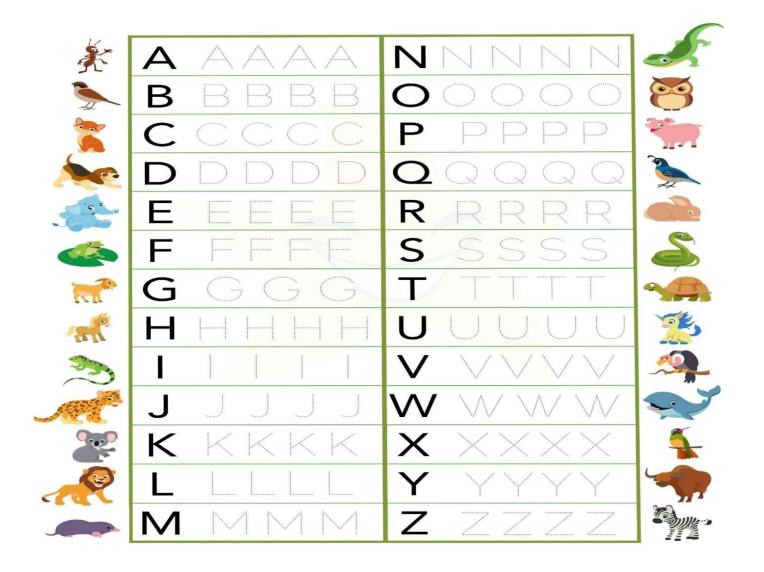
KV IIT PATNA

Summer Vacation homework 2025-26

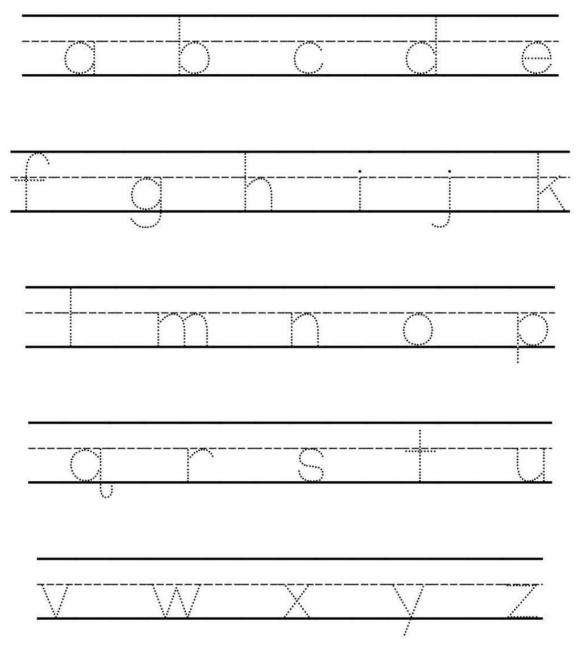
<u>CLASS - 1</u>

<u>ENGLISH</u>

1. Recognize and practice letters (A-Z), focusing on their sounds (phonic drills).



2. Recognize and practice letters (a-z), focusing on their sounds (phonic drills).(5 times)



3. Recite and learn rhymes with action from your textbook .

- a. Two little hands (page no. 1 s 2)
- b. Hop a little (page no. 20 s 21)

4. Circle the picture that begins with the sound of the letter-

a) Letter C-



b) Letter D-



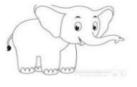
















5. Practice speaking these words daily for fluency.



yes	here	tick	have	both
are	when	make	sort	time
did	goes	fill	what	done
for	also	each	told	that
into	over	some	back	then

6. Focusing on Vocabulary and Simple Sentences:

My Favourite Thing: Ask them to draw their favourite toy, fruit, or animal. Then, with the help of a family member, they can try to say and write simple sentence about it, like "This is my red ball" or "I like to eat mango."

7. Tear and paste activity.

Make a flower with big petals and big leaves on A4 size colourful sheet . Tear the small bits of any colourful paper for petals and green for leaves. Apply glue and Stick these small bits of paper on the petals and leaves .

- 8. Write 5 page handwriting by touching the lines.
- G. Make paper puppet any of your choice using colourful sheet. (Any animal, bird).
- 10. Draw your favourite toy and make a pair of rhyming word.

Note-Make a separate 3 in 1 copy for holiday homework.

Summer vacation homework Maths

Class- 1

1. Count and write how many windows, glass, plate, bowls, fans, and chairs are in your home.

2. Draw 5 things that come in pairs (like shoes, socks, eyes).

3. Make your own colourful number card (size 15×15cm) from 0

to 9 with drawings (e.g., 3 apples, 7 pencils).

