



SIDHESHWAR
PUBLIC SCHOOL
Learning Breeds Courtesy

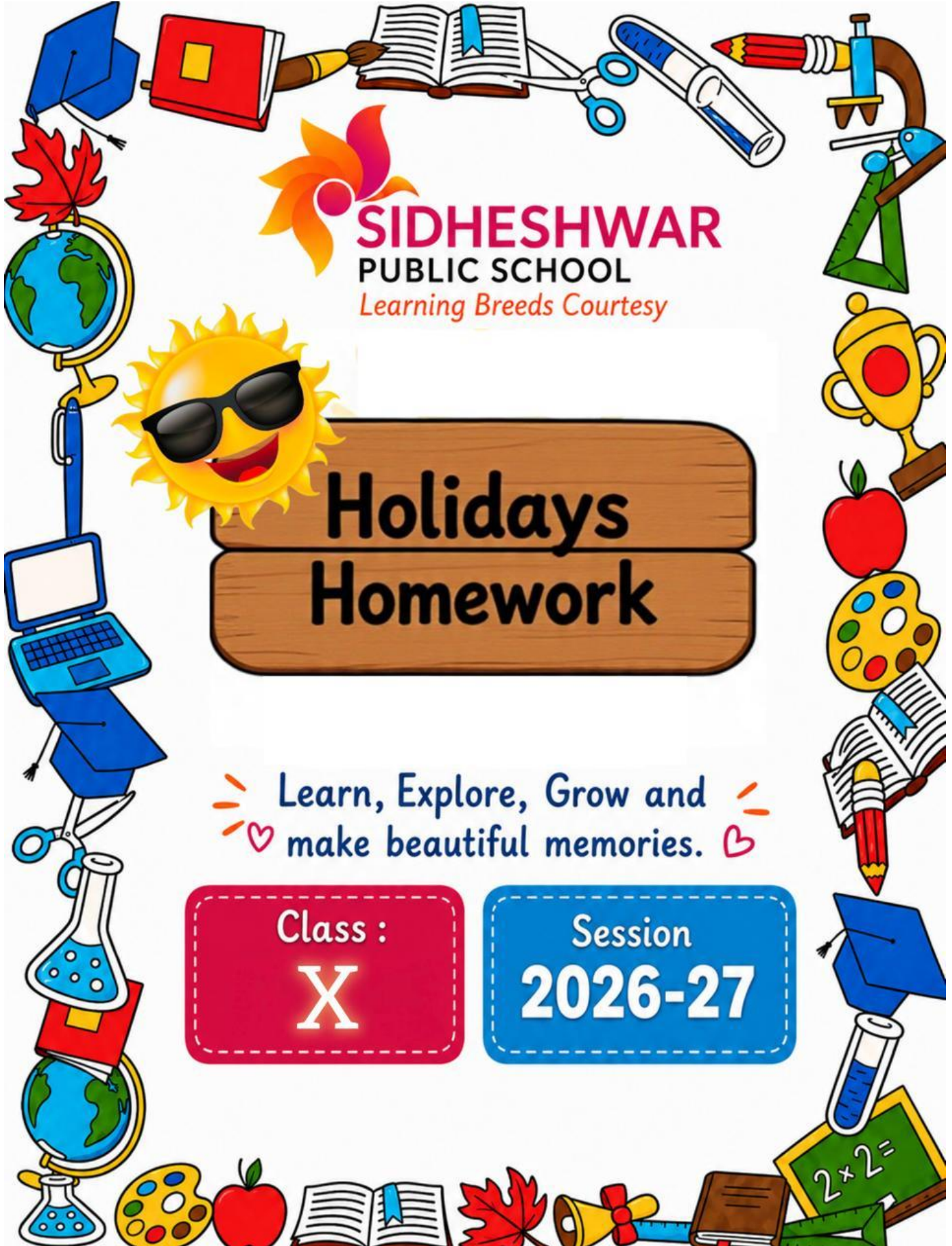


Holidays Homework

Learn, Explore, Grow and
♥ make beautiful memories. ♥

Class :
X

Session
2026-27



ENGLISH

1. Reading Task

Read any one novel/story book of your choice and prepare a Book Review including:

- Title of the book
- Name of the author
- Main characters
- Summary of the story
- Favourite part
- Moral/Message
- Your personal opinion

Decorate the review with illustrations, bookmarks, or character sketches.

