

SAINIK SCHOOL PUNGLWA, NAGALAND
SUMMER VACATION ASSIGNMENT: 2025-26
CLASS X

Subject : English

Q1. From the text, **Words and Expressions:**

Cadets to solve the comprehension passage of Unit 1, Text II and all the exercises under the heading VOCABULARY, GRAMMAR and EDITING from Unit 1,2,3,4 and 5.

Q2. Write daily top five news headlines from any newspaper in your copy.

Subject : Hindi

निम्नलिखित गतिविधि का कार्य A 4 पेपर पर करें :

1. निम्न विषय पर 250-300 शब्दों में निबंध लिखिए ।
 - (i) जानलेवा प्लास्टिक
 - (ii) प्रकृति की रक्षा मानव की सुरक्षा
 - (iii) भारत में समावेशी विकास: अवधारणा और चुनौतियाँ
2. आप किसी बैंक में प्रबंधक हैं । एटीएम मशीन में कुछ तकनीकी खराबी आ गई है जिस कारण ग्राहक दो दिन तक इसका उपयोग नहीं कर पाएंगे । इसका विवरण देते हुए सूचना लिखिए ।
3. स्वच्छता अभियान के अंतर्गत आप अपने मोहल्ले के लोगों से सहयोग चाहते हैं । सभी से सहयोग की अपील करते हुए सूचना लिखिए ।
4. रक्तदान को बढ़ावा देते हुए एक आकर्षक विज्ञापन तैयार करें ।
5. आपके शहर में एक नया खरीदारी केंद्र खुला है, जिसमें दुकानों के साथ – साथ झूलें, रोमांचक खेलों और खानपान की उत्तम व्यवस्था है इसके लिए विज्ञापन तैयार करें ।
6. आप एक ग्राहक हैं । 'हिंदुस्तान टाइम्स' समाचार-पत्र के संपादक के नाम एक पत्र के माध्यम से ऑनलाइन शॉपिंग के नाम पर हो रहे धोखाधड़ी पर अपने विचार व्यक्त कीजिए ।

7. आप स्कूल के हेड बॉय हैं | स्कूल में मोबाइल फ़ोन लाने पर पूरी तरह प्रतिबंध है | फिर कुछ विद्यार्थी न केवल मोबाइल फ़ोन लाते हैं बल्कि चोरी-छिपे इसका उपयोग भी करते हैं जिससे पूरी कक्षा कि पढ़ाई बाधित होती है | इसकी शिकायत करते हुए प्रधानाचार्य को पत्र लिखिए |
8. “हरिहर काका” पाठ को लघुकथा के रूप में लिखें तथा इस कहानी से हमें क्या शिक्षा मिलती है व्यक्त कीजिए |
9. दैनिक हिंदी समाचार- पत्र से प्रतिदिन पाँच प्रमुख खबरें पढ़कर प्रतिदिन लिखें।
(बिंदु संख्या - 09 की गतिविधि एक लघु उत्तरपुस्तिका में दिनांक सहित लिखें ।)

Subject : Mathematics

Solve the example of following chapter along with 5 - different questions which are based on each exercise.

Chapter 1 :- Real Numbers

Chapter 2 :- Polynomials

Periodic test will be conduct after vacation.

Subject : Physics (Class 10A&B)

1. An object is placed 25 cm in front of a concave mirror of focal length 15 cm. Calculate the image distance and describe the nature of the image.
2. A convex mirror forms an image at a distance of 10 cm behind the mirror when an object is placed 20 cm in front. Find the focal length of the mirror.
3. An object 3 cm tall is placed 18 cm in front of a concave mirror. The image formed is 6 cm tall and inverted. Find the image distance and focal length.
4. A virtual, erect image is formed by a mirror at a distance of 12 cm behind it when the object is placed 24 cm in front. Identify the mirror type and calculate its focal length.
5. A concave mirror forms a real, inverted image twice the size of the object. If the object is placed 10 cm in front of the mirror, find the focal length and image distance.
6. An object is placed 40 cm from a mirror. The image is formed 20 cm from the mirror on the same side. Calculate the focal length and identify the mirror.