4. Use bindi or buttons to show:

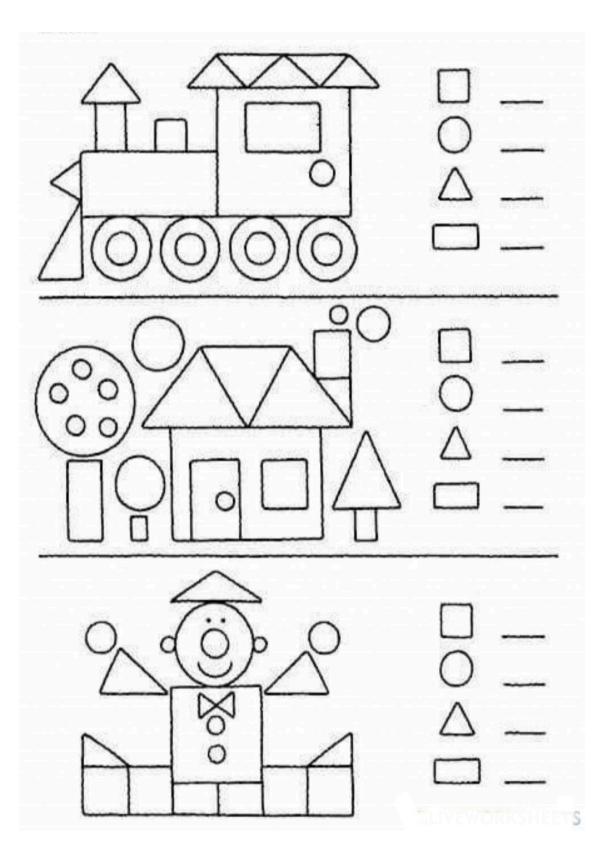
- 3 + 2 = ____
- 5 1 = ___
- 5 + 2 = ___
- 3 + 3 = ____
- 5 2 = ___
- 6 + 2 = ____
- 4 + 2 = ____
- 6 3 = ___
- 7 + 2 = ____

5. Draw a picture of a garden and add butterflies, flowers, and bees. Write how many there are in total.

6. Find 10-10 things taller and shorter than you (e.g., fridge, table, pet).7. Roll two dice 10 times, add the numbers each time, and write the total sum.

8. Write the numbers from 1 to 100 and color every 5th number.

9. Count the shapes and write the number, then color the same shapes with the same color.



Kendriya Vidyalaya, IIT Patna

Holiday Homework 2025-2026

Class – 2A.

English

Part A: Let's Read and Learn

Read the poem "My Bicycle" and "Welcome to my world" aloud.
 Record your reading or recite it to your parents.
 Underline and write down 10 rhyming words from each poem (Example: fun – run).

Part B: Vocabulary Time

1. Write any 10 words from "My Bicycle" and Welcome to my world and make new rhyming words. Example: bell – well, tell

2. Write 10 action words (verbs) you find in the chapter My Bicycle, picture reading Out out, Welcome to my world .

Example: ride, spin,

Part C: Fun with Drawing and Colouring

1. Draw and colour your dream bicycle.Add a basket, bell, or streamers if you want!

Part D: 1. Story Time!

Imagine you go on an adventure on your bicycle. Write a short story in 4–5 lines. Give your story a title!

Note:--

- Write 10 pages in good handwriting.
- Complete the fair copy neatly and cleanly with good pictures.
- Complete your book as well.
- Do the holiday homework in a 4-line English notebook.
- Don't do this in the english course notebook/ faircopy



- 1. अपने परिवार का चित्र बनाओ और हर सदस्य का नाम लिखो।
- 2. 5 फूलों के नाम लिखो और उनके रंगीन चित्र बनाओ।

- 3. 'गर्मी का मौसम′ पर एक चित्र बनाओ और उस पर 3 पंक्तियाँ लिखो।
- 4. किसी एक जानवर की कहानी सुनो और उसे 4 पंक्तियों में लिखो।
- 5. अपने पसंदीदा खिलौने का चित्र बनाओ और उस पर 2 वाक्य लिखो।
- 6. 3 फल, 3 सब्ज़ी और 3 खेलों के नाम लिखो।
- 7. अपनी पसंदीदा कविता याद करो और परिवार को सुनाओ।
- 8. रंगीन कागज़ या बटन से अक्षरों की माला बनाओ (अ-ई तक)।
- 9. `पेड़ हमारा मित्र है' विषय पर एक पंक्ति लिखो और पेड़ का चित्र बनाओ।
- 10. प्रतिदिन एक पेज सुलेख लिखो।

Maths

- 1. Write the numbers from 1 to 100.
- 2. Add the following numbers:
- 15 + 7 = ?
- 24 + 9 = ?
- 36 + 8 = ?
- 3. Subtract the following numbers:
- 52 15 = ?
- 61 24 = ?
- 43 19 = ?
- 4. Draw a rectangle and count how many corners and sides it has. Write them down.5. Write the multiplication table from 2 to 15.(10 times).
- 6. Write the numbers from 1 to 50 in words (5 times).7. Fill in the blanks:
- 18 + ____ = 25
- 50 ____ = 30
- 8. Complete the number pattern:

10, 20, ____, 40, ____, 60

5, 10, 15, ___, 25, ___

9.Draw a circle, square, and triangle. Write the number of sides for each shape next to them.