2. Creative Writing

FORMAL LETTER WRITING

1. Letter to the Editor

Write a letter to the editor of a newspaper about:

“Increasing Use of Mobile Phones Among Teenagers”

Include:

- Problems caused
- Effects on studies and health
- Suggestions to control screen time

2. Letter of Placing an Order

Write a letter to a bookshop placing an order for:

- English grammar books
- Dictionaries
- Story books for school library

Use proper format and details.

3. LITERATURE PRACTICE QUESTIONS

Answer the following questions in about 80-100 words each:

- a) How did faith and hope help a character remain positive even during a difficult situation?
- b) Describe how freedom and responsibility are connected in life.

- c) Why is overindulgence harmful? Explain with reference to a character you have studied.
- d) What qualities make a true leader? Support your answer with examples.
- e) How did kindness and generosity create a positive impact in the story?
- f) Explain how discipline and proper habits can improve one's health and lifestyle
- g) "Courage is not the absence of fear, but the triumph over it." Explain this statement in your own words.
- h) What message do the stories teach about human values and relationships?

3. MODEL MAKING ACTIVITY

Prepare a Working Model on the Following Topics

with the help of the YouTube links provided below according to your Roll Number.

Topic	Roll Numbers	Suggested YouTube Link
Tenses	1–7	https://www.youtube.com/results?search_query=tenses+working+model+for+class+10+english
Verbs	8–15	https://www.youtube.com/results?search_query=verbs+working+model+for+school+project
Narration	16–24	https://www.youtube.com/results?search_query=narration+working+model+english+grammar
Determiners	25–32	https://www.youtube.com/results?search_query=determiners+working+model+for+english+grammar
Modals	33–40	https://www.youtube.com/results?search_query=modals+working+model+english+grammar

हिंदी

भाग – 1 : मुहावरों का उचित प्रयोग करते हुए रिक्त स्थान भरिए-

कोष्ठक में दिए गए मुहावरों में से उचित मुहावरा चुनकर रिक्त स्थान भरिए-

(आँखों का तारा, हाथपाँव फूलना-, नौदो ग्यारह होना-, दाँत खट्टे करना, नाक कटना, रंग में भंग पड़ना, मुँह की खाना, चार चाँद लगना, आसमान सिर पर उठाना, सिर पर उठाना (

- 1.परीक्षा का प्रश्नपत्र देखते ही उसके _____ लगे।
- 2.शरारती बच्चों ने पूरे घर को _____।
- 3.पुलिस को देखते ही चोर _____ हो गया।
- 4.अपनी गलती के कारण उसे सबके सामने _____ पड़ी।
- 5.अच्छे अंकों ने विद्यालय की प्रतिष्ठा में _____ लगा दिए।
- 6.अधिक लाड़ प्यार बच्चों को-_____ ठीक नहीं होता।
- 7.हारकर विरोधी टीम के _____ गए।
- 8.छोटीसी- बात पर इतना शोर मचाना, यानी _____।
- 9.बेटे की गलती से परिवार की _____ गई।
- 10.बारिश आने से पिकनिक के आनंद में _____ पड़ गया।

भाग – 2 : निर्देशानुसार वाक्य परिवर्तित कीजिए (रचना के आधार पर)

