PM SHRI KENDRIYA VIDYALAYA AJNI -I NAGPUR

SUMMERBREAKHOLIDAYHOMEWORK2025-26

Class- X

Maths

- 1. Activity 1- Pair of linear equation in two variables
- 2. Activity 2- Arithmetic progression –To verify that a given sequence is an arithmetic progression or not

 i) 1,3,5,7,9,11,.... ii) 2,3,7,7,8,10......
- 3. Activity 3 To verify graphically that the sum of first n natural number is n(n+1)/2i.e. 1+2+3+....+n = n(n+1)/2
- 4. Write your maths portfolio.
- 5. Solve the following pair of linear equation graphically
- a) x 7y = -42; x 3y = 6
- b) Aftab tells his daughter, 'Seven year ago, I was seven times as old as you were then. Also, three years from now, I shall be three times as old as you will be. Represent this situation algebraically and graphically.

Work Education

- (1) Make a switch board by using 4 switches and 4 socket.
- (2) Write the description of thermal power plant.
- Part A:-Defination
- Part B:-Diagram with labelling
- Part C:-Enlist the places of thermal power plant.
- Part D:-Show the places of thermal power plant in map.
- 2) Write the descriptions of nuclear power plant
- Part A:-Defination
- Part B:-Diagram with labelling
- Part C:-Enlist the places of nuclear power plant.
- Part D:-Show the places of nuclear power plant in map

Hindi

नाम –

अनुक्रमांक -

(1) आत्म परिचय

जन्मतिथि

पिता का नाम

माता का नाम

पिता का व्यवसाय

माता का व्यवसाय

भाई-बहनों की संख्या और नाम

चलभाष क्रमांक

निवासस्थानकापता

- (1) निम्नलिखितविषयोंपर 150 -150 शब्दोंमेंअनुच्छेदलिखिए-
 - (क) 20-20 क्रिकेट
 - (ख) भारतकी वैज्ञानिक उपलब्धि
 - (ग) फिल्मों का समाज पर प्रभाव
- (2) निम्नलिखितविषयों पर सौ शब्दोंमेंपत्र-लेखन-
 - (क) दादा जी को आयु के पचहत्तर वर्ष पूर्ण करने पर बधाई पत्र लिखिए।
 - (ख) नगर में चोरी और लूटपाट की जानकारी पुलिस आयुक्त को देकर सुरक्षा की माँग कीजिए।
 - (ग) छोटे भाई को योग के लाभ पत्र द्वारा बताइए।

CLASS-X [AI] PARTA-EMPLOYABILITYSKILLS

DESCRIPTIVE QUESTIONS

Q1:- Writedownoneshort-termgoal(to beachieved in 1 month) and one long-termgoal(to be achieved in 1 year). For each goal, answer the following:

- Why isthisgoalimportanttoyou?
- Whatstepswill youtaketoachieveit?
- Whatresourcesorsupportdoyouneed?

Q2:-Developing healthyhabitsiskeytoself-management.

- (a) List 3healthyhabitsyoupracticeregularly(e.g.,gettingenoughsleep,eating healthy, exercising).
- (b) Chooseonehabit that youwanttoimproveoradopt. Writedownaplanonhowyouwill make this habit part of your daily routine.

MULTIPLE CHOICE QUESTIONS

Section1:WrittenCommunication

Q1:Whichofthefollowingismostimportantwhenwritinga formal email?

- a) Usingemojistomaketheemailfriendly
- b) Clearsubjectlineandprofessionaltone
- c) Writinglongparagraphs
- d) Usinginformallanguagetosoundapproachable

Q2: Whenwriting are port, which of the following should you do?

- a) Avoidanyheadingsorsubheadings
- b) Usetechnicaljargonwithoutexplanation
- c) Provideaclearintroduction, body, and conclusion
- d) Onlyincludepersonalopinions

Section2:VerbalCommunication

Q3:Ina presentation, whichofthefollowing is an important element for engaging the audience?