KENDRIYA VIDYALAYA IIT PATNA HOMEWORK FOR SUMMER VACATION (2025-26) CLASS -2 B

<mark>ENGLISH</mark>

- Write one page handwriting everyday for 25 days. Try to write in cursive by touching the lines. (write in a separate 4 line copy or in any old four line notebook at home) read what you write.
 Do Maths activities on A 4 paper or punch paper
- 2. Read one page from any English book everyday(newspaper, story book, or any other book)
- 3. Cut and paste any one positive news headline from English news paper and read it too.
- 4. Draw and colour / paste your favourite toy and write at least five sentences on it.
- 5. Draw/ paste and write about any one game you play. Name of the game, how many people can play, why do you like playing it, how do you play, things required to play the game...... etc
- 6. Worksheets link:(get a print)
 - i) <u>https://whatistheurl.com/articles-worksheet-for-grade-2-choose-the-best-one-from-a-or-an/</u>
 - ii) https://in.pinterest.com/pin/481181541455664637/
 - iii) Reading comprehension (worksheets)



HAPPY LEARNING AND ENJOY YOUR VACATIONS

Comprehension!

Directions: read the paragraph inside the box, once you have read it all, answer the questions below using the paragraph you have read!

The Curious Caterpillar

Once upon a time, there was a curious caterpillar named Charlie. Charlie loved exploring the world around him. One sunny day, he decided to crawl up a tall tree to see what was on top. As he reached the highest branch, he discovered a magnificent view of the entire garden. The colorful flowers, buzzing bees, and fluttering butterflies filled him with joy. From that day forward, Charlie knew that curiosity could lead to the most wonderful adventures.

What is the title of the story?

What is the name of the main character?

What did Charlie love doing?

What did Charlie discover on the highest branch of the tree?

What filled Charlie with joy?

What did Charlie learn from that day forward?

Comprehension!

Directions: read the paragraph inside the box, once you have read it all, answer the questions below using the paragraph you have read!

The Magical Kite

Once in a small village, there lived a young girl named Lily. On a windy day, Lily decided to fly her colorful kite in the park. As the kite soared high in the sky, it transformed into a magical kite. It took Lily on a thrilling journey above the fluffy clouds, where she met friendly birds and even saw a rainbow. The magical kite brought joy and excitement to Lily's heart, and she treasured that memory forever.

What did Lily decide to do on a windy day?

What is the name of the main character?

What happened to Lily's kite as it soared high in the sky?

Where did the magical kite take Lily?

Whom did Lily meet during her journey?

What did Lily treasure forever?





Emma had been learning to ride a bike. Today, she got a new bike. It was pink with white stripes. Emma was excited to ride it.

She put on her helmet and started to ride in her driveway. At first, she wobbled a bit, but soon she was riding smoothly. She rode up and down the driveway.

Her cat, Mittens, watched from the window. Emma laughed as she rode. She felt proud of herself for learning to ride her new bike.

True or False?

- 1. Emma has been learning to drive a car.
- 2. Emma's new bike is pink with white stripes.
- 3.Emma wore a helmet while riding her bike.
- 4. She fell off her bike the first time she rode it.

5. Emma's cat, Mittens, watched her from the window.

.

MATHEMATICS (Creative Activities)

Do all the activities in a separate notebook or A4/ punch paper.

Q 1: Shape Hunt (Observation Activity)

Instructions:

- Look around your home, school, or neighbourhood.
- Find at least 2 objects for each shape below and draw or paste pictures of them.

Object 1	Object 2
e.g., wall clock	
e.g., cushion	
e.g., book	
e.g., hanger corner	
e.g., mirror	
	e.g., wall clock e.g., cushion e.g., book e.g., hanger corner

Q2: Shape Art (Craft Activity)

Instructions:

- Use cutouts of basic shapes from paper, old magazines, etc.
- Create an animal, house, robot, or any picture/ (scenery) using only shapes.

Give your shape picture a name and 2-3 lines about it.

<mark>Q3</mark>: Beads and Bundles (Hands-On Activity) □

Instructions:

- Use small objects like buttons, pasta pieces, daal, beads, or cut pieces of two different colour paper if nothing is available (given in your textbook)
- Group them into bundles of 10 to represent Tens, and keep remaining as Ones.
- Show at least 3 different numbers using this method .

Example:	
To show 32	3 bundles of $10 = 30$
	2 single ones $= 2$

Q 4: Tens and Ones Robot (Creative Drawing)

Instructions:

- Draw a robot using blocks.
- Use big rectangles for Tens and small circles for Ones.
- Write how many tens and ones your robot has.

