEIGHTS PUBLIC SCHOOL

Jungle Dhusar, Gorakhpur

Session 2019-20

Subject - Maths

Month	W. Days	Chapter Name	Activity
April	24	1. Rational Numbers	
		2. Exponents and Power	
Apr+May	24+15	3. Linear Equation in one variable	
		4. Understanding Quadrilaterals	To verify that the sum of interior angles of a quadrilateral is 360° by cutting and pasting. To verify that (i) diagonals of a rectangle are of equal length (ii) diagonals of a square are of equal length
June	8	5. Practical Geometry	To make the following geometrical shapes by paper folding and cutting. (i) A kite (ii) A rhombus
		Revision	
Periodic Test - 1			
July	27	6. Square and Square roots	To observe the following number patterns and generate it up to next three steps : (i) $1^2 = 1$ $11^2 = 1\ 2\ 1$ $111^2 = 1\ 2\ 3\ 2\ 1$ (ii) $1 + 3 = 4 = 2^2$ $1 + 3 + 5 + 9 = 3^2$ $1 + 3 + 5 + 7 + 9 = 16 = 4^2$
		7. Cube and Cube roots	
Aug	24	8. Comparing Quantities	
		9. Algebraic Expression & Identities	
		Revision	
Half Yearly Exam			
Sept	22	10. Factorization	
Oct	21	11. Visualising Solid Shapes	TO draw the front view, top view and side view of the two given shapes made by unit cubes.
		12. Mensuration (Plane figure)	To make cubes and cuboids of given dimensions (i) $4 \times 3 \times 2$ (ii) $3 \times 3 \times 3$
Nov	22	12. Mensuration (Solid figure)	To explore the relationship between (i) length (in cm) and perimeter (in cm) (ii) length (in cm) and area (in cm^2) of 5 squares of different dimensions drawn on a squared paper.
	20	Direct and Inverse Proportion	
		Revision	
Periodic Test - 2			
Dec	24	14. Introduction to graphs	To measure the time spent by student in the various activities on a particular day (i) school (ii) homework (iii) play (iv) sleep (v) watching TV (vi) Others Represent the information in a pie chart.
		16. Data Handling	
Jan	22	15. Playing with Numbers	
Feb	23	Revision	
Annual Exam			

ACADEMIC HEIGHTS PUBLIC SCHOOL

Session 2019-20

Subject - Biology

Month	W. Days	Topics/Chapter	Activity
April	24	Crop Production and Management	
		Agricultural practices, crop seasons.	
		Basic practices of crop production.	
		Preparation of soil.	
		Sowing.	
		Adding manures and fertilizers, irrigation.	
		Agricultural implements.	
		Inclusive: Geog- Rabi and Kharif crops, climatic conditions	
		Crop Production (Contd...)	To demonstrate that damaged seeds are lighter than healthy seeds.
		Protection from weeds, harvesting, storage.	
		Increasing crop yield.	
		Food from animal sources.	Field trip: Visit to school garden.
		Notes: More examples of kharif & Rabi crops.	Field trip: Visit to dairy farm.
May +June	15+8	Microorganisms Friend & Foe	
		Microorganisms.	
		Where do microorganisms live?	To study microorganisms present in pond water. (plant specimens to be shown.)
		Microorganisms and us.	
		Friendly Microorganisms.	
		Microorganisms: Friend & Foe (Contd.)	
		Friendly microorganisms.	
		Harmful microorganisms.	
		Disease causing microorganisms in humans, animals & plants.	
		Food poisoning.	
		Food Preservation.	
		Nitrogen fixation and Nitrogen cycle	
		Inclusive teaching: To discuss the role of preservatives & the kind of reaction involved with food stuff.	
		Notes: labelling for Fig. 2.2, 2.3, 2.4, 2.5, 2.7 and 2.9	
		Definition of Antibiotics, antibodies carriers, preservatives.	
Periodic Test - 1			
July	27	Conservation of plant and Animals	
		Deforestation and its cause	Make a list of deforestation
		Consequences of deforestation	Make a list which show harm of animals due to deforestation
		Conservation of forest and wild life	
		Century, National park, biosphere reserve flora and funa, red detabook, migration etc.	Make a list of flora and funa of your

