



# **SUMMER ASSIGNMENTS**

*“Let’s get inspired and gain knowledge every day to achieve success”*

**CLASS - X**



# **IMPORTANT INFORMATION**

- ✚ Summer Comes with an excitement, warm weather and a break from regular ongoing task.
- ✚ School gives vacation to students with a touch of studies in the form of summer assignments.
- ✚ Summer assignments are planned for holistic development of students and are based on CBSE curriculum.
- ✚ Preparation Guidelines are provided to complete the summer assignments for every subjects.
- ✚ Worksheets are attached below every subject individually.
- ✚ The students are advised to complete the project /portfolio / Lab Manual, worksheet and EBSB project according to instruction and complete worksheet in subject notebook.
- ✚ Learning outcomes are also provided so that the student's will be able to know its benefits.
- ✚ For any queries the student can take teacher's help.



# HOMEWORK

## Benefits



1

Homework Improves Memory Power

2

Homework Enhances Concentration Power

3

Homework Strengthens Problem-Solving Skills

4

Homework Helps Students Get Better Grades

5

Homework Helps Students Excel In Future Tasks

6

Homework Teaches Discipline

7

Homework Helps Students Understand Lessons Better

8

Homework Helps Students Prepare For Exams

9

Homework Helps Students Develop Analytical Skills

10

Homework Stimulates Students' Imaginations

Homework, also known as homework, is any tasks given by the teacher of a school to their students to be completed outside of class time. Homework helps students to review lessons taught in class and study them on their own.



# ASSIGNMENTS CHECKLIST

**Portfolios/Projects**

**Worksheets**

**Lab Practical  
Assignments**

**EBSB  
Activity**

**Subject Enrichment  
Activity**

**Subject wise marks are included in Examination result**



# ENGLISH LANGUAGE & LITERATURE (184)

CLASS - X



## Learning Objectives



This Portfolio stimulates students to use language in a meaningful way. To express their ideas about their topic. They need to consolidate vocabulary and grammar forms by interacting and exploring on the particular topic. It improves the reading and writing skills among students. The aim of this study was to determine the effect of project work on students' improvement in English language learning.

### PROTFOLIO

#### *General Instructions:*

- Students will use A4 size paper and make a file.
- Use different colours, draw and paste the colourful picture as per the requirement.
- The content must be relevant with proper example and must be written by the students themselves.
- Write name and class/sec at the end of the portfolio.

#### *The portfolio must contain*

- Page 1 - School Cover Page
- Page 2 - Auto Biography
- Page 3 - Why I Like English? (100 words)
- Page 4 - Multiple Assessment Activity (Given beside)
- From Page 5 onwards - English Activity as given below in A4 size

#### *Multiple Assessment Activity*

*Answer the questions based on the poem  
"Dust of Snow"*

*The Way a crow*

Shook down on me  
The dust of snow  
From a hemlock tree  
Has given my heart  
A change of mood  
And saved some part  
Of a day I had rued.

paper.

*I. Prepare a Poster on any one topic given below*

- Determiners
- Tenses
- Modals

*II. Write a Biography on “Robert Frost” with image decoratively. (100-150 Words)*

*III. . Write a paragraph on “Beauty and Beast” (120-130 Words)*

*IV. 3. Write a poem on “My State” (100 words)*



**1. What is the name of the poet?**

- (a) Sylvia Plath      (b) W.B yetas  
(c) Robert Frost      (d) Robert Burns

**2.What did the poet think of the day before the dust of snow fell on him?**

- (a) He was energetic (b) He was rude  
(c) He was lucky (d) His day was ruined.

**3.What was the mood of the poet in the beginning of the poem?**

- (a) Sad mood      (b) Happy mood  
(c) Confused mood      (d) None of these

**4. How does the poet’s mood get changed?**

- (a) When he started running  
(b) When started laughing  
(c) When dust of snow fall on him  
(d) None of the Above

**5. The crow and the Hemlock tree symbolize**

- (a) Sorrow      (b) Happiness  
(c) celebration      (d) death

*Worksheet is given below for your reference. Student will solve the worksheet in the subject notebook,*

Through this portfolio work students can able to develop their critical thinking skills and creativity. It enhances their creativity and fluency in English reading and writing skills.

# SANSKAR PUBLIC SCHOOL, RAIGARH

## WORKSHEET

CLASS - X

SUB: ENGLISH (184)

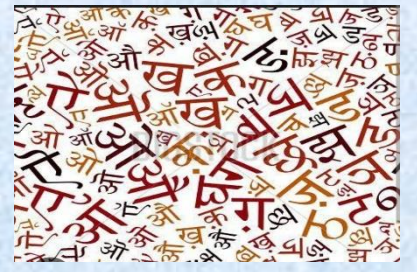
Students will solve the questions in the subject notebook.

1	What were Lencho's feelings when he found the letter with money in it? What did he do after opening the letter? [Creativity]
2	How far would you agree that one's positivity can bring in a spark of brightness even in adverse circumstances? [Critical reasoning]
3	"Now we're really going to get some water woman." Is Lencho sure that it is going to rain? Give a reason for your answer. [Analyze]
4	Describe the loss caused by the heavy fall of hailstones in general and to Lencho in particular. [Creativity]
5.	What kind of a person do you think the narrator, a veterinary surgeon, is? Would you say he is tactful as well as full of common sense? [Analyze]
6	Do you think there are also parents like Mrs Pumphrey? Is she a responsible parent? [Creativity]
7	Why is he tempted to keep Tricki on as a permanent guest? [Creativity]
8	Why does Mrs Pumphrey think the dog's recovery is "a Triumph of Surgery"? [Analyze]
9	What do people think about the ending of the world? What does the poet think? [Critical Thinking]
10	Why does the poet say, 'I've tasted of desire/I hold with those who favour fire'? [Analyze]
11	How does the poet 'know enough of hate'? Where will this 'hate' lead to in the poem "Fire and Ice". [Critical Thinking]
12	Our attitude towards a situation evokes both negative and positive response. Analyze this with reference to the poem, 'Dust of Snow' to bring out the inherent valuable lessons. [Analyze]