निम्न वाक्यों को निर्देशानुसार सरल, संयुक्त या मिश्र वाक्य में बदलिए-

1.राम विद्यालय जाता है और पढ़ाई करता है।

(सरल वाक्य में बदलिए (

2.जो छात्र मेहनत करता है, वही सफल होता है।

(सरल वाक्य में बदलिए (

3.मोहन बाज़ार गया। उसने फल खरीदे।

(संयुक्त वाक्य में बदलिए (

4.सूरज निकला। पक्षी चहचहाने लगे।

(संयुक्त वाक्य में बदलिए (

5.मेहनत करो। तुम सफल हो जाओगे।

(मिश्र वाक्य में बदलिए (

6. मैं बीमार था इसलिए विद्यालय नहीं गया।

(सरल वाक्य में बदलिए (

7. जब वर्षा होती है, तब मौसम सुहावना हो जाता है।

(सरल वाक्य में बदलिए (

8. रीमा ने पुस्तक पढ़ी और नोट्स बनाए।

(मिश्र वाक्य में बदलिए (

9. शिक्षक ने समझाया। विद्यार्थियों ने ध्यान से सुना।

(संयुक्त वाक्य में बदलिए (

10. जो व्यक्ति सत्य बोलता है, वह सम्मान पाता है।

(सरल वाक्य में बदलिए (

भाग – 3 : समास अभ्यास

निम्नलिखित समस्त पद का समास-विग्रह तथा समास का भेद लिखिए-

1 यथासंभव

2 काली मिर्च

3. क्रोधाग्नि

4. राजपुत्र

5. चतुर्भुज

6 मातापिता-

7. नीलकमल

8. सुखदुःख-

9. महावीर

10. दशानन

प्रश्न 2 : निम्नलिखित समास विग्रह से समस्त पद बनाइए -

1. राजा का पुत्र

2. नीला है जो कमल

3. शक्ति के अनुसार

4. तीन नेत्रों वाला

5. माता और पिता

6.देश के प्रति भक्ति

7.गंगा का जल

8.चार भुजाओं वाला

9.हाथ से लिखा हुआ

10.जन्म से अंधा

✉ □ 1. औपचारिक पत्र) Simple + Real Life)

प्रश्न :

आपके मोहल्ले में स्ट्रीट लाइट खराब है।

नगर निगम को एक औपचारिक पत्र लिखिए जिसमें

समस्या बताएँ

जल्द समाधान की विनती करें

📄 2. विज्ञापन) Easy Creative)

प्रश्न :

“पुरानी किताबें खरीदें और बेचें”

इस विषय पर एक छोटा सा आकर्षक विज्ञापन बनाइए।

एक स्लोगन लिखें

संपर्क नंबर भी दें

📄 3. सूचना) Basic Notice)

प्रश्न :

आपके विद्यालय में चलाया जा रहा है। “पेड़ लगाओ अभियान”

इसके लिए एक सरल सूचना लिखिए जिसमें

तिथि

समय

स्थान

निर्देश शामिल हों

✉ 4. ईमेल) Friendly)

प्रश्न :

अपने मित्र को ईमेल लिखिए जिसमें आप

अपनी छुट्टियों का अनुभव बताएँ

उसे मिलने के लिए आमंत्रित करें

📖 5. लघु कथा) Short & Easy)

प्रश्न :

विषय: “ईमानदारी का फल”

एक छोटी और सरल लघु कथा लिखिए) 100–120 शब्द (

जिसके अंत में एक संदेश हो।

- कक्षा में कराया गया सभी कार्य याद कीजिए।

संस्कृत

प्रश्न 1) प्रकृति प्रत्ययान् संयोज्य विभाज्य वा लिखत-

सरल + टाप् =

शिष्य + टाप् =

कुशल + टाप् =

छात्र + टाप् =

सेविका =

बालिका =

उज्ज्वला =

नायिका =

देव + डीप् =

नद + डीप् =

कुमार + डीप् =

तरुणी =

कुमारी =

नौ + ठक् =

नगर + ठक् =

सामाजिकः =

उष्ण + तल् =

निर्धनता =

विवेक + इन् =

ज्ञानी =

प्रश्न 2) वाच्यपरिवर्तनम् कुरुत -

1) बालकः पायसं खादति।

_____ पायसः खाद्यते।

2) अहं फलं खादामि।

_____ फलं खाद्यते।

3) त्वं किं शृणोषि ?