August	24	Cell Structure and Function	
		Discovery of the cell, definition of cell.	
		Instruments for studying cells.	To study unicellular organisms from permanent slide (Amoeba, Paramoecium)
		Organisms show variety in cell number, shape and size	
		Cell structure and function, tissues.	
		Parts of cell - cell membrane, cell wall, nucleus, cell organelles in plant and animal cell.	To study plant cell from onion peel.
		Differences between a plant cell and an animal cell.	
		Prokaryotic and Eukaryotic cells.	
		Cell division and growth.	
		Inclusive Teaching: Physics: to discuss the concept of magnification with reference to microscope.	
		Notes: Diagram of plant cell & animal cell.	
		Diagram of Prokaryotic & Eukaryotic cell.	
Sept.	22	Revision	
Haly Yearly			
Oct. + Nov	21+22	Reproduction in Animals	
		Modes of reproduction	
		Male and Female reproductive organs	Visit of a pond in rainy season to see the clusters of frog's eggs floating in water.
		Fertilization	
		Test tube babies	Try to collect egg of frog, lizard, butterfly hen, crow or any other birds.
		Internal and External Fertilization	
		Development of embryo, viviparous and obiparous	
		Binary fission, metamorphosis	
		Budding	
Periodic Test - 2			
Dec	24	Reaching the age of Adolescence	
		Puberty	Make a chart of height according to age.
		Change at puberty	
		Change in body shape, voice change, development of glands, development of sex organs, secondary sexual character	Draw a graph which show percentage of height with age.
		role of hormones, sex determination, reproductive health	Make a note on iodised salt.
Jan.	22	Pollution of Air and Water	
		Air Pollution	Write a note on air pollution due to automobiles
		How does air polluted	Make a table which show sources of pollution
		Green house Effects	
		Global Warming	Collect the water from different sources and compare on the basis of their smell and colour
		Water Pollution	
		Soil Pollution	
Feb.	24	Revision	
Annual Exam			

ACADEMIC HEIGHTS PUBLIC SCHOOL

Session 2019-20

Subject - Social Science

Month	W. Days	Subject	Chapter/Topic	Activity
April	24	Geography	Resources & Human Resources. What is Resource Types of Resources Conserving Resources	Prepare a flowchart showing types of resources
		History	From Trade to Territory, East India Company begins trade in Bengal, Battle of Buxar and Plassey, Subsidiary Alliance and Doctrine of Lapse, Claim of Paramountcy	Write about the colonial system in India
Apr+May	15	Geography	Human Resource Importance of Human Resource	
		Civics	Fundamental Rights and Duties	Write a Short Note on the Drafting Committee of Indian Constitution paste the pictures of the members
June	8	Geography	Revision	
		History		
		Civics		
Periodic Test - 1				
July	27	Geography	Land, Soil, Water, Natural Vegetation and Wildlife. Land resources, Land use, Land Degradation and Conservation, Soil, Formation of Soil, Degradation and Conservation	Preparation of Chart showing conservation of Wildlife
		History	When People Rebel, A mutiny becomes a popular rebellion, The company fights back	Write a short note on the 1857 revolt and paste some pictures regarding that.
		Civics	Laws & Judiciary, Do laws apply to all, Controversial Laws, Role of Judiciary, Structure of Courts in India	Write a short note on the Indian Justice System and paste the pictures of the courts of India
Aug	24	Geography	Land, Soil, Water, Natural Vegetation and Wildlife. Water Availability, Water Cycle and Conservation. Significance of Plants and Wildlife. Natural Vegetation and its types	
		History	Women Caste & Reforms, Changing lives of the Widows, Demands for Equality and Justice, Revision	Write a short note on the social reformers like Raja Ram Mohan Roy, Dayanand Saraswati and Ishwarchandra Vidyasagar and paste the pictures of these reformers.
Sept	22	Geography	Mineral Resources. Types of Minerals. Extraction. Occurrence, uses, Distribution and Conservation Power Resources, Their Importance, Conventional & Non conventional sources of Energy. Conservation	Prepare a file showing different types of fossil fuels and their uses