# HINDI (002)

## Class - X



### LEARNING OBJECTIVES



- \* "सूरदास के पद" पाठ के माध्यम से छात्रों को प्रेम के महत्व के बारे में समझाना।
- \* "नेताजी का चश्मा" पाठ के आधार पर छात्रों को पाठ से संबंधित पात्रों से परिचित कराना।
- \* अनुच्छेद लेखन के माध्यम से छात्रों को मुख्य विषय को संक्षिप्त रूप में कैसे लिखते हैं ? उसके बारे में समझाना।
- \* पत्र लेखन के माध्यम से व्यावहारिक जीवन में पत्र के महत्व के बारे में समझाना।
- \* ई-मेल के माध्यम से महत्वपूर्ण जानकारी प्राप्त कैसे की जा सकती है ? उसके बारे में जानकारी प्राप्त करना।
- \* विज्ञापन के माध्यम से छात्रों को नए-नए प्रोडक्ट के बारे में समझाना।
- \* संदेश लेखन के माध्यम से छात्रों को उसके महत्व के बारे में समझाना।

### Portfolio

पोर्टफोलियो बनाते समय, नीचे दिए गए निर्देशों का ध्यान रखे और प्रोजेक्ट फाइल के रूप में जमा करें।

- छात्र A4 आकार के कागज का उपयोग करेंगे और एक फाइल बनाएंगे।
- आवश्यकतानुसार विभिन्न रंगों का उपयोग करें।
- फाइल में निम्नलिखित पृष्ठ होने चाहिए।

#### Multiple Assessment

**प्रश्न : निम्नलिखित पद्यांश को पढ़कर प्रश्नों के सर्वाधिक उपयुक्त विकल्पों का चयन कीजिए।**

हरि हैं राजनीति पढि आए।

समुझी बात कहत मधुकर के, समाचार सब पाए।

इक अति चतुर हुते पहिलें ही, अब गुरु ग्रंथ पढाए।

बढी बुद्धि जानी जो उनकी, जोग-संदेश पठाए।

ऊधौ भले लोग आगे के, पर हित डोलत धाए।

अब अपनै मन फेर पाइहैं, चलत जु हुते चुराए।

ते क्यों अनीति करें आपुन, जे और अनीति छुड़ाए।

राज धरम तौ यहै सूर; जो प्रजा न जाहिं सताए।।

**(क) मथुरा जाते समय श्रीकृष्ण गोपियाँ का क्या लेकर गए?**

- (i) नीति (ii) मन (iii) बुद्धि (iv) चालाकी





- पृष्ठ 1-स्कूल कवर पेज
- पृष्ठ 2-छात्र सूचना
- पृष्ठ 3-मुझे हिंदी क्यों पसंद है? (100 शब्द)
- पृष्ठ 4-एकाधिक मूल्यांकन (बगल में दिया गया है)
- पृष्ठ 5 से हिंदी व्याकरण कार्य नीचे दिया गया है।

(ख) "ऊधौ भले लोग आगे के पर हित डोलत धाए" इस पंक्ति का क्या आशय है?

- (i) पहले के लोग धूर्त थे, जो दूसरों की भलाई नहीं करते थे
- (ii) दूसरों की भलाई न करने वाला
- (iii) पहले के लोग भले थे, जो दूसरों की भलाई के लिए दौड़े चले आते थे
- (iv) श्रीकृष्ण दयावान थे

(ग) गोपियाँ राजधर्म की बात किससे कहती हैं?

- (i) कृष्ण से
- (ii) हरि से
- (iii) उद्धव से
- (iv) स्वयं से

(घ) गोपियाँ उद्धव की बात सुनकर निराश क्यों हो गई?

- (i) क्योंकि उद्धव श्रीकृष्ण के आने का समाचार लाए थे
- (ii) क्योंकि उद्धव उनके लिए श्रीकृष्ण द्वारा भिजवाया गया योग का सन्देश लेकर आए थे
- (iii) क्योंकि उद्धव श्रीकृष्ण से मिलन की सूचना लाए थे
- (iv) क्योंकि उधौ श्रीकृष्ण से प्रेम करते थे

(ङ) गोपियाँ ने श्रीकृष्ण को राजा के कौन-से कर्तव्य बताए हैं?

- (i) राजा किसी भी स्थिति में प्रजा को परेशान करता
- (ii) न्याय का विरोध करता है
- (iii) प्रजा को दुःखी नहीं करता
- (iv) प्रजा के हित में कार्य नहीं करता

**प्रश्न :1 निम्नलिखित विषय पर संकेत-बिंदुओं के आधार पर लगभग 120 शब्दों में अनुच्छेद लिखिए -**

\* सफलता के सोपान चढ़ती युवा-पीढ़ी

संकेत बिंदु-

\* भूमिका

\* महत्वाकांक्षी युवा पीढ़ी

\* निर्धारित लक्ष्य

\* विभिन्न क्षेत्रों में उपलब्धियाँ

\* निष्कर्ष

**प्रश्न:2 निम्नलिखित विषय पर पत्र लिखिए-**

(क) 'स्वच्छ भारत स्वस्थ भारत' अभियान का आपके आस-पड़ोस में क्या प्रभाव दिखाई देता है? उसकी अच्छाइयों और सीमाओं की चर्चा करते हुए किसी समाचार -पत्र के संपादक को लगभग 100 शब्दों में पत्र लिखिए।