_____ किं श्रूयते।

4) आवां चित्राणि पश्यावः।

_____ चित्राणि दृश्यन्ते।

5) माता रोटिकां पचति।

मात्रा _____ पच्यते।

6) अहं गृहं गच्छामि।

मया _____ गम्यते।

7) आवां लेखान् लिखावः।

आवाभ्यां _____ लिख्यन्ते।

8) अहं जलं पिबामि।

मया जलं _____।

9) छात्रः अध्ययनं करोति।

छात्रेण अध्ययनं _____।

10) पाचकः भोजनं पचति।

पाचकेन भोजनं _____।

प्रश्न 3) समयः लेखनम् कुरुत -

1) सा प्रातः उत्थाय _____ (8:00) बादने योगाभ्यासं करोति।

2) मम माता प्रातः _____ (7:30) बादने उत्तिष्ठति।

3) सः _____ (2:30) बादने भोजनं करोति।

4) रामः _____ (3:15) बादने गृहकार्यं करोति।

5) मम पिता प्रातः_____ (5:00)बादने देवालयं गच्छति ।

6) नेहा _____(4:45)बादने गृहं प्रत्यागच्छति ।

7) श्रेया रविवासरे_____ (9:00)बादने उत्तिष्ठति।

8) सा सायं_____ (4:30)बादने उद्याने क्रीडति।

9) अहं नित्यं रात्रौ_____ (8:30)बादने भोजनं करोमि।

10) दिव्यांशः प्रातः _____(6:00)बादने योगं करोति।

प्रश्न 4) मन्जूषातः पदानि चित्वा रिक्त स्थानानि पूरयत -

मञ्जूषा (जलाशयम्, अचिन्तयत्, समीपे, कोटरे, सर्पः, वृद्धः, वृक्षस्य, दुःखिता, उपरि, आदाय (

एकस्य वृक्षस्य शाखासु अनेके काकाः वसन्ति स्म । तस्य वृक्षस्य) 1) ___ एकः सर्पः अपि अवसत् ।

काकानाम् अनुपस्थितौ) 2) ___ काकानाम् शिशून् खादति स्म। काकाः) 3) ___ आसन्। तेषु एकः) 4) ___ काकः उपायम्) 5) ___ । वृक्षस्य) 6) ___ जलाशयः आसीत्। तत्र एका राजकुमारी स्नातुम् (7) ___ आगच्छति। शिलायाम् स्थितं तस्या :) आमरणम्8) ___ एकः काकः वृक्षस्य) 9) ___ अस्थापयत्।

राजसेवकाः काकम् अनुसृत्य) 10) _____ समीपम् अगच्छन्। तत्र ते तं सर्पं च अमारयत् । अतः एवोक्तम् उपायेन सर्वं सिद्धयति।

ग्रीष्मावकाशकार्यं (2026-27)

संस्कृतकथा लेखनम् कुरुत।

काकः च घटः (1-10)

सिंहः च मूषकः) 11-20)

चटकः च वानरः) 21-30)

गजः शृगालः च) 31-40)

ग्रीष्मावकाशे भवान् यत्र भ्रमणाय अगच्छन् तस्य वर्णनम् कुर्वन्तु।

दिल्ली भ्रमणम्

शिमला भ्रमणम्

SCIENCE

ASSIGNMENT

INSTRUCTIONS:

1. All questions are compulsory.
2. Do all the questions in separate notebook.

BIOLOGY:

Q1. Ravi was feeling tired and weak. The doctor advised him to take iron-rich food because his haemoglobin level was low. Haemoglobin helps in transporting oxygen in the body.

- a) In which blood cells is haemoglobin present?
- b) Name the pigment responsible for carrying oxygen.

- c) Which blood vessel carries oxygenated blood from lungs to heart?
- d) Why does low haemoglobin make a person feel tired?

Q2. Photosynthesis Experiment

A student kept a potted plant in darkness for two days and then covered one leaf with black paper. The plant was kept in sunlight for a few hours. After performing the iodine test, only part of the leaf turned blue-black.

- a) Why was the plant kept in darkness initially?
- b) Which substance gives blue-black colour with iodine?
- c) What does this experiment prove?
- d) Write the balanced chemical equation for photosynthesis.

Q3. Respiration During Exercise

During heavy exercise, muscles start producing lactic acid.

- a) Which type of respiration occurs in muscles during vigorous activity?
- b) Why does muscle cramp occur?

- c) Name the cell organelle where aerobic respiration occurs.
- d) Give one difference between aerobic and anaerobic respiration.