- a) Speakinginamonotonevoice
- b) Usingirrelevant examples
- c) Makingeyecontactandusinggestures
- d) Speakingtoofastwithout pauses

Q4: Whendelivering a presentation, howshouldyou conclude?

- a) Withanapologyfor anymistakesmade
- b) Bysummarizingkeypointsandleavingtheaudiencewithathought-provokingidea
- c) Byaskingtheaudiencetoleavetheroom
- d) Bymentioningeverydetailagain

Sction3:ActiveListening

Q5: Whatistheprimary goal of active listening?

- a) Tothinkaboutyourresponsewhile the other person is speaking
- b) Tointerruptandshareyouropinionsimmediately
- c) Tofullyfocusandunderstandthespeaker'smessage
- d) Toignorethespeakerandwaitforyourturntotalk

Q6:Ifaspeaker says, "Ifeelfrustratedwiththeproject deadlines," howshouldyourespondtoshow active listening?

- a) "Youshouldnotfeelfrustrated.Justworkharder."
- b) "Thatsoundsdifficult. Canyoutellmemoreaboutwhyyoufeelfrustrated?"
- c) "Everyonefeelsthatway.It's normal."
- d) "Ihavenoidea whatyoumean."

Section4: Non-Verbal Communication

Q7:Whichofthefollowingisanexampleofnon-verbalcommunication?

- a) Speakingclearlyinapresentation
- b) Usingfacial expressions, gestures, and posture while speaking
- c) Writinganemail
- d) Readingabooksilently

Q8:Ifyou are presenting in front of an audience, what should you do to convey confidence through body language?

- a) Avoideyecontactwiththeaudience
- b) Standwitharmscrossedandheaddown
- c) Maintaingoodpostureand makeeyecontactwiththeaudience
- d) Speakwithoutmovingyourhands

Section5: TeamCommunication

Q9:Inateamdiscussion, what is the bestway to handle a disagreement?

- a) Ignorethedisagreementandmoveon
- b) Alloweveryonetospeaktheirviewsandtrytofindcommon ground
- c) Avoidanyconflict byagreeingwitheveryone
- d) Waitforthedisagreementtoresolveitself

Q10:Whencommunicating with a team, why is it important to use clear and concise language?

- a) Tomakethediscussionsoundmoreprofessional
- b) Toavoidmisunderstandingsandconfusion
- c) Toavoidusingcomplexwords
- d) To maketheconversationlonger

SUBJECT-SOCIAL SCIENCE

- 1. 1. Make a project (subject enrichment activity) on any one of the following
- (a) Sustainable Development
- (b) Consumers Rights
- (c) Social Issues

(Do this in a project file,10 pages on A4 linear sheets.)

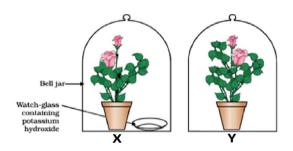
- 2. Make and write ten questions and answers of one mark (one word or one sentence) of each lesson completed.
- 3. Learn and revise all the completed chapters and also complete your CW and HW copy.
- 4. Make mind maps on completed chapters.
- 5. Do map practice of History and Geography, and fill separate map for each on below topics.
- A. Major types of soil
- B. Major lakes in India
- C. Major national park/sanctuary in india
- D. All major cities in India

STD:- X SCIENCE HOLIDAY H.W

- Q1. Why does the colour of copper sulphate solution change when an iron nail is dipped in it? Write two observations.
- Q.2. You might have noted that when copper powder is heated in a china dish, the surface of copper powder becomes coated with a black colour substance.
 - (i) How has this black coloured substance formed?
 - (ii) What is that black substance?
 - (iii) Write the chemical equation of the reaction that takes place.
- Q.3a) What is the role of HCl in our stomach?
 - b) What is emulsification of fats?
 - c) Which protein digesting enzyme is present in pancreatic juice?
- Q4. Name the following:
- (a) The process in plants that links light energy with chemical energy
- (b) Organisms that can prepare their own food
- (c) The cell organelle where photosynthesis occurs
- (d) Cells that surround a stomatal pore

Solve the following case studies based on PISA type /CCT Practice (Please take the print out and paste in to your notebook.)