(ख) आप विभू/विभूति हैं। अपने मित्र तेजस्विन शंकर को राष्ट्रमंडल खेल में ऊँची कूद के लिए पदक जीतने पर लगभग 100 शब्दों में बधाई-पत्र लिखिए।

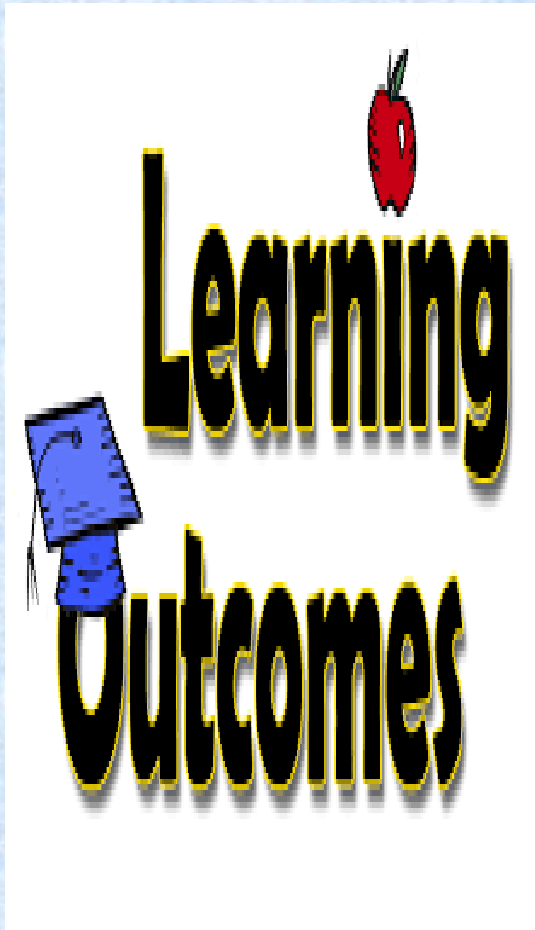
**प्रश्न:3** आपने 25 रजिस्टर ऑनलाइन ऑर्डर किए थे। जो एक सप्ताह में पहुँचने चाहिए थे, पर दस दिन बीत जाने पर भी आपको प्राप्त नहीं हुए हैं। ई-कॉमर्शियल कंपनी को अपना ऑर्डर रद्द करने के लिए ई-मेल लिखिए। (शब्द-सीमा लगभग 80 शब्दों में)

**प्रश्न:4** अपने विद्यालय में होने वाले निःशुल्क स्वास्थ्य शिविर के आयोजन से संबंधित एक आकर्षक विज्ञापन तैयार कीजिए। (शब्द-सीमा लगभग 25-30 शब्दों में)

**प्रश्न: 5** शिक्षक-दिवस पर अपने अध्यापक को शुभकामना संदेश लिखिए। (शब्द-सीमा लगभग 80 शब्दों में)



**छात्र नीचे दी गई वर्कशीट को हिंदी विषय कॉपी में हल करें।**



- \* "सूरदास के पद" पाठ के आधार पर बच्चों के अंदर प्रेम की भावना का विकास हुआ।
- \* सूरदास के पदों में प्रयुक्त रचनाओं में ब्रजभाषा के बारे में जानकारी प्राप्त की।
- \* पदों में प्रयुक्त अलंकार ,छंद , रस आदि के बारे में जानकारी प्राप्त की ।
- \* "नेताजी का चश्मा" पाठ के आधार पर बच्चों के अंदर देशभक्ति भावना का विकास हुआ।
- \* "नेताजी का चश्मा" पाठ के आधार पर सुभाष चंद्र बोस के व्यक्तित्व के बारे में बच्चों को जानकारी प्राप्त हुई।
- \* अनुच्छेद लेखन के माध्यम से छात्रों के अंदर विषय से संबंधित जानकारी प्राप्त की।
- \* पत्र लेखन के माध्यम से छात्रों में सोच का विकास हुआ।
- \* ई -मेल लेखन के माध्यम से छात्रों ने आवश्यक सूचना प्राप्त की।
- \* विज्ञापन के माध्यम से छात्रों ने किसी भी प्रोडक्ट के बारे में जानकारी प्राप्त की।
- \* संदेश लेखन के माध्यम से छात्र अपनी भावनाओं को व्यक्त कर सकेंगे।

# SANSKAR PUBLIC SCHOOL, RAIGARH

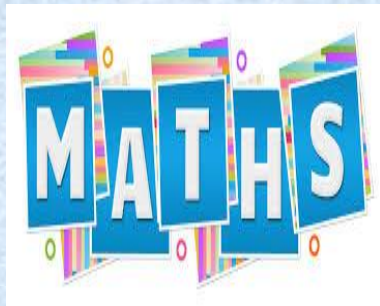
## WORKSHEET

CLASS - X

SUB: HINDI (002)

Students will solve the questions in the subject notebook.