		Civics	Criminal Justice System, Role of the public prosecutor, Role of police in Investigating a crime, Fair Trial.	Paste the pictures of the courts in India
Oct	21	Geography	Agriculture. Economical Activities, Agriculture limiting factors for Agriculture, Farm System, Types of Farming, Major Crops, Agricultural Development, Case Study of Indian Farms and American Farms	Prepare a tabular chart showing major crops and conditions of their growth
		History	The making of the National Movement, Emergence of Nationalism, Advent of Mahatma Gandhi, The march to Dandi	Paste the pictures of the leaders who took part in the National Movement. Write about them as well.
Half Yearly Exam				
Nov	22	Geography	Industries. Secondary Activities. Industries and their classification, Factors affecting the location of Industries, Industrial Regions	
		Civics	Electoral Politics, System of Election in India, Universal Adult Franchise, Election Commission	Write a short note on What make Elections in India democratic
Dec	24	Geography	Revision	
		History	India After Independence, A Constitution is written, Formation of States, India after sixty years	Make the list of the all states of the Indian union today and Identify the predominant language spoken in each state
Periodic Test - 2				
Jan	22	Geography	Industries(cont.). Distribution of Major Industries. Tata Iron & Steel Company – Jamshedpur, Cotton Textile Industries of Ahemdabad	
		Civics	Constitutional Design and Democratic Rights, South African Struggle for Independence, Importance of Fundamental Rights	
Feb	23	Geography	Population. Distribution of Population, Density of Population, Factors affecting distribution of Population, Population Change, Patterns of Population Change, Population Composition	Group Discussion on Population Growth and Development
		History	French Revolution, Estate General of 1789, Causes of Revolution	
Annual Exam				

ACADEMIC HEIGHTS PUBLIC SCHOOL

Session 2019-20

Subject - Computer Science

Month	W. Days	Chapter/Topic	Activity
April	24	1. Networking Concepts	Lab Practical
May	15	2. Window Movie Maker	Lab Practical
June	8	3. Log on to Access	Lab Practical
Periodic Test - 1			
July	27	4. Working with TABLES	Lab Practical
Aug	24	5. Working with QUERIES	Lab Practical
Sept	22	6. Adobe Photoshop CS-3	Lab Practical
Half Yearly Exam			
Oct	21	7. More on Photoshop CS-3	Lab Practical
Nov	22	8 .Visual Basic 2010 Express	Lab Practical
		9. More on VB 2010 Express	
Dec	24	10. Understanding HTML	Lab Practical
Periodic Test - 2			
Jan	22	11. Using LIST and creating TABLES	Lab Practical
Feb	23	12. Surfing Internet	Lab Practical
Annual Exam			

ACADEMIC HEIGHTS PUBLIC SCHOOL

Session 2019-20

Subject - Reasoning

Month	W. Days	Chapters Name
April	24	1. Which one is different
May	15	2. Analogy
		3. What comes next
June	8	3. What comes next
Periodic Test - 1		
July	27	4. Direction Sense
Aug	24	5. Mathematics reasoning
Sept	22	6. Paper cutting
Half Yearly		
Oct	21	7. Mirror Images
Nov	22	8. Cube & Dice
Dec	24	9. Analytical reasoning
Jan+Feb	22+23	Practice
Annual Exam		

ACADEMIC HEIGHTS PUBLIC SCHOOL

Session 2019-20

Subject - English

Month	W. Days	New Gem's English Reader (Literature)	The New Grammar Tree (Grammar)	Activities
April	23	Ch 1 – Harry porter learns Quidditch Ch 2 – The Palanquin Bearers Ch 3 – Ranji's Wonderful Bat Ch 4 – Set Our Children Free Ch 5 – I Remember, I Remember	Ch 1 – Nouns Ch 2 – Pronouns Ch 3 – Adjectives Ch 4 – Verbs Ch 5 – Subject Verb Agreement Leave Application	Pronunciation (Vowel & Consonants)
May	15	Ch 6 – After Twenty Years Ch 7 – Break, Break, Break	Ch 6 – Non – Finite Verbs Ch 7 – Modal Verbs Notice Writing	Practising Tongue Twister
June	8	Ch 8 – The First Pup	Ch 8 – Adverbs	Describing the things around
Periodic Test - 1				
July	27	Ch 9 – How Pleasant to know Mr Lear Ch 10 – My Dearest Lizzy	Ch 9 – Prepositions Ch 11 – Determiners Letter Writing (Formal)	
Aug	24	Ch 11 – The World in the Wall Ch 12 – Lines to an Indian Air Ch 13 – The Shoemaker	Ch 12 – Conjunctions Ch 13 – Active Passive Voice Ch 14 – Direct Indirect Speech Report Writing	Introduction Practice
Sept	23	Ch 14 – Lines written in Early Spring	Ch 17 – The Sentence : An Over View Ch 18 – The Sentence Comprehension	
Half Yearly Exam				
Oct	21	Ch 15 – Scout Shows the Way Ch 16 – Fire Ch 17 – A Grain of Sand	Ch 19 – Clause & Phrase Ch 20 – Sentence Construction and Synthesis Ch 21 – Transformation of Sentences Essay Writing	Speech Delivery
Nov	22	Ch 18 – Macbeth Ch 19 - If	Ch 22 – Conditional Sentences Ch 23 – Punctuation Ch 24 - Vocabulary Story Writing	
Dec	24	Ch 20 – India's Heroes	Ch 25 – Idioms and Phrases Ch 28 – Book Review Ch 29 - Bio Sketch Email Writing	
Periodic Test - 2				
Jan	22	Ch 21 – The Ad-dressing of Cats Ch 22 – Lata Mangeshkar in Her Own Voice	Ch 31 – Note Making Revision	Telling the story of a movie last seen
Feb	23	Revision	Revision	Revision
Annual Exam				