Example: "My robot has 4 Tens and 3 Ones = 43"

Q5. "Weighing Balance" (DIY Experiment)

Instructions:

- Make a simple balance using a hanger, two cups, and string.
- Compare pairs of items (e.g., apple vs. eraser, spoon vs. toy car).
- Record on a paper, which is heavier and which is lighter. (Do it at least for 10 objects)

Example:

- Apple is heavier than an eraser.
- Spoon is lighter than a toy car.

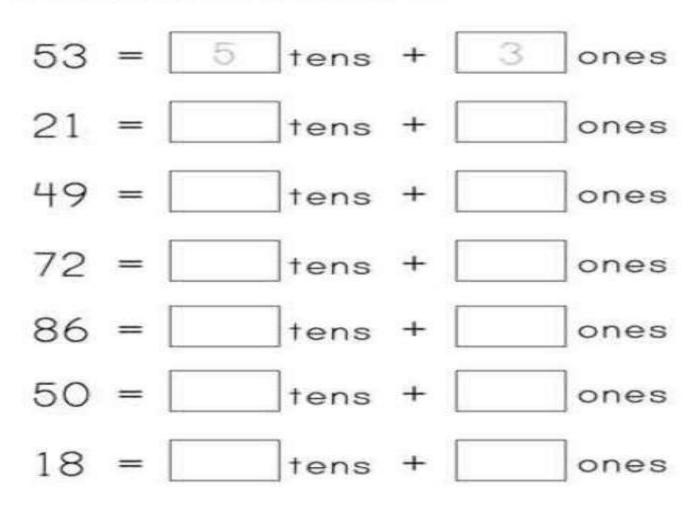
LEARN TABLES FROM 2 TO 10

Worksheets:

AME :	Ten	s and Or	nes	SECTIO		natics [Clo DLL No.	ass 2]
Q.1 how	many bra	clets can	be made	ds when each if she has the it in each case	braclet h	as 10 bea	
No. o	of beads		No.	of braclets		No. of	beads left
(a)	81		221	12		12	
(b)	46		**			:::-	
(c)	58						
(d)	48						
(e)	54		-			385 675	
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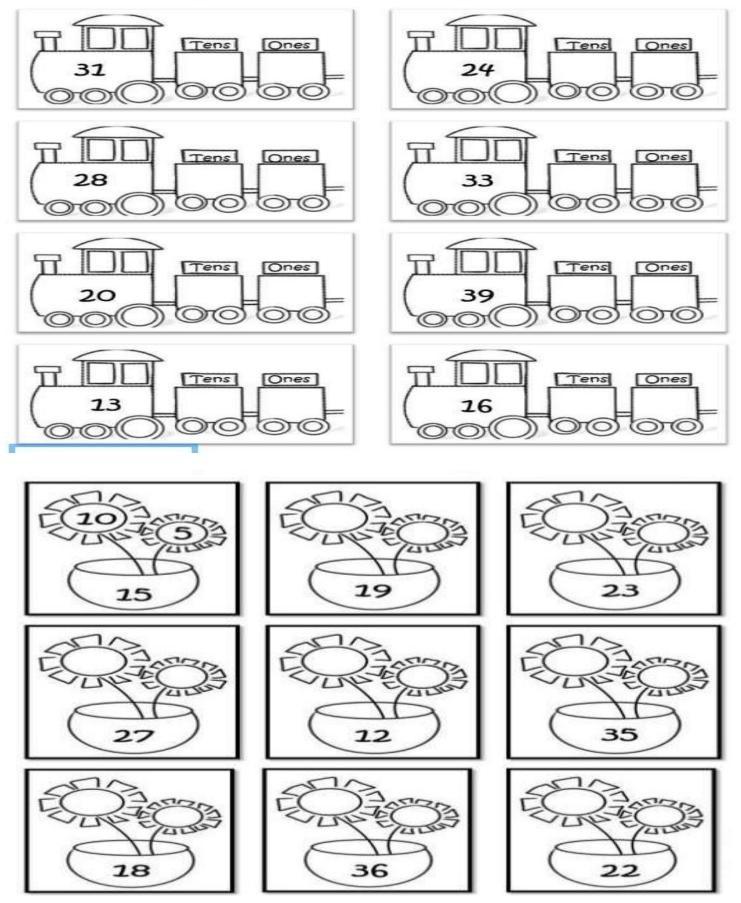
Tens and Ones Place Values Worksheet