1	गोपियाँ कृष्ण के प्रेम में किस प्रकार डूबी रहती हैं?	(सोच आधारित प्रश्न)
2	गोपियाँ क्या व्यथा सह रही थीं और किसके बल पर सह रही थीं?	(समस्या समाधान आधारित प्रश्न)
3	गोपियाँ धीरज धारण क्यों नहीं कर पा रही हैं?	(समस्या समाधान आधारित प्रश्न)
4	गोपियों ने किस बीमारी की बात कही है?	(सोच पर आधारित प्रश्न)
5.	गोपियों ने श्रीकृष्ण को अपने हृदय में किस प्रकार बसाया हुआ है?	(समस्या समाधान आधारित प्रश्न)
6	"उद्धव भले लोग आगे के, पर हित डोलत धाए।" इस पंक्ति का क्या अर्थ है?	(रचनात्मक कौशल पर आधारित प्रश्न)
7	गोपियाँ उद्धव की बातें सुनकर निराश क्यों हो गईं?	(समस्या समाधान आधारित प्रश्न)
8	"गुर चाँटी ज्यों पागी" कहकर गोपियाँ अपनी और कृष्ण की किस दशा का बोध कर रही हैं?	(समस्या समाधान आधारित प्रश्न)
9	"बुद्धि की चतुराई प्रेम में बाधक है।" "सूरदास" के पद के आधार पर इस कथन की विवेचना कीजिए।	(रचनात्मक कौशल पर आधारित प्रश्न)
10	सूरदास के "भ्रमरगीत" का उद्देश्य स्पष्ट कीजिए।	(रचनात्मक कौशल पर आधारित प्रश्न)
11	मूर्ति किसकी थी ? उसे देखकर लेखक को क्या स्मरण होता था?	(विश्लेषण विधि पर आधारित प्रश्न)
12	पहली बार पान खाने के लिए कस्बे में रुकने पर हालदार साहब चकित क्यों हो गए?	(रचनात्मक कौशल पर आधारित प्रश्न)
13	नेताजी के बदलते चश्में के संदर्भ में पानवाले ने हालदार साहब को क्या बताया?	(सोच आधारित प्रश्न)



# MATHEMATICS (041)



## CLASS - X

### LEARNING OBJECTIVES



The Mathematics promotes mathematical skills and knowledge for their intrinsic beauty, effectiveness in developing proficiency in analytical reasoning, and utility in modeling and solving real world problems. To responsibly live within and participate in the transformation of a rapidly changing, complex, and interdependent society, students must develop and unceasingly exercise their analytical abilities. Students who have learned to logically question assertions, recognize patterns, and distinguish the essential and irrelevant aspects of problems can think deeply and precisely, nurture the products of their imagination to fruition in reality, and share their ideas and insights while seeking and benefiting from the knowledge and insights of others.

#### LAB MANUAL

#### Portfolio

#### *General Instructions :*

Write the following activities in Maths Lab Manual :

#### *General Instructions:*

Student have to prepare portfolio in A4 size paper and submit it in Stick file with School Cover page.

**Activity 2 :** To draw graph of a quadratic polynomial and observe (i) the shape of the curve when the coefficient of  $x^2$  is positive (ii) the shape of the curve when the coefficient of  $x^2$  is negative (iii) its number of zeros.

**Activity 9 :** To find the sum of the first  $n$  natural numbers

**Activity 12 :** To establish the criteria for similarity of two triangles.

**Activity 13 :** To verify basic proportionality theorem ( Thales theorem )

**Activity 18 :** to verify the distance formula by graphical method

#### *The portfolio must contain*

Page 1 - School Cover Page

Page 2 - Students Information

Page 3 – Why I Like Math? (100 words)

Page 4 – Multiple Assessment Activity (Given below)

From Page 5 onwards – Math Activities as given below.

#### **Math Activity**

Students will prepare the project in any one topic given below in MS Word and take print out. Attach print out in stick file with School Cover Page. No spiral binding is required.

Topic 1: Chronological development of solution of a quadratic equation.

Topic 2 : Indian mathematicians and their contributions.

Topic 3 : List some quotations of famous mathematicians.

Topic 4 : Ramanujan Number ( 1729)

Topic 5 : Mathematical crosswords

#### *Multiple Assessment Activity*

I. To enhance the reading skills of grade X students, the school nominates you and two of

your friends to set up a class library. There are two sections- section A and section B of grade X. There are 32 students in section A and 36 students in section B.

(i) What is the minimum number of books you will acquire for the class library, so that they can be distributed equally among students of Section A or Section B?

- (a) 288                      (b) 360                      (c) 320                      (d) 188

(ii) If the product of two positive integers is equal to the product of their HCF and LCM is true, then find the HCF of (32 , 36).

- (a) 16                      (b) 4                      (c) 8                      (d) 2

(iii) If p and q are positive integers such that  $p = a$  and  $q = b$ , where a , b are prime numbers, then find the LCM (p, q).

- (a) b                      (b) a                      (c) ab                      (d)  $ab^2$

(iv) The largest number which divides 70 and 125, leaving remainders 5 and 8 respectively, is

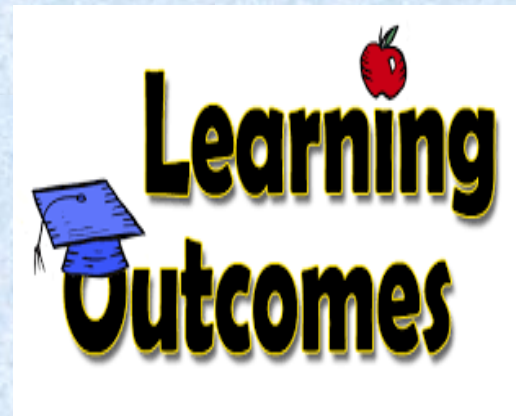
- (a) 13                      (b) 65                      (c) 875                      (d) 1750

(v) What is L. C. M of 6, 72 & 120 ?

