

**O.P Jindal School, Savitri Nagar, Tamnar**  
**Summer Holiday Homework(Session 2024-25)**  
**Class - X**

S.No	Subject	Topic
1.	English	<p>Do the following assignments in A-4 size paper and submit in a folder.</p> <p>(1) Choose a short story or article of your choice (out of the Syllabus) and identify at least 10 unfamiliar words for you. Write down those words, their origins, meanings, 02 synonyms and 02 antonyms for each word.</p> <p>(2) Read the Book “Wings of Fire” by A. P. J. Abdul Kalam/ “Long Walk to Freedom” by Nelson Mandela/ “The Diary of a Young Girl” by Anne Frank or any other suitable book of your choice and write the review of the book in 250-300 words, mentioning            (i) what did you like in the book and why (ii) what did you learn from the book which may help in your life.</p> <p>(3) Write a story in 120-150 words. The story should begin with these words - “The ancient map had been passed down through generations of the Reynolds family, and now, as Olivia traced her fingers over its weathered surface, she felt a surge of excitement knowing that adventure awaited.”</p> <p>(4) Consult a dictionary and find at least 20 adjectives each from letter ‘P’ and ‘S’, also write the meaning of the words you find out.</p> <p>(5) Workbook “Words and Expressions” – Unit 1 (A Letter to God); Unit 2 (Nelson Mandela: Long Walk to Freedom) – Read and do the exercises in your Workbook using pencil.</p>
2	Hindi	<p>1 कवि सूरदास और तुलसीदास जी की कविताओं का वाचन करके वीडियो बनाकर मेल कीजिए।</p> <p>2 दिए गए फारमेट में अपना पोर्टफोलियो बनाकर मेल कीजिए।</p> <ol style="list-style-type: none"> <li>1 अनुक्रमणिका</li> <li>2 छात्र/छात्रा का परिचय</li> <li>3 रुचि/अरुचि</li> <li>4 आत्म जीवन परिचय</li> <li>5 पारिवारिक सदस्य</li> <li>6 मेरा सबसे अच्छा मित्र</li> <li>7 मेरे आदर्श व्यक्ति</li> <li>8 मेरे जीवन का लक्ष्य</li> </ol>
3.	Sanskrit	<p>ग्रीष्मावकाश: गृहकार्यम् (संस्कृतम्) कक्षा - दशमी। 2024 -25</p> <p>1) अभ्यासार्थः - सं. व्या. से अपठित गद्यांशः, पत्रलेखनम्, चित्रवर्णनम्, और अनुवाद कार्यम्। अलग कॉपी में लिखेंगे। (कार्यपत्रक भी दिया जाएगा)।</p> <p>2) श्रेष्ठी पाठ - 6 ( सुभाषितानि ) के श्लोकों को कंठस्थ कीजिए।</p>
4.	Mathematics	<p>1. Solve atleast 5 questions daily in your practice notebook from the 3 chapters covered during the month of April-May. Solve all the problems of NCERT including examples and then problems from R. S.</p>

		<p>Aggarwal or any other reference book.</p> <ol style="list-style-type: none"> <li>Write atleast 15-15 MCQ's from all 3 chapters in your practice note book and then solve them.</li> <li>Write 3-3 Case Based questions from all the 3 chapters in your practice note book and then solve them.</li> </ol>
5.	Science	Do the worksheet below..
6.	Social Science	<p>Project work – The student who has been given the individual project topic, will collect material information on that topic.</p> <p>Students are required to keep following essentials in mind while preparing the project.</p> <ol style="list-style-type: none"> <li>Explanation of the concept</li> <li>Meaning and definition</li> <li>Application of the concept</li> <li>Diagram/Map/Graphs related to the concepts etc., if any</li> <li>Students' own views/perception/opinion and learning from topic.</li> </ol> <p><input type="checkbox"/> Collection of the research material/data Organization of material/data</p> <p>Present material/data Analysing the material/data for conclusion Draw the relevant conclusion Presentation of the Project Work</p> <p>NOTE: Marks will be given on the basis of following parameters (a) Content accuracy, originality and analysis (b) Presentation and creativity (c) Viva-voce</p> <ol style="list-style-type: none"> <li>Write note on any three points given below (about 120 words each) <ol style="list-style-type: none"> <li>Bright future of Solar Energy in India</li> <li>Industrial Pollution and steps to be taken to minimise it.</li> <li>Mahatma Gandhi and Non co-operation movement</li> </ol> </li> <li>Map pointing <p>Label the following on outline map of India</p> <ol style="list-style-type: none"> <li>Coal mines – Raniganj , Bokaro, Korba, Singrauli, Singareni, Neyveli , Jharia</li> <li>Oil fields - Digboi, Ankaleshwar, Mumbai high,</li> <li>Nuclear Power plants - Tarapur , Kakrapara, Rawat Bhata,</li> </ol> </li> </ol> <p>Q.1 How many National Political Parties are there in India ? Write about each National Political Parties principle,origin and their main leaders.</p> <p>Q. Write an essay with related pictures about 200 words ( any one )</p> <ol style="list-style-type: none"> <li>First World War,KhilafatAndolan and Non Co-operation.</li> <li>Democracy and India</li> </ol> <p>Q.3 Write a note on consumer's rights and duties</p> <p>Q.4-Research based question- Trace the origin and logo of a well known company</p> <p>Q5. Maharashtra and Bundelkhand regions of Uttar Pradesh and Madhya</p>