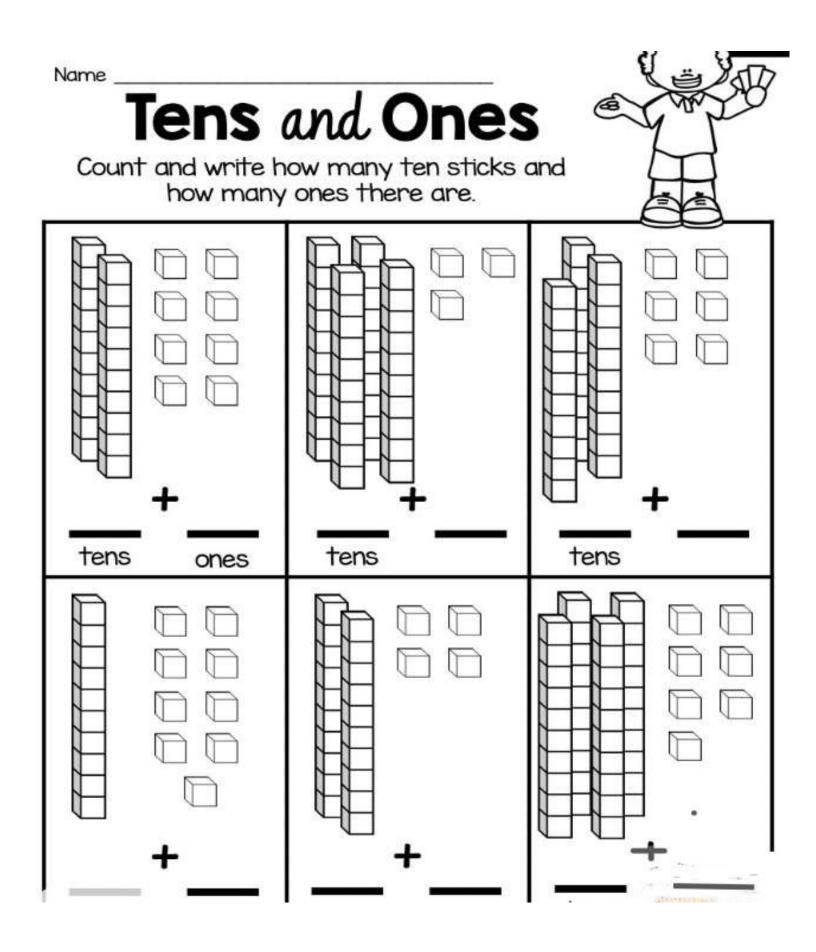
ook at the number at the beginning of each row. Write the correct number of tens and ones in the boxes next to it.



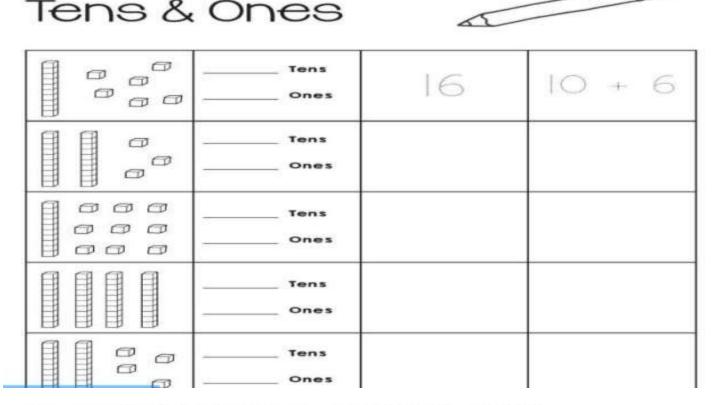
Name:_

Tens And Ones





Tens & Ones



M

Name :

UNDERSTANDING

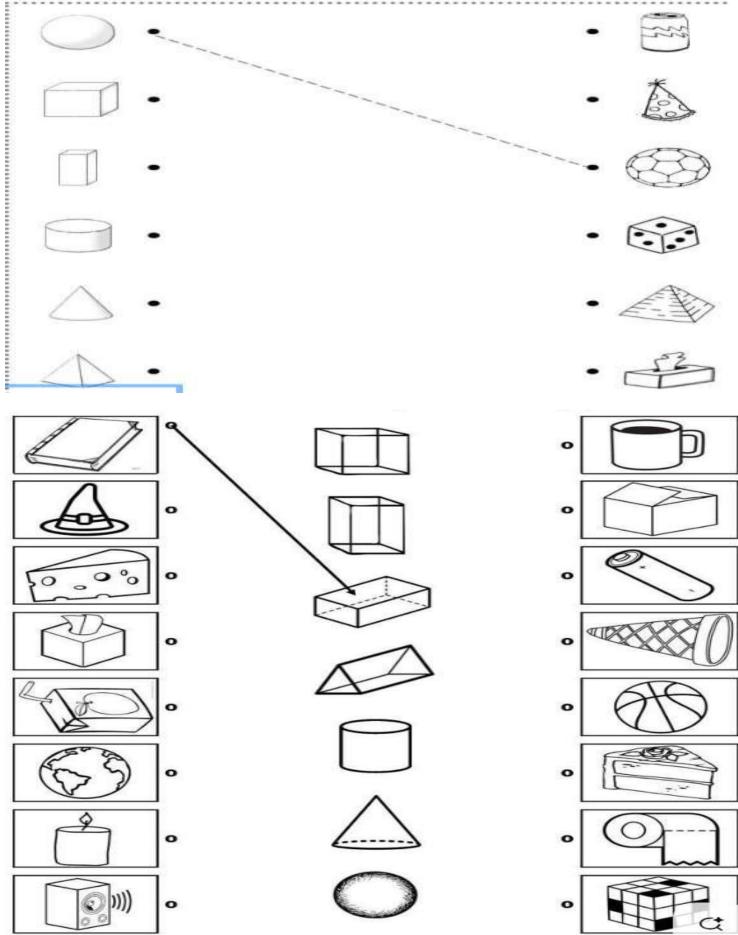
NUMBERS

Complete the following table.