- (a) 360                      (b) 144                      (c) 6                      (d) 120



*Worksheet is given below for your reference. Student will solve the worksheet in the subject notebook.*



After completing this assignment, students will be able to draw graphs of polynomial functions efficiently and develop the relationship between algebraic and graphical methods of finding zeroes of a polynomial. The main outcome of this assignment is to help students strengthen their mathematical knowledge and skills. This will boost their logical thinking and problem-solving skills.

# SANSKAR PUBLIC SCHOOL, RAIGARH

## WORKSHEET

CLASS : X

SUB : MATHEMATICS (041)

Students will solve the questions in the subject notebook.

1	Find the (HCF $\times$ LCM) for the numbers 100 and 190. <b>[Problem Solving]</b>
2	What is the HCF of smallest prime number and the smallest composite number? <b>[Critical Thinking]</b>
3	Prove that $3 + \sqrt{2}$ is an irrational number. <b>[Analyze]</b>
4	Find HCF and LCM of 404 and 96 and verify that HCF $\times$ LCM = Product of the two given numbers. <b>[Problem Solving]</b>
5	Prove that $\sqrt{2}$ is an irrational number. <b>[Analyze]</b>
6	Explain why $11 \times 13 \times 15 \times 17 + 17$ is a composite number. <b>[Problem Solving]</b>
7	H.C.F. of two numbers is 13 and their L.C.M. is 182 and one number is 26. Find the other number. <b>[Application Based]</b>
8	Find the largest number which divides 615 and 963 leaving remainder 6 in each case. <b>[Critical Thinking]</b>
9	Prove that $\sqrt{5}$ is an irrational number by contradiction method. <b>[Analyze]</b>
10	Check whether $6^n$ can end with the digit 0 for any natural number n. <b>[Creative]</b>
11	Find the zeroes of the following quadratic polynomial and verify the relationship between the zeroes and the coefficients : $6x^2 - 3 - 7x$ . <b>[Application Based]</b>
12	Find a quadratic polynomial with the given numbers as the sum and product of its zeroes respectively : $\sqrt{2}$ , $1/3$ . <b>[Application Based]</b>



# SCIENCE (086)

## Class - X



### LEARNING OBJECTIVES



Science plays a vital role in our everyday lives as it helps us grasp the way things operate in the world. It enables us to create fresh gadgets, medicines, and other advances that enhance our well-being.

In this assignment Students may able to understand the

Refraction of light.

Students may able to differentiate between reflection & refraction. Students will be aware about acidic and basic behaviour of different substances. Students will be able to know the essential life processes in plants & animals required for sustenance of life.

### LAB MANUAL

### Portfolio

#### General Instructions:

Lab manual should be written by all students.

Lab manual file is common for physics, chemistry & biology

#### General Instructions:

Student have to prepare portfolio in A4 size paper and submit it in Stick file with School Cover page.

Page 1 - School Cover Page

Page 2 - Students Information

Page 3 - Why I Like Science? (100 words)

Page 4 - Multiple Assessment Activity(given below)

From Page 5 onwards - Subject Activities as given below.

#### Assignment No. - 1

Finding the PH of the following sample by using universal indicator. (i) dilute HCl (ii) water (iii) dilute NaOH

#### Assignment No. - 2

Preparing a temporary mount of a leaf peel to show stomata

#### Assignment No. - 3

Tracing the path of a ray of light passing through a rectangular glass slab for different angles of incidence. Measure the angle of incidence, angle of refraction, angle of emergence and interpret the results.

#### Activity I [Chemistry]

Write method of preparation, chemical reaction and uses of (i) caustic soda (ii) washing soda (iii) baking soda.

#### Activity II [Biology]

Life Processes in plants & animals

#### Activity III [Physics]

To construct the image formation in concave mirror in following conditions:

(i) AT FOCUS (ii) INFINITE (iii) AT C

(iv) BETWEEN C & F (v) AT F

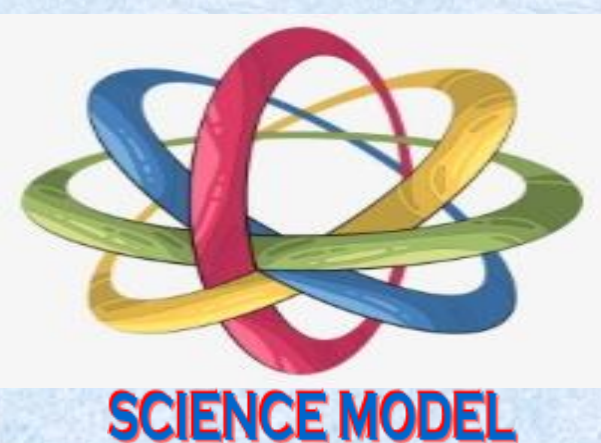
## Multiple Assessment Activity

*Read the Case to solve the questions given below*

On heating gypsum at 373 K, it loses water molecules and becomes calcium sulphate hemihydrate ( $\text{CaSO}_4 \cdot \frac{1}{2} \text{H}_2\text{O}$ ). This is called Plaster of Paris. Plaster of Paris is a white powder.

We have, the object distance is the distance of the object from the pole of the mirror. And we always know that object is placed in front of mirror that means on left side and hence object distance  $u$  is always taken as negative. The distance of the image from the pole of the mirror is taken as image distance.