A) The Figure shown below represents an activity to prove the requirements for photosynthesis. During this activity, two healthy potted plants were kept in the dark for 72 hours. After 72 hours, KOH is kept in the watch glass in setup X and not in setup Y. Both these setups are air tight and have been kept in light for 6 hours. Then, Iodine Test is performed with one leaf from each of the two plants X and Y.



1. The function of KOH is to absorb-

A. Oxygen. B. Carbon dioxide.

C. Moisture.

D. Sunlight.

2. Which of the following statements shows the correct results of Iodine Test performed on the leaf from plant X and Y respectively?

A. Blue - black colour would be obtained on the leaf of plant Xand no change in colour on leaf of plant Y.

- B. Blue black colour would be obtained on the leaf of plant Y and no change in colour on leaf of plant X.
- C. Red colour would be obtained on the leaf of plant X and brown colour on the leaf of plant Y.

- D. Red colour would be obtained on the leaf of plant Y and brown colour on the leaf of plant X.
- B).A chemical reaction is a representation of chemical change in terms of symbols and formulae of reactants and products. There are various types of chemical reactions like combination, decomposition, displacement, double displacement, oxidation and reduction reactions. Reactions in which heat is released along with the formation of products are called exothermic chemical reactions. All combustion reactions are exothermic reactions.
- (i) The massive force that pushes the rocket forward through space is generated due to the

(a) combination reaction

(b) decomposition reaction

(c) displacement reaction

- (d) double displacement reaction
- (ii) A white salt on heating decomposes to give brown fumes and yellow residue is left behind. The yellow residue left is of
- (a) lead nitrate

(b) nitrogen oxide

(c) lead oxide

(d)

oxygen gas

- (iii) Which of the following reactions represents a combination reaction?
- (a) CaO (s) + H2O (l) \rightarrow Ca (OH)2 (aq)
- (b) Zn(s) + CuSO4 (aq) $\rightarrow ZnSO4$ (aq) + Cu(s)
- (c) CaCO3 (s) \rightarrow CaO (s) + CO2(g)
- (d) $2\text{FeSO4(s)} \rightarrow \text{Fe2O3(s)} + \text{SO2(g)} + \text{SO3(g)}$
 - (iv) Complete the following statements by choosing correct type of reaction for X and Y.

Statement 1: The heating of lead nitrate is an example of 'X' reaction

Statement 2: The burning of magnesium is an example of 'Y' reaction.

- (a)X-Combination,Y-Decomposition
- (c)X-Combination,Y-Displacement
- (b)X-Decomposition,Y-Combination
- d) X- Displacement, Y-decomposition

Science - Projects

CLASS X (2025-26)

Make a Project on any one of the following topic

THEME - NATURAL RESOURCES SUB THEME - FOREST AND WILD LIFE

- 1)- Conservation of plants and animals PachachiBiosphere Reserve
- 2) 'Forest are Biodiversity Hotspots, also discuss Influence of forest in climate, water cycle and air quality.
- 3) Forest Biodiversity and sustainable management Special note on Examples of People's participation in conservation and management of forests

SUB THEME - WATER CONSERVATION

4)- Traditional methods of water harvesting in India

- 5) Tehari Dam Social, Economic and environmental effect Group 6- Sardar Sarovar Dam Social, Economic and environmental effect
- 6) River Ganga Pollution and Solution. How Lockdown has been gift for river Ganga?

Sub- theme – Our Environment

- 7) Effective Waste management systems
- 9) Aquatic Ecosystems
- 10) Millets: A Potential Source of Energy and Nutrients for Health