Number	Tens and Ones	Part Whole Model	Number Word
94	<u>9</u> Tens <u>4</u> Ones	90 (4) (90) (94)	Ninety Four
76	Tens Ones	\gg	
45	Tens Ones	\gg	
57	Tens Ones	\gg	
63	Tens Ones	\gg	
32	Tens Ones	\gg	

3D Shapes







कक्षा – 2

SUMMER HOLIDAY HOMEWORK

- Subject gardening
- **1.** Make a collage of things that we get from plants .
- 2. Write names of 10 trees and paste pictures too
- 3. Write 5 lines about your school garden.

विषय– हिन्दी

→ इकाई 1-परिवार, नीमा की दादी, घर, माला की चाँदी की पायल इन सभी पाठों के अभ्यास के प्रश्न-उत्तर अपने हिन्दी की कॉपी पर अवश्य पूरा करके लाए।

- → 20 पेज सुंदर अक्षरों में सुलेख लिखे और पढ़ने का अभ्यास करें।
- → हिन्दी की कॉपी पर अपनी पंसद का एक चित्र बनाकर उस पर पाँच लाइन लिखें।
- → घर में उपलब्ध वस्तुओं अखबार, पेड़ के पत्ते, माचिस की तिल्ली, रुई, घास आदि (की सहायता से एक घर बनाइए और घर पर पाँच वाक्य लिखिए।
- रंगीन कागज या बटन से अक्षरों की माला बनाओ (अ-ई तक)।

[`]पेड़ ह्मारे मित्र हैं इस विषय पर श्लोगन लिखो और पेड़ का चित्र बनाओ।

KENDRIYA VIDYALAYA IIT PATNA HOMEWORK FOR SUMMER VACATION CLASS – 3 A & B SUBJECT - EVS

Q 1. Homework Title: "My Family & Friends Tree"

Objective:

To help children understand relationships, values, and bonding through a fun and creative activity.

Instructions:

- 1. Draw or Create a Tree
 - Use a chart paper or notebook.
 - Draw a large tree with branches.
 - Label the tree as "My Family & Friends Tree."

2. Family Leaves

- On each leaf, write the name of a family member.
- Write one kind thing they do for you (e.g., "Papa tells bedtime stories").

3. Friendship Flowers

- Draw flowers around the tree for each friend.
- On each flower, write your friend's name and one quality you like in them.

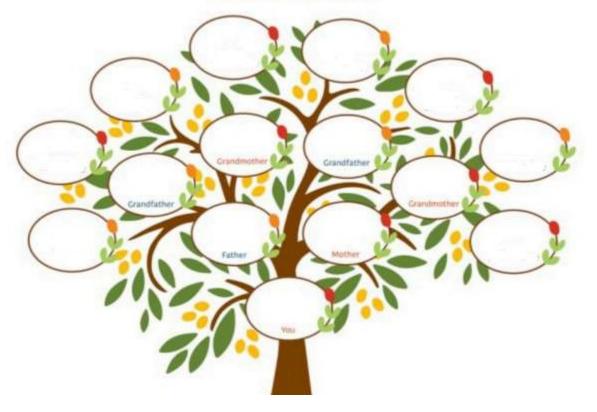
4. Decorate

- Use colors, stickers, or even paste small printed photos.
- Make it as lively and colorful as possible.

5. Communicate :

• Interview a grandparent or elder in the family and write 3 things you learned from them.

MY FAMILY TREE



Q 2. Creative Homework: "My Day at the Mela"

Instructions:

Read the **questions** below and answer them with drawings, short sentences, or a mix of both. Be as imaginative and colorful as you like!

Questions:

- 1. Draw your favorite ride at the mela.
 - What was it called?
 - Why did you like it?
- 2. What did you eat at the mela?
 - Draw your plate and name the items.
 - Which one was the tastiest?

3. You met a puppet seller.

- What did he/she say to you?
- Make a puppet using old socks or waste colourful clothes at home and write a name for it.

4. Imagine you lost your way at the mela!

- Who helped you?
- How did you feel?
- 5. If you could set up your own stall at the mela...
 - What would you sell?
 - Draw your stall and name it.
- 6. You saw an animal ride.
 - Which animal was it?
 - Would you try it? Why or why not?
- 7. You bought a gift for a friend.
 - What was it?
 - Why did you choose that gift?
- 8. Describe the mela in at least two paragraphs using your five senses:
 - What could you see, hear, smell, taste, and touch?