- (a) What is the water of crystallisation of Plaster of Paris.  
(b) What is the formula of gypsum?  
(c) What is the sign of power of convex and concave lens?  
(d) If the magnification produced is negative and positive in case of mirrors then what about the nature of images formed there?  
(e) Which of the following group of organisms are not included in ecological food chain?  
(i) Carnivores                      (ii) Saprophytes      (iii) Herbivores      (iv) Predators

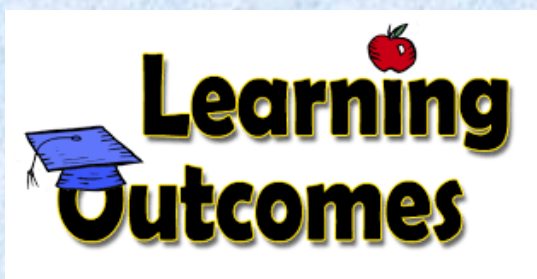


*Prepare a Scientific working model in any one topic*

- Topic-1: Modern Periodic Table
- Topic-2: Representation of acid, bases and salts
- Topic-3: Fire Extinguisher
- Topic-4: Volcano Eruption
- Topic-5: Power Generator
- Topic-6: Wind Mill
- Topic-7: Wireless Electromagnetic Induction
- Topic-8: Tesla Coil
- Topic-9: Drone
- Topic -10 : Transport System in Human Being



*Worksheet is given below for your reference.*  
*Student will solve the worksheet in the subject notebook.*



Students may be able to apply scientific concepts in daily life and solving problems. They may be able to derive formula, equations and laws. They can be able to take initiative to know about scientific discoveries and inventions.  
Through activities the student may be able to know the image formation in mirror.  
Through experiment students may be able to know about refractive index.  
Students will know about the acid, base indicators, preparation method of washing soda, caustic soda etc.  
Students will know all the essential life processes in plants & animals.



# SANSKAR PUBLIC SCHOOL, RAIGARH

## WORKSHEET

CLASS - X

SUB: Science (086)

Students will solve the questions and write separately in Physics, Chemistry & Biology subject notebook.

1	What are the three main facts of light. <span style="float: right;">[Knowledge Based]</span>
2	Rays from the sun converge at a point 15 cm in front of a concave mirror where should an object be placed so that the size of its image is equal to the size of the object? <span style="float: right;">[Critical Thinking]</span>
3	A student conducts an activity using a flask of height 15 cm and a concave mirror. He finds that the image formed is 45 cm in height. What is the magnification of the image? <span style="float: right;">[Critical Thinking]</span>
4	If an object is placed at 10 cm from a convex mirror of radius of curvature 60 cm, then find the position of image. <span style="float: right;">[Competency Based]</span>
5	State the laws of reflection & refraction of light. Explain the term 'absolute refractive index of a medium' and write an expression to relate it with the speed of light in vacuum. <span style="float: right;">[Knowledge Based]</span>
6	(a) A 5 cm tall object is placed perpendicular to the principal axis of a convex lens of focal length 20 cm. The distance of the object from the lens is 30 cm. Find the position, nature and size of the image formed. <span style="float: right;">[Problem Solving]</span>
7	Translate the following statements into chemical equations and then balance them. (a) Hydrogen gas combines with nitrogen to form ammonia. (b) Hydrogen sulphide gas burns in air to give water and sulphur dioxide. (c) Barium chloride reacts with aluminium sulphate to give aluminium chloride and a precipitate of barium sulphate. (d) Potassium metal reacts with water to give potassium hydroxide and hydrogen gas. <span style="float: right;">[Knowledge Based]</span>
	Balance the following chemical equations :

8	<p>(a) <math>\text{HNO}_3 + \text{Ca}(\text{OH})_2 \rightarrow \text{Ca}(\text{NO}_3)_2 + \text{H}_2\text{O}</math></p> <p>(b) <math>\text{NaOH} + \text{H}_2\text{SO}_4 \rightarrow \text{Na}_2\text{SO}_4 + \text{H}_2\text{O}</math></p> <p>(c) <math>\text{NaCl} + \text{AgNO}_3 \rightarrow \text{AgCl} + \text{NaNO}_3</math></p> <p>(d) <math>\text{BaCl}_2 + \text{H}_2\text{SO}_4 \rightarrow \text{BaSO}_4 + \text{HCl}</math> <b>[Critical Thinking]</b></p>
9	<p>Why should a magnesium ribbon be cleaned before burning in air? <b>[Reasoning Skill]</b></p>
10	<p>Write the balanced equation for the following chemical reactions.</p> <p>(i) Hydrogen + Chlorine <math>\rightarrow</math> Hydrogen chloride</p> <p>(ii) Barium chloride + Aluminium sulphate <math>\rightarrow</math> Barium sulphate + Aluminium chloride</p> <p>(iii) Sodium + Water <math>\rightarrow</math> Sodium hydroxide + Hydrogen <b>[Critical Thinking]</b></p>
11	<p>Write a balanced chemical equation with state symbols for the following reactions:</p> <p>(i) Solutions of barium chloride and sodium sulphate in water react to give insoluble barium sulphate and the solution of sodium chloride.</p> <p>(ii) Sodium hydroxide solution (in water) reacts with hydrochloric acid solution (in water) to produce sodium chloride solution and water. <b>[Critical Thinking]</b></p>
12	<p>When air is blown into test tube containing lime water, the lime water turns milky. Why? <b>[Critical Thinking]</b></p>
13	<p>Due to unavailability of sufficient water, how does plant cope with the desert situation? <b>[Knowledge Based]</b></p>
14	<p>Pancreas secretes lipase enzyme. Mr. Ayub is suffering from malfunctioning of the pancreas. Digestion of which nutrient will be adversely affected in Mr. Ayub's body? <b>[Competency Based]</b></p>
15	<p>Smoking is likely to cause infections in the respiratory tract. How? <b>[Competency Based]</b></p>



# SOCIAL SCIENCE (087)

## Class X



### LEARNING OBJECTIVES



Students will recognise Political, social and economic issues which affect their daily lives across time and space. Students will learn the Earth as a Habitat and other forms of life in Earth. They will be familiar with one's own region and realise interdependence of various regions (local to global). They will be able to analyse and evaluate sustainable & social issues in real world scenarios. In this assignment Students will utilize their map skill and creatively learn about soils in India.