ACADEMIC HEIGHTS PUBLIC SCHOOL

Session 2019-20

Subject - Art and Craft

Month	W. Days	Particulars	Learning outcome
April	24	Unit : 1	
		Introduction	
		Elements of Art	Sketching
		Principles of composition	
		Perspective	
May	15	Materials	Colouring
June	8	Unit : 2	
		Study of Nature	
		Fruits	
Periodic Test - 1			
July	18	Flower, Landscape	Craft
Aug	24	Unit : 3	
		Birds & Animals	Sketching colouring
		Birds & Animals in silhouette	
		Pencil shading & decorative	Poster
Sept	22	Unit : 4	
		Human Figures & Features	Colouring
		Potraits, Action figure	
Half Yearly Exam			
Oct	21	Unit : 5	
		Still life composition	
		Still life composition in pencil	Craft
		Rangoli design	
Nov	22	Unit : 6	
		Designs & Patterns	
		Designing of saree border	Board making
		Calligraphy & Poster	
Dec	24	Unit : 7	
		R' world of recreation	
		Collage making, Decoupage	Book cover
Jan	22	Graphic figure	
		Unit : 8	
		Art gallery	Craft
		Indian art & culture	
		Textile & Festivals	
		State Arts, Odisha, Andhra Pradesh	
Periodic Test - 2			
Feb	23	International Art	
		Self potrait	
Annual Exam			

ACADEMIC HEIGHTS PUBLIC SCHOOL

Session 2019-20

Subject - G.K.

Month	W.D	Chapter Name/Content
April	24	Strange Insects, Sobriquets of Indian Cities, Deadly diseases, Lost in music, Sports Legends, Game Zone, Match the proverb
April + May	24+15	Unique Nature, Politics in India, Interesting Inventions, Dance Dance Dance, Sporting Families, Strategy Games, Word Ladder, Save the Environment
June	8	Desert Lands, Movements in India, Space Quiz, What's the World, Director Diaries, Revolutions, Science Quiz, Beyond Films
Periodic Test - 1		
July	18	Anagrams, Volcanoes and Earthquakes, Neighbouring India, Forms of Government, IT Acronyms, Global Civilizations, Economic Times
Aug	24	Books & Authors, World of Villains, Natural wonders of the world, Visiting India, Autobiographies, Stories in Pictures
Sep	13	Eminent Entrepreneurs, Inspiring Biopic, Code Zone, Famous Battles, Doing Your Bit, Logical Reasoning, Union Territories of India
Half Yearly		
Oct	21	Close to Nature, Champions, Healthy Lifestyle, Test paper 1st ,
Nov	19	Deadliest Animals on the Earth, World of Mythology, Nuclear Science, Indian Heritage, Famous Worlds, Overcoming stereotypes,
Dec	16	Breaking Records, Knowing Reptiles, Medieval India, Poetry Corner, Odd one out
Half Yearly		
Jan	22	Alternative medicines, Sculpting Wonders, All about Olympics, Writing a report
Feb	23	Ferns, Lichens and Fungi, Visiting the north east, Exploring Antartica
Annau Exam		