Q3. Hands on Activity:

- 1. Make a Mela Collage using magazine cut-outs, old wrappers, or drawings to show the different things you saw at the fair.
- 2. Make a Festival Scrapbook Page choose ANY ONE festival like chhath pooja, holi, Diwali, Eid, Christmas or any other one of your choice and create a page with drawings, photos, and small facts step by step (like what people wear, eat, and do).
- Q4. Revise chapter 1 and 2 for periodic test 1 (REVISE FROM BOOK AND NOTEBOOK)

KENDRIYA VIDYALAYA IIT PATNA

SUMMER VACATION HOMEWORK

SUBJECT- ENGLISH

Class – 3

- 1. Reading and Understanding
- a. Read the chapters "Colours" and "Badal and Moti" aloud to your parents or siblings.
- b. Write 5 new words from each chapter and use them in your own sentences.
- 2. Creative Writing
- a. Chapter "Colours"

Topic: "My Favourite Colour and Why I Like It"

Write 5-6 lines about your favourite colour. Draw or paste pictures of things of that colour.

b. Chapter – "Badal and Moti"

Topic: "A Day in the Life of My Pet" (If you don't have a pet, imagine one!)

Write 6-8 lines describing a day spent with your pet like Badal or Moti.

- 3. Art Integration Activity
- a. Draw a rainbow and label all the 7 colours.
- 4. Fun with Words
- a. Make an acrostic poem with the word COLOURS.

(Example: C – Cheerful, O – Orange like a sunset...)

- b. Rearrange the jumbled words (from both chapters):
- 1. egrnao = _____. 2. itmo = _____
- 3. dogloen = _____. 4. blauetifu = _____
- 5. gdo = _____
- 5. Grammar Time
- a. Find and write 5 naming words (nouns) from each chapter.
- b. Write 5 sentences using 'and' to join two ideas (like: Badal is strong and friendly).

Note:--

- Write 10 pages in good handwriting.
- Complete the fair copy neatly and cleanly with good pictures.
- Complete your book as well.
- Do the holiday homework in a 4-line English notebook.

KENDRIYA VIDYALAYA IIT PATNA

SUMMER VACATION HOMEWORK

SUBJECT- COMPUTER

CLASS – III

Type - I (Short Answers Based Question) -

- 1. Write down the function of the following keys
 - i. Backspace
 - ii. Enter
 - iii. Caps Lock
 - iv. Shift
 - v. Space Bar
- 2. Write the function of scroll button on mouse
- 3. Name any three uses of a computer.
- 4. What are the main parts of a computer?
- 5. Write the name of any four input and four output devices.
- 6. Write down any two things you should do in the computer room and also you should not do.

Type- II Match the Following

Α	В
1. CPU	a. Gives output on paper
2. Mouse	b. Brains of the computer
3. Printer	c. Used to click and draw
4. Keyboard	d. Used to type
5. Monitor	e. Shows output on screen

Type -III - Fill in the Blanks

- The ______ is the part of the computer that shows pictures and text.
 A ______ helps us to point, click and draw on the computer screen.
 The ______ stores all the work we do on the computer.
 ______ Devices are used to give instructions to the computer.
 Computers are used in ______ to keep records and print bills.

KENDRIYA VIDYALAYA IIT PATNA

SUMMER VACATION HOMEWORK

SUBJECT- MATHEMATICS

CLASS - IV

Q.1 Make a model of buildings like Taj Mahal, Qutub Minar, India Gate, Jantar Mantar, your own house, or a hut using cardboard, thermocol, wooden blocks etc.

Q.2 Make any one of the following shapes using cardboard, thermocol and coloured sheet:

Cube

Cuboid

Cone

Sphere

Cylinder

Prism

Pyramid

Q.3 Solve the following:

a. Skip Counting: Fill in the missing numbers:

2, 4, 6, ___, ___, 12

- 10, 20, 30, __, __, 60
- 100, 150, 200, __, __

b. Building Numbers: Use the digits 5, 8, and 2 to make:

The largest possible three-digit number.

The smallest possible three-digit number.

c. Story Sum: There were 62 birds sitting on a tree. 27 more birds came to join them. How many birds are there on the tree now?

KENDRIYA VIDYALAYA IIT PATNA

SUMMER VACATION HOMEWORK

SUBJECT- ENGLISH

CLASS - IV

- **1.** Create a Chart/Poster of any of the following:
- a. Noun and its Types
- b. Together We Can (Poem)
- c. List of Collective Nouns
- d. Road Safety Tips (Be Smart, Be Safe)

2. Create a symbol for togetherness by following the simple steps given on Page No. 7 of your English Textbook and paste it in the space given on Page No. 8.

3. Write 1 Page Handwriting (Cursive) Everyday. You can write Quotes by Great thinkers like Mahatma Gandhi, Swami Vivekananda, Shaheed Bhagat Singh, Rabindranath Tagore etc.