		<p>Pradesh are facing water scarcity. Collect articles and pictures about given disaster and prepare a report. Give your ideas about water conservation.</p> <p>2. Write an essay on Globalization and it's impact on today's world and Indian economy. (about 250 w)</p> <p>3. Write short note on any four points given below- (about 200w)</p> <p>(i) Alluvial soil  (ii) Quit India movement  (iii) Gorakhpur incidence.  (iv) Round table conference.</p> <p>4. Map Pointing-  (A)On India Political map-  Write capital, chief minister governor, soil and main crops names of given states  Gujrat, Maharashtra, Uttar Pradesh, Andhra Pradesh/Telangana, Kerala</p> <p>*write 20 questions with answers in your Home work note book from the following chapters:  1 Resources and Development.2. Power Sharing</p> <p>3. Fill 5 maps of the following and paste them in your home work note book:  1. Soil-types of India  2 Major ports of India  3 Major iron-ore belts of India</p>
7.	AI	<p>Chat GPT (An AI tool)  What is Chat GPT?  What is the role of Chat GPT?  Write some software names for Ethical Hacking?  Search more about Chat GPT with the help of internet, newspaper and computer magazines. Make a PowerPoint presentation on the topic – Advantages of Chat GPT. Set a beautiful background. Apply nice formatting and animation effects on it.</p>

## Science Worksheet

**Q1.** A ray of light of wavelength  $5400 \text{ \AA}$  suffers refraction from air to glass. Taking  ${}_a\mu_g = 3/2$  find

- (i) the wavelength of light in glass.
- (ii) speed of light in glass
- (iii) frequency of light in glass

**Q2.** A ray of light strikes a glass slab 5 cm thick, making an angle of incidence equal to  $30^\circ$ .

The refractive index of glass is 1.5

- (a) Construct the ray diagram showing the emergent ray and the refracted ray through the glass block on A-4 size paper and stick in the copy.
- (b) Measure the lateral displacement of ray.

Taking  $\sin 19.5^\circ = 1/3$

**Q3.** How does the action of a convex lens differ from that of a concave lens on a parallel beam of light incident on them? Draw diagrams to illustrate your answer

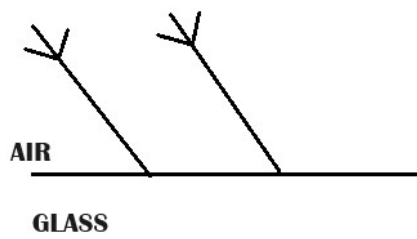
**Q4.** Convex mirror are used as rear view mirrors in automobiles. Explain why?

**Q5.** Explain how we can differentiate between concave and convex lens by

- (i) Touching it
- (ii) By seeing image.

**Q6.** The diagram below shows two parallel rays of red and violet light incident from air on air-glass boundary. Complete the diagram showing the refracted rays for them in the glass.

- (i) Are the two refracted rays in glass parallel? Give a reason for your answer.
- (ii) How do the speeds of the rays compare in glass ?



- Q7.** Lead nitrate solution is added to a test tube containing potassium iodide solution.
- Write the name and colour of the compound precipitated.
  - Write the balanced chemical equation for the reaction involved.
  - Name the type of this reaction justifying your answer.
- Q8.** 5 g of silver chloride is taken in a China dish and the China dish is placed in sunlight for sometime. What will be your observation in this case? Write the chemical reaction involved in the form of a balanced chemical equation. Identify the type of chemical reaction.
- Q9.** Crystals of a green salt 'X' are heated in a dry boiling tube, Which gives smell of burning sulphur (Y) and rotten egg(Z).
- Find out X, Y and Z .and write their chemical formula.
  - Name the type of chemical reaction taking place.
  - Write balanced chemical equation for the reaction and name the products formed.
- Q10.** You might have noted that when copper powder is heated in a China dish, the reddish brown surface of copper powder becomes coated with a black substance.
- Why has this black substance formed?
  - What is the black substance?
  - Write the chemical equation of the reaction that takes place.
  - How can the black coating on the surface be turned reddish brown?
- Q11.** (a) Can a displacement reaction be a redox reaction? Explain with the help of an example.
- (b) A zinc plate was put into a solution of copper sulphate kept in a glass container. It was found that blue colour of the solution gets fader and fader with the passage of time. After few days, when zinc plate was taken out of the solution, a number of holes were observed on it.
- State the reason for changes observed on the zinc plate.
  - Write the chemical equation for the reaction involved.
- Q12.** How do the guard cells regulate opening and closing of stomatal pores ?
- Q13.** How does aerobic respiration differ from anaerobic respiration ?
- Q14.** Why is small intestine in herbivores longer than in carnivores ?

**Q16.** Why is blood circulation in human heart called double circulation ?