Q4. Human Digestive System

A patient complained of indigestion due to insufficient secretion of bile juice.

- a) Which organ secretes bile juice?
- b) Where is bile stored?
- c) What is the function of bile juice?
- d) Name the enzyme that digests proteins in stomach.

Q5. Plant Transport System

A gardener observed that when the bark of a tree was removed in a ring shape, the upper part swelled after some days.

- a) Which tissue was removed?
- b) Which tissue transports water in plants?
- c) Why did swelling occur above the ring?
- d) Name the process responsible for upward movement of water in plants.

Q6. Why do desert plants open their stomata at night instead of during the day?

Q7. A person's pancreas stops functioning properly. Which life process will be affected the most and why?

Q8. Why is diffusion insufficient for transport of substances in large multicellular organisms?

Q9. How does the structure of alveoli help in efficient gaseous exchange?

Q10. Why do veins have valves but arteries do not?

Q11. A leaf from a variegated plant was tested for starch. Only green parts turned blue-black. Explain the reason.

Q12. Why does the rate of breathing increase during physical exercise?

Q13. What would happen if mucus were not secreted in the stomach?

Q14. Why is the small intestine longer in herbivores than in carnivores?

Q15. Describe the mechanism of opening and closing of Stomata.

CHEMISTRY

Chemical Reactions & Equations Acids, Bases and Salts

1. Why is magnesium ribbon cleaned before burning in air?

2. Identify the type of reaction:

Iron nails are dipped in copper sulphate solution and the colour of solution changes.

3. Write one observation when silver chloride is exposed to sunlight. Name the type of reaction involved.

4. What happens when an iron nail is placed in copper sulphate solution? Write the chemical equation.

5. Why should food items containing fats and oils be flushed with nitrogen?

6. State two ways to prevent rusting of iron.

7. Why do we apply paint on iron articles?

8. Rahul observed that an old iron gate near the sea coast developed a reddish-brown coating after a few months.

a. Name the process taking place on the iron gate.

b. Which two conditions are necessary for this process?

c. Why does rusting occur faster near sea coasts?

d. Mention one method to prevent this process.

9. A student passed electric current through acidified water using graphite electrodes and observed bubbles at both electrodes.

a. Which gas is produced at cathode?

b. Which gas is produced at anode?

c. Name the type of reaction taking place.

d. Why is water acidified before electrolysis?

10. When calcium carbonate was heated strongly, a gas was evolved which turned lime water milky.

a. Identify the gas evolved.

b. Write the chemical equation for the reaction.

c. Name the type of reaction.

d. State one use of the product formed.

11. Why do silver articles become black after some time when exposed to air?

12. Why should curd and sour substances not be kept in brass or copper vessels?

13. What is the effect of dilution on acids?

14. Why does an ant's sting cause irritation and how can it be treated?

15. Aman was suffering from indigestion. The doctor advised him to take an antacid tablet.

a. What causes indigestion?

b. Name one commonly used antacid.

c. How do antacids provide relief?

d. Which type of substances are antacids?

PHYSICS

1. Draw a ray diagram by using a concave mirror when the object is placed
 - (i) at C
 - (ii) between C and F
 - (iii) between F and P
2. How can you distinguish between a plane mirror, a concave mirror and a convex mirror by looking at the image of your face in these mirrors?
3. Name the mirror used in the following situations:
 - (i) Headlights of a car.
 - (ii) Side/Rear-view mirror of a vehicle.
 - (iii) Solar Furnace.

Support your answer with reason.