### PROJECT (SEA)

### Portfolio

#### General Instructions:

- Use A4 size paper to prepare Project and put it inside Stick file along with School cover page.
- Do your work neat and clean. Outline the paper beautifully.
- Write a beautiful introduction of the given topics then Add all data and content to your file and in last Write a conclusion about the topic.

#### General Instructions:

Students have to prepare portfolio in A4 size paper and submit it in Stick file with School Cover page.

#### Prepare a Project on any one topic

#### The portfolio must contain

Page 1 - School Cover Page  
 Page 2 - Students Information  
 Page 3 - Why I Like Social Science?  
 (100 words)



From Page 4 onwards - Subject Activities as given below.

#### Activity I [Multiple Assessment Activity]

1. The Rio Convention endorsed the Global Forest Principles and adopted \_\_\_ for achieving sustainable development in the 21st century.  
 (a) Agenda 20 (b) Agenda 21 (c) Agenda 19 (d) Agenda 22
2. The state of Rajasthan is very well endowed with solar and \_\_\_ energy but lacks water resources.  
 (a) Geothermal (b) Hydro (c) Wind (d) Tidal
3. What percentage of our land should be under the forest according to the National Forest Policy (1952)?

#### The Project should have content like

- Acknowledgement
- Certificate
- Objective of Project
- Introduction to Project Topic
- Forms/Types

<ul style="list-style-type: none"> <li>• Components</li> <li>• Recent Developments</li> <li>• Way Forward</li> <li>• Other Contents(If Any)</li> <li>• Conclusion</li> <li>• Bibliography</li> </ul>	<p>(a) 33      (b) 22.5      (c) 31      (d) 30</p> <p>4. In which of the following States is black soil found?  (a) Jammu &amp; Kashmir      (b) Gujarat  (c) Rajasthan      (d) Jharkhand</p> <p>5. ___ are the subset of the __, which can be put into use with the help of existing technical 'know-how', but their use has not been started.  a) Reserves, developed resources      b) Stocks, reserves  c) Developed resources, stock      d) Reserves, stock</p> <p><i>Activity II [Map Activity]</i>  Use Physical map of India and perform the activity given below.  Locate/label/identify the states.  1. Alluvial soil      2. Black soil      3. Red Soil  4. Yellow Soil      5. Regur Soil</p>
 <p>The graphic shows a stack of papers with three colored pencils (red, blue, green) resting on top. The word "WORKSHEET" is written in bold red capital letters across the papers.</p>	<p><i>Worksheet is given below for your reference. Student will solve the worksheet in the subject notebook.</i></p>
 <p>The graphic features the text "Learning Outcomes" in a large, bold, black font with a yellow outline. Above the letter 'i' in "Learning" is a small red apple, and above the letter 'o' in "Outcomes" is a blue graduation cap.</p>	<p>Student will develop 21st century skills of communication, cooperation, coordination, critical thinking, creativity and collaboration to produce an extended and independent work.</p>

# SANSKAR PUBLIC SCHOOL, RAIGARH

## WORKSHEET

CLASS - X

SUB: Social Science (087)

Students will solve the questions in the subject notebook.

1	Why is soil considered as a resource? Explain with five arguments. <b>(Analytical)</b>
2	Describe any five distinct characteristics of 'Arid soils.' <b>(Thinking Skill)</b>
3	Suggest any six measures to solve the problem of land degradation. <b>(Competency based)</b>
4	What are the three stages of resource planning in India? Why is it essential to have resource planning? <b>(Competency based)</b>
5	"In India, some regions are rich in certain types of resources but deficient in some other resources". Do you agree with the statement? Support your answer with any three examples. <b>(Analytical)</b>
6	Describe the importance of judicious use of resources. <b>(Thinking Skill)</b>
7	"Resource Planning is essential for the sustainable existence of all forms of life." Support the statement with examples. <b>(Analytical)</b>
8	Describe any three main features of the black soil. <b>(Thinking Skill)</b>
9	What do you understand by a 'Resource'? Give examples. <b>(Case Based)</b>
10	How are natural resources important for man? Give five points. <b>(Reasoning Skill)</b>
11	Explain any one benefit of 'Power-Sharing'. <b>(Analytical)</b>
12	How did Sri Lanka and the Belgium government try to solve the ethnic problem? <b>(Reasoning Skill)</b>
13	"Sharing of powers makes a country more powerful and united." Do you agree with this statement and why? <b>(Analytical)</b>
14	Explain the three measures taken by Sri Lanka, as per the Act passed in 1956 <b>(Explorative Question)</b>



# INFORMATION TECHNOLOGY (402)



## LEARNING OBJECTIVES



Information Technology is a skill subject offered to students to enhance their cognitive ability, make them adaptable in changing environment and to improve their Skill set & Knowledge. In this assignment students will learn the application of style in a document and its steps. Through worksheet students will learn communication process, impact of body language, importance of feedback in effective communication and basic writing skill requires for communication.

## LAB RECORD

### *General Instructions:*

Students will Read Digital Documentation (Advanced) Session 1 from Book and write assignments in Lab Practical File..

**Assignment 2:** How to use fill format in a document.(Part B – Page 9 (1.3.1A) [5 steps])



*Worksheet is given below for your reference.  
Student will solve the worksheet in the subject notebook,*



After Completing this Assignment, the students will have knowledge about basic writing skills and importance of clear communication in Life. They will be effective communicator & problem solver. They will develop a documentation skill.