7. A 4.5 cm tall object is placed at a distance of 30 cm from a concave mirror of focal length 20 cm. Find the position and height of the image.
8. A concave mirror forms an image 15 cm in front of it when the object is placed 30 cm in front. Calculate the focal length and magnification.
9. An object is placed 35 cm in front of a convex mirror. The image appears 14 cm behind the mirror. Find the mirror's focal length.
10. A 6 cm tall object is placed 20 cm in front of a mirror and the image formed is 3 cm tall and virtual. Calculate the magnification and identify the type of mirror.
11. A concave mirror forms an image 4 cm tall of a 2 cm tall object. If the object is placed 12 cm in front of the mirror, find the image distance.
12. A mirror forms a real image 60 cm from the mirror when the object is placed 90 cm from it. Calculate the focal length of the mirror.
13. A convex mirror has a focal length of 20 cm. Where will the image be formed if the object is 30 cm from the mirror? Also, calculate magnification.
14. An object 5 cm tall is placed at 15 cm from a concave mirror. If the image formed is 10 cm tall, find the image distance and nature of the image.
15. A mirror forms a magnification of -2. If the object is placed 15 cm in front of the mirror, find the image distance and focal length.
16. A convex mirror forms an image at 8 cm behind the mirror. If the object is 16 cm in front of the mirror, calculate focal length and magnification.
17. An object is placed 60 cm from a concave mirror of focal length 20 cm. Find the image distance and state the nature of the image.
18. A 3 cm tall object placed at 24 cm from a concave mirror produces a 6 cm tall image. Find the mirror's focal length.
19. The magnification produced by a mirror is +0.4. If the object is placed 25 cm from the mirror, find the type of mirror and its focal length.
20. A real image is formed 45 cm from a mirror when an object is placed 30 cm from the mirror. Determine the focal length and identify the mirror.

Subject : Physics (Class 10C)

1. Draw the ray diagrams for the formation of images by concave and convex mirrors.

2. An object is placed 20 cm in front of a concave mirror of focal length 10 cm. Find the position and nature of the image formed.
3. An object is placed 30 cm from a concave mirror of radius of curvature 40 cm. Calculate the position and magnification of the image.
4. A concave mirror forms an image 10 cm in front of it of an object placed 20 cm in front of it. Calculate the focal length of the mirror.
5. An object 5 cm in size is placed 25 cm in front of a concave mirror of focal length 15 cm. Find the image distance and the size of the image.
6. A real image is formed by a concave mirror at a distance of 30 cm from the mirror. If the object is placed at a distance of 60 cm from the mirror, find the focal length.
7. An object is placed at a distance of 10 cm in front of a convex mirror of focal length 15 cm. Find the position and nature of the image.
8. An object is placed 50 cm in front of a concave mirror. The image is formed 100 cm in front of the mirror. Find the focal length and the magnification.
9. A convex mirror forms an image at 15 cm behind the mirror when the object is placed 30 cm in front of it. Find the focal length of the mirror.
10. An object is 2 cm tall and placed 16 cm in front of a concave mirror of focal length 8 cm. Find the height and nature of the image.

Subject : Chemistry

Q.1 To investigate everyday chemical reactions using common kitchen ingredients, classify the reactions, and explain their chemical principles and equations. Present Your Work Creative

Make a scrapbook, poster, or digital presentation (PPT / Google Slides).

Include:

Reaction photos

Chemical equations (if possible)

Reaction type and explanation

Real-life use/application (e.g., baking soda + vinegar used in cleaning)

Record Observations

For each reaction:

Write down initial and final observations (color change, bubbles/gas, texture)

Take photos or short video clips (if possible)

Subject : Biology

Write all the textual question and answers from the chapter: **LIFE PROCESSES**

Subject : Social Science

Make a Case Study of anyone of the following and submit a written report on it:-

1. One nation, one election.
2. Uniform Civil Code.
3. National Registration of Citizens.
4. The Great Depression of 1929.
5. Right to Information.

NB. i) Except cover page, all content is to be handwritten.

ii) Index at the beginning and Acknowledgement at the end to be written.

iii) Relevant pictures with caption, maps, tables, figures and diagrams to be included in the report.

iv) Last date of submission 28th JUNE 2025. Negative marking will be awarded to late submission.

Subject : Computer Applications

Q1. Develop a webpage on the Project Title: **My Favorite Tourist Places to visit**

Project Description:

Create a basic HTML web page that displays:

- i. A title for the webpage along with a background color.
- ii. An ordered list showcasing the top 5 places to visit.
- iii. An unordered list of essential items to pack while traveling.