4. A candle flame is placed in front of the reflecting surface of a convex mirror of focal length f . If the distance of the flame from the pole of the mirror is f , find the distance at which image is formed.
5. An object 5 cm in length is held 25 cm away from a converging mirror of focal length 10 cm. Draw the ray diagram and find the position, size and the nature of the image formed.
6. An object 5 cm in length is placed at a distance of 20 cm in front of a convex mirror of radius of curvature 30 cm. Find the position of the image, its nature and size.
7. An object of height 5cm is placed at 15 cm in front of a concave mirror of focal length 10 cm. At what distance from the mirror should a screen be placed, so that a focussed image is obtained on it? Find the height of the image.
8. A convex mirror used for rear-view on an automobile has a radius of curvature of 3m. If a bus is located at 5m from this mirror, find the position, nature and magnification of the image.
9. A concave mirror has a focal length of 20 cm. At what distance from the mirror should a 4cm tall object be placed so that it forms an image at a distance of 30 cm from the mirror? Also calculate the size of the image formed.
10. A 6 cm tall object is placed perpendicular to the principal axis of a concave mirror of focal length 30 cm. The distance of the object from the mirror is 45cm. Use mirror formula to determine the position, nature and size of the image formed. Also draw labelled ray diagram to show the image formation in this case.
11. A concave lens has focal length 20 cm. An object is placed 40 cm from the lens. Find the image position draw the ray diagram.

12. An image is formed 24 cm from a convex lens when the object is placed 12 cm away. Find the focal length.
13. An object is placed at a distance of 25 cm from a convex lens of focal length 10 cm. Determine the image distance, nature and size of image formed.
14. The refractive index of water is 1.33. Find the speed of light in water.
15. Draw a ray diagram for the refraction through a glass slab.

Social Science

Assignment

Instructions:

Attempt all questions in sequence in your SST notebook.

Section A - Answer in one word or one sentence.

1. Which soil type is best suited for cotton cultivation in India?
2. What is the total income of a country divided by its total population called?
3. Which movement was started by women in 1970s to protect trees in the Himalayas?
4. Which sector includes activities like banking, teaching, and transport?
5. Who was the French emperor who spread nationalist ideas across Europe?
6. Which project was launched in 1973 to protect tigers in India?

Section B – Assertion-Reasoning Questions

Directions: In the following questions, a statement of Assertion (A) is followed by a statement of Reason (R)
Mark the correct choice: _

- A. Both A and R are true and R is the correct explanation of A.
 - B. Both A and R are true but R is not the correct explanation of A.
 - C. A is true but R is false.
 - D. A is false but R is true.
7. Assertion (A) Nationalism in Europe led to the unification of Germany and Italy.
Reason (R) Cultural symbols like flags, anthems, and folk songs helped people identify as one nation.
 8. Assertion (A) Power sharing is essential in a democracy.
Reason (R) It reduces the possibility of conflict between social groups and ensures stability.

9. Assertion (A) Soil erosion is a major environmental issue in India.

Reason(R) Deforestation and overgrazing are two human activities that cause soil erosion.

10. Assertion (A) The tertiary sector is becoming more important in India.

Reason(R) The primary sector provides employment to the largest number of people in India.

Section C – Very Short Answer type Questions

11. Explain any two ways in which nationalism emerged in Europe in the 19th century.

12. What is soil erosion? Mention any two causes of it.

13. Differentiate between Primary and Tertiary sectors with one example each.

14. Why is power sharing desirable in a democracy? Give one reason.

Section D – Short Answer type Questions

15. Describe the role of culture in promoting nationalism in Europe.

16. What is Human Development Index? Explain its three components.

17. Why did the feeling of alienation increase among the Sri Lankan Tamils in 1956? Explain.

Section E – Long Answer type Questions

18. “ We have to use a planned and sustainable manner to conserve our minerals “. Support the statement by giving suitable arguments.

19. Distinguish between public and private sector of economy with examples.

20. Describe the path of accommodation adopted in Belgium. What were it’s consequences?

MATHS

PRESENTATION TIPS

1. Use colored pens/pencils for headings and important steps.
2. Every activity should be neatly decorated.
3. Prepare a beautiful cover page with your Name, Class, Roll No. & Subject.
4. Try to make your work creative using charts, cuttings, mind maps, and real-life examples.
5. Use graph sheets wherever require.
6. Maintain neatness and creativity.

Roll No. 1 – 12

Chapter 1: Real Numbers

Activity: Create a colorful **Factor Tree Chart** showing prime factorization of the following numbers:

72, 96, 144, 180 and 404.

Chapter 2: Polynomials

Activity: Prepare a **Polynomial Flower Diagram** using the following polynomials: $x^2 - 5x + 6$, $2x^2 + 7x + 3$, $x^2 - 9$ and $x^2 + 4x + 4$.

