Subject- English

I.   Design your own newspaper: (Use A4 Sheets)

The newspaper should have five sections-

1. Facts and figures of English language

2. Creative corner- Any original story or poetry

3. Quotes by famous writers and poets along with their names

4. Entertainment

5. Games and puzzles

II.   Three types of letters: Write any one letter for the given types in your English language notebook.

1. Enquiry

2. Placing an order

3. Complaint

III.   Prepare a report on deforestation in PPT form.

Points to be covered: Causes, effects, remedies/solutions.

IV.   Read the story book, 'The Monk who sold his Ferrari'.

Prepare a review on it in PPT form.

Points to be covered: About the writer, favourite character and personal analysis.

Note: Do any one PPT from Q.No. III & IV

विषय-हिंदी

★अपनी पुस्तक क्षितिज से पाठ संख्या 4 पढ़ें।यह पाठ बर्ड वाचर (पक्षी प्रेमी) के संबंध में है।इस पाठ से संबंधित आपको निम्न परियोजना बनानी है-

1- एक आकर्षक एल्बम (PPT form) तैयार कीजिए जिसमे कुछ प्रसिद्ध बर्ड वाचर के विषय मे लिखकर देश-विदेश के कुछ पक्षियों की तस्वीर नाम व स्थान के साथ दर्शाइये।

अथवा

3- एक स्वरचित (स्वयं लिखी हुई) चित्रात्मक कहानी का निर्माण कीजिए।(PPT बनाएं)

_____

Mathematics

1. Solve the following sums
   a) Find the value of $34^2 - 21^2$
   b) If $a = 5 - 2\sqrt{5}$ then find a^2.
   c) Find 5 rational numbers between $\frac{4}{5}, \frac{7}{5}$.
   d) If $x = 0.28$, then find x^3.
   e) Add $5\sqrt{2} + 4\sqrt{3}$ and $7\sqrt{2} - 6\sqrt{3}$

2. Represent the rational numbers on number line
   a) $\frac{3}{4}$ b) $-\frac{8}{5}$ c) $\frac{5}{2}$ d) $-\frac{7}{8}$

3. Rationalize the denominators:
   a) $\frac{5}{2+\sqrt{3}}$ b) $\frac{8}{\sqrt{5}-\sqrt{6}}$

4. If $x + y = 12$ and $xy = 32$, find the value of $x^2 + y^2$.

5. If $3x + 2y = 12$ and $xy = 6$, find the value of $9x^2 + 4y^2$.

6. Expand,
   a) $(3a+4b)^3$ b) $(5p-3q)^3$.

7. Represent the number system with the help of a flow chart and write examples also.

8. Learn and write algebraic identities.

9. Make a list of law of Exponents.

10. Factorise:
   a) $x^2 - 4x - 21$ b) $x^2 + 9x + 18$

Project / Practical Work

A Maths With Geoboard

What to do: To prepare a Geoboard.
1. How to do: A. (Even Roll No.): **Square Geoboard**
1. On a square wooden board of 8"X 8".

2. Make marks on every inch on all sides.

3. Fix nails with small heads using hammer on every point (7 X 7=49 nails.) B. (Odd Roll No):

2. Circular Geoboard 1. Take a square wooden board of 8"X 8".

2. Take a centre and draw a circle of suitable radius on the board.

3. Fix nails with small heads using hammer on centre and 12 nails on the circumference at equal distance (Eg:- like No. on a clock)

 Where to do: On wooden board Parameters: (i) Content (ii) Accuracy

2. SUSTAINABILITY COUNTS!

OR

B) MATHEMATICS ARTICLES

 What to do: Read and record an article related to mathematics and write a   report of 100 words.

How to do: Take help of the below links or magazines and choose a suitable   article.
a) https://www.mathgoodies.com

 b) https://azimpremjifoundation.com(At Right Angles Magazine)

 c) https://www.tandfonline.com

d) Mathematics Today

e) Mathematics Spectrum Where to do: On A-4 size sheet

 Parameters: (i) Content (ii) Presentation

Note: Do practice of all the sums in the fair holiday homework notebook.

_____

SCIENCE

PHYSICS

Summer Assignment for Grade IX

Dear students

Please perform one activity and complete one project from the following options:

Activities-

1. Make a PPT to describe Rest, Motion, Distance, Displacement, Speed, Velocity and Acceleration.

[At least 15 slides]

2. Describe Equations of motion through a PPT of at least 15 slides.

Projects-

1. Investigate about the causes of motion and describe your findings through a PPT of at least 15 slides.

2. Prove the equations of uniformly accelerated motion by Graphical Method.

NOTE:

Though you might not be aware of some terms and concepts, but you are supposed to investigate about them and then perform the activity or do your project work. Take help of internet or other sources and mention the source from where you have taken help.

(CHEMISTRY)

1. Prepare a PPT on any 10 Chemical Reactions which take place in our daily life.

<div align="center">OR</div>

2. Newly discovered elements
   - Prepare a scrapbook about newly discovered elements.
   - Write about how they were discovered, Discoverer's name, origin, etc.

(Biology)

1. Osmosis in Raisins

Aim
To determine the mass percentage of water imbibed by raisins.

Theory

Imbibition: It is a special type of diffusion in which movement of water takes place due to difference in water molecule concentration between the adsorbant and the imbibant. For e.g., the dry plant part or dry seeds when placed in water increases in size or swells.
Mass percentage of water imbibed by raisins can be calculated as:

Mass % of water imbibed= $\frac{Mass \quad of \quad water \quad absorbed \quad by \quad the \quad raisins}{Intial \quad mass \quad if \quad raisins} X100$

Materials Required
Five raisins, a beaker, filter paper, weighing balance, watch glass, weight box.

Procedure

1. Take 5 dry raisins and weigh it.
2. Place these raisins in a beaker containing water. Allow all the raisins
3. Next day remove all the raisins and place them on filter paper.

4. Gently dry the outer surface of raisins by using filter paper.
5. Weigh the raisins which are swollen.

OR

2. Prepare PPT on National park and Wildlife Sanctuary of Uttarakhand.

- Minimum 16 slides should be there

_____

SOCIAL SCIENCE

Choose any one topic and make PowerPoint presentation(PPT)on that. Please make 8 to 10 slides.

1. Constitution of India

2. Farm activities and Non- farm activities in rural India

3. Reign of Terror.

_____

Information Technology

Make ppt slide on any one topic from the 3 topic given below.

1. Collect information regarding 3D animation companies in Bangalore, India and suggest your suggestion which one is the best.

2. Collect information regarding highest paying jobs in Bangalore, eg. Machine Learning Engineer, Master of Blockchain, Data Scientist, Web Developer, Android Developer etc., compare them and state which one is the best and why?

3. Collect information regarding all hardware require to make a computer system. Also collect information regarding top 3 mostly web browser used.

_____