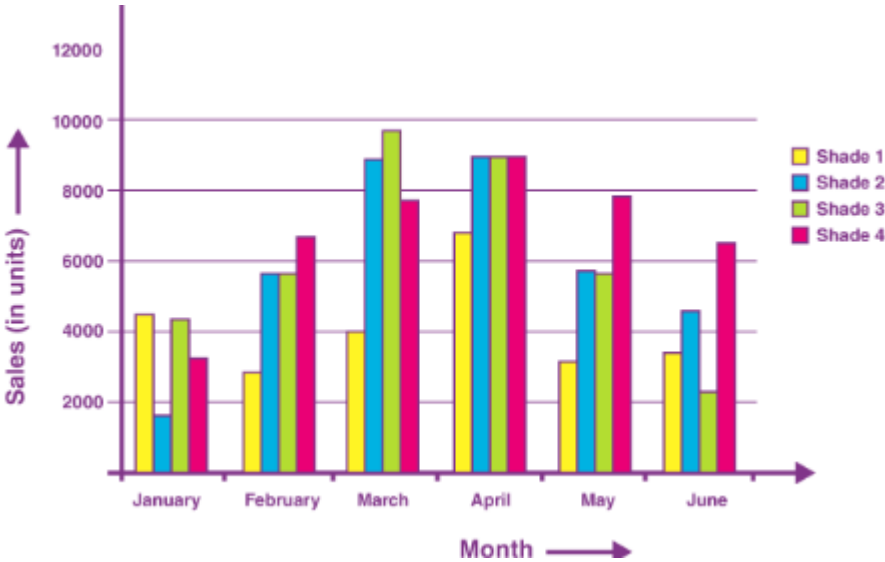
# SANSKAR PUBLIC SCHOOL, RAIGARH


## WORKSHEET

CLASS - X

SUB: INFORMATION TECHNOLOGY (402)

Students will solve the questions in the subject notebook.

1	Schematically represents the Methods of communication. <span style="float: right;">[Creative]</span>																																			
2	Rajveer wants to address people about Healthy Lifestyle. Give example of communication through public address. <span style="float: right;">[Case Based]</span>																																			
3	Karuna is clumsy, who is often confused while meeting in social gathering about the correct body language. Help her to learn the DO's and Don'ts of Body Language. <span style="float: right;">[Critical Thinking]</span>																																			
4	Which of the following is not a method of communication? <span style="float: right;">[Analyze]</span> a. Face to Face      b. Email      c. Social Media      d. Shouting																																			
5	Differentiate between Formal & informal feedback. <span style="float: right;">[Analyze]</span>																																			
6	Which form of Visual communication is represented through the image. <span style="float: right;">[Analyze]</span> <div style="text-align: center;">  <table border="1" style="margin: 10px auto; border-collapse: collapse;"> <caption>Sales Data from Bar Chart</caption> <thead> <tr> <th>Month</th> <th>Shade 1</th> <th>Shade 2</th> <th>Shade 3</th> <th>Shade 4</th> </tr> </thead> <tbody> <tr> <td>January</td> <td>4500</td> <td>1500</td> <td>4500</td> <td>3000</td> </tr> <tr> <td>February</td> <td>2800</td> <td>5500</td> <td>5500</td> <td>6500</td> </tr> <tr> <td>March</td> <td>4000</td> <td>8800</td> <td>9500</td> <td>7500</td> </tr> <tr> <td>April</td> <td>6800</td> <td>8800</td> <td>8800</td> <td>8800</td> </tr> <tr> <td>May</td> <td>3000</td> <td>5500</td> <td>5500</td> <td>7500</td> </tr> <tr> <td>June</td> <td>3200</td> <td>4500</td> <td>2200</td> <td>6500</td> </tr> </tbody> </table> </div> <p style="text-align: center;">a. Model                      b. Info-graph                      c. Map                      d. Logo</p>	Month	Shade 1	Shade 2	Shade 3	Shade 4	January	4500	1500	4500	3000	February	2800	5500	5500	6500	March	4000	8800	9500	7500	April	6800	8800	8800	8800	May	3000	5500	5500	7500	June	3200	4500	2200	6500
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7	Schematically represent the importance of communication. <span style="float: right;">[Creative]</span>																																			

8	Discuss the 7 C's of effective communication.	[Short Type]
9	Schematically represent the Capitalization rule.	[Creative]
10	<b>K</b> atrina wants to be a good communicator. She starts to learn English and correct sentence construction rules. Help katrina to learn about Sentences	[Problem Solving]
11	 <p>What type of barrier prevents the communication process in the above diagram.</p>	[Critical Thinking]
12	How to overcome barrier of Cultural Influence.	[logical]
13	How to overcome Interpersonal barrier.	[logical]
14	How to write a good paragraph?	[Critical Thinking]
15	Mention the list of interpersonal barriers in communication.	[Critical Thinking]
16	Mention the Pros & Cons of written communication?	[Long Type]





# PROJECT

Every student will prepare an Ek Bharat Shreshth Bharat Project on one of the pairing states given below section wise and submit the file to the class teacher.

## **Section A -- Gujarat**

## **Section B -- Kerala**

The Project must cover topics like....

- Introduction
- Facts about Gujarat/Kerala
- State Map – Demographics, Area Covered, Climate & Rivers
- Flora & Fauna
- State cuisine
- State Cultural Heritage
- State Tourism

Students can add other relevant points & take ideas from the you tube link given beside.



*The canvas of Ek Bharat Shreshth Bharat (EBSB) encompasses the pairing of Chhattisgarh with Gujarat & Kerala.*