Show their degree, type and zeroes.

Chapter 3: Linear Equations In Two Variables

Activity: Draw colorful graphs for the following pairs of linear equations on graph paper:

1. $x + y = 5$ and $x - y = 1$
2. $2x + y = 7$ and $x - y = 2$

Chapter 4: Quadratic Equations

Activity: Make a **Quadratic Equation Mind Map** using the following equations: $x^2 - 7x + 12 = 0$

$$x^2 + 2x + 5 = 0$$

$$2x^2 - 5x - 3 = 0$$

Show discriminant, nature of roots and methods used to solve them.

Roll No. 13 – 24

Chapter 1: Real Numbers

Activity: Make a colorful poster proving that $\sqrt{2}$ and $\sqrt{5}$ are irrational numbers with proper steps and illustrations.

Chapter 2: Polynomials

Activity: Prepare a chart on A4 Sheets for the following polynomials:

$$x^2 - 4x + 3$$

$$x^2 - 9$$

$$x^2 + 5x + 6$$

$$5x^4 - 3x^2 + 7$$

Mention degree, type and zeroes wherever possible.

Chapter 3: Linear Equations In Two Variables

Activity: Prepare graph sheet art using the following equations:

$$x + 2y = 8$$

$$x - y = 2$$

$$2x + y = 6$$

Draw and color the graphs neatly.

Chapter 4: Quadratic Equations

Activity: Create a colorful “Roots & Formula” chart on A4 Sheet for the following equations:

$$x^2 - 9x + 20 = 0$$

$$x^2 + x - 12 = 0$$

$$x^2 - 11x + 28 = 0$$

Find roots and write formulas used.

Roll No. 25 And Above

CHAPTER 1: Real Numbers

Activity: Design a creative “Math Number Maze” using HCF and LCM of the following numbers:

84 & 126

96 & 144

210 & 55

CHAPTER 2: Polynomial

Activity: Make a colorful flipbook using the following polynomials:

$$x^2 - 5x + 6$$

$$x^2 - 9$$

$$x^2 + 7x + 12$$

$$2x^2 - 3x + 1$$

Show factorization and zeroes.

Chapter 3: Linear Equations In Two Variables

Activity: Create a mini project showing real-life applications of the following linear equations:

$$2x + y = 11$$

$$x - y = 1$$

$$3x + 2y = 16$$

$$2x - y = 3$$

Use situations like shopping, taxi fare or stationery items.

Chapter 4: Quadratic Equations

Activity: Prepare a decorative Art Sheets showing methods of solving the following quadratic equations:

$$x^2 - 7x + 12 = 0$$

$$2x^2 - 5x - 3 = 0$$

$$x^2 + 6x + 5 = 0$$

Solve them using factorization and quadratic formula methods.



CREATIVE CORNER



MATHS CREATIVE PROJECT

STUDENTS CAN CHOOSE ANY ONE OR MORE OF THE FOLLOWING CREATIVE TASKS:



1. Crossword Activity – Polynomials

Create a colorful crossword puzzle using the following terms from the chapter 'Polynomials':

Polynomial, Zeroes, Coefficients, Factorization, Quadratic, Linear, Constant, Degree, Monomial, Binomial.

Write at least 10 clues.

Decorate the crossword creatively using colors and borders.

Solve the crossword on a separate sheet.

Use graph paper or colored A4 sheet for presentation.



2. 3d Maths Model

Prepare a 3D model based on any one topic:

- Factor Tree Model
- Linear Equation Graph Model
- Quadratic Equation Model
- Number System Wheel



3. Maths Formula Booklet

Create a small colorful booklet including important formulas, examples and tricks from all 4 chapters.



4. Maths In Daily Life Poster

Design a poster showing how Mathematics is used in shopping, banking, construction, transport or daily calculations.

MAKE A CR5AT A MATH COMIC STRIP

short comic strip using characters solving maths problems related to polynomials or linear equations. Use colors, creativity and proper presentation.

★ BONUS SECTION

Chapter 1: Real Numbers

1. Find the HCF and LCM of 510 and 92 and verify:
 $\text{HCF} \times \text{LCM} = \text{Product of the numbers.}$
2. Prove that $\sqrt{3}$ is irrational.
3. A merchant has 3825 apples and 4860 oranges. He wants to pack them in boxes so that each box has the same number of fruits and no fruit is left. Find the greatest number of boxes possible.
4. Without actual division, determine whether the decimal expansion of $13/75$ will terminate or recur.
5. Find the largest number that divides 245 and 1029 leaving remainder 5 in each case.
6. Find the least number which when divided by 15, 20 and 28 leaves remainder 2 in each case.
7. Determine whether $7 \times 11 \times 13 \times 15 + 15$ is a composite number.
8. The HCF of two numbers is 23 and their product is 10580. Find their LCM.
9. Find the HCF of 867 and 255 using prime factorization method.
10. Write the decimal expansion of $17/160$ and state whether it is terminating or non-terminating.

Chapter 2: Polynomials

1. Find the zeroes of the polynomial $2x^2 - 7x + 3$ and verify the relationship between zeroes and coefficients.
2. If one zero of the polynomial $x^2 - 5x + k$ is 2, find the value of k .
3. Find the zeroes of the polynomial $x^2 - 9$ and verify the relationship between zeroes and coefficients.
4. Find a quadratic polynomial whose zeroes are $-3/2$ and 4.
5. Find a quadratic polynomial whose zeroes are 2 and -5 .
6. Factorize completely:
 $x^2 - 11x + 28$.
7. Verify the relationship between zeroes and coefficients of $x^2 + 7x + 12$.
8. If α and β are zeroes of $x^2 - 6x + 5$, form a polynomial whose zeroes are α^2 and β^2 .
9. Find the zeroes of $x^2 + x - 12$ and verify the relationship between zeroes and coefficients.
10. Find a quadratic polynomial whose zeroes are -3 and 4.

Chapter 3: Linear Equations In Two Variables

1. Solve graphically:
 $2x + y = 6$
 $x - y = 3$

2. Solve the following pair using substitution
method: $3x + 4y = 10$
 $2x - y = 8$
3. Solve by elimination
method: $5x - 2y = 7$
 $3x + 4y = 23$
4. Solve the following pair of equations by any suitable algebraic
method: $7x - 3y = 11$
 $2x + 5y = 12$
5. The sum of digits of a two-digit number is 9. If 27 is added to the number, its digits are reversed. Form equations and find the number.
6. A fraction becomes $\frac{1}{3}$ when 1 is subtracted from the numerator and it becomes $\frac{1}{2}$ when 1 is added to the denominator. Find the fraction.
7. Two numbers are in the ratio 5 : 6. If 8 is added to each, the ratio becomes 7: 8. Find the numbers.
8. A train covers 360 km at a uniform speed. If the speed had been 5 km/h more, it would have taken 1 hour less. Find the speed of the train.
9. Determine graphically whether the following pair has a unique solution, no solution or infinitely many solutions:
 $2x + 3y = 6$
 $4x + 6y = 12$
10. The taxi fare in a city is ₹100 for the first 10 km and ₹8 per km thereafter. Another taxi charges ₹80 for the first 8 km and ₹10 per km thereafter. Compare both fares algebraically.

11. Chapter 4: Quadratic Equation

1. Solve by factorization: $2x^2 - 7x + 3 = 0$
2. Solve by factorization: $x^2 + 8x + 7 = 0$
3. Solve using quadratic formula: $3x^2 - 5x - 2 = 0$
4. Find the discriminant and nature of roots of: $2x^2 - 4x + 5 = 0$
5. The product of two consecutive positive integers is 306. Form the quadratic equation and find the integers.
6. A rectangular field has area 528 m^2 . Its length is 2 m more than twice its breadth. Find its dimensions.
7. The hypotenuse of a right triangle is 13 cm. If one side is 7 cm more than the other, find the sides.
8. Find a quadratic equation whose roots are reciprocal of the roots of: $2x^2 - 5x + 3 = 0$
9. A person travels 120 km at a certain speed. If the speed were 10 km/h more, the journey would take 2 hours less. Find the original speed.
10. Solve:

$$x^2 - 6(a+b)x + 9(a^2+b^2) + 18ab = 0$$