4. Write 10 lines about how you spent your Holidays mentioning the various activities you did throughout your entire summer vacation.

5. Write an application to the principal of your school requesting him to grant you a 2-days' leave as you need to be out of station to attend a family function.

KENDRIYA VIDYALAYA IIT PATNA

SUMMER VACATION HOMEWORK

SUBJECT- EVS

1. Create a colourful poster to help Chandan and his friends and invite people from their neighbourhood to participate in the Van Mahotsav.

2. What are some of the ways by which we can take care of nature and our neighbourhood? List a few.

- 3. Make a chart of any of the following Community Institutes:
 - a. Post Office
 - b. Hospital
 - c. Bank
 - d. School
 - e. Police Station

4. You must have seen piggy banks (Gullak) a number of times. Try to make one of your own. You can use Cardboard, Old Boxes, Plastic Bottles etc. to make your own Gullak.

5. How does helping others and working together make our community better?

KENDRIYA VIDYALAYA IIT PATNA

SUMMER VACATION HOMEWORK

SUBJECT- COMPUTER

CLASS – IV

Type I – Short Answer Question –

- 1. When is computer literacy day celebrated?
- 2. Who is the father of modern digital computer?
- 3. Who is the first programmer of the world?
- 4. What is Abacus?
- 5. Which technology is used in 3rd Generation Computer?

Type II – Long Answer Question –

- 1. Define Hybrid Computer and give examples where it is used.
- 2. Write Difference between Digital and Analog computer.
- 3. Give examples of each type of computer i.e analog, digital, hybrid.
- Write down the advantages and disadvantages of 2nd Generation Computer.

Type III – Write Full Form of the following Terms –

- i. IC
- ii. LSI
- iii. VLSI
- iv. ENIAC
- v. UNIVAC
- vi. UPS
- vii. LED
- viii. LCD
- ix. ICU
- x. PDF

SUMMER VACATION HOMEWORK

SUBJECT- ENGLISH

CLASS - V

Q1- "Design a poster that shows traffic and public symbols such as: School Ahead, No Littering, Gents Restroom, Handicapped, Drive Slow, U-Turn, No Honking, Ladies Restroom, Right Turn, No Left Turn, and Danger Ahead."

Q2 - Write a daily diary entry for 5 days (4–5 lines each) about what you did that day.

Use at least one feeling word in each entry (happy, excited, tired, etc.).

Q3-Choose one: Write a short paragraph (6–7 lines) on:

"If I Had a Superpower" or

"A Visit to the Moon"

Q4 - Create a picture dictionary:

Choose 10 new words (you can take help from parents or books).

Write their meanings and draw or paste pictures.

Example: "bicycle" – a vehicle with two wheels – (draw or paste a picture).b)What is balanced diet?

c)Give two examples of aquatic animals, terrestrial plants and aquatic animals.

5.Project-Prepare a diet chart to provide a balanced diet to a twelve-year-old child.

6.Learn chapter –

a)Diversity in the Living World

b)Mindful Eating : A Path to a Healthy Body

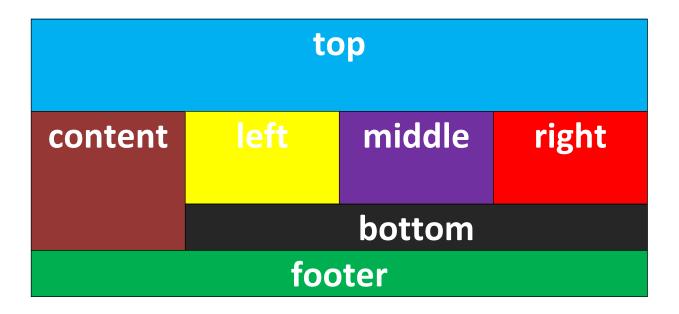
SUMMER VACATION HOMEWORK

SUBJECT- COMPUTER

CLASS - V

Q1. Draw Your Time Table in MS Word and paste the screen shot in white side of your copy.

Q2. Draw the following Layout using merge cells option and paste the screen shot in white side of your copy.



Q3. How do you add borders in Table in MS Word?

Q4. How to add new rows and columns in the existing table?

Q5. Write any five uses of MS Word?

Q6. Write Full Form of the following Terms –

- i. IC
- ii. LSI
- iii. VLSI
- iv. ENIAC
- v. UNIVAC
- vi. UPS
- vii. LED
- viii. LCD
- ix. ICU
- x. PDF

SUMMER VACATION HOMEWORK

SUBJECT- SCIENCE

CLASS - VI

1.Differentiate between-
a) Herbs and shrubs
b)Creeper and climber
c)Reticulate venation and parallel venation
d)Aquatic habitat and terrestrial habitat
e)Tap root and fibrous root
2.Write function of the following-
a)Root
b)Leaf
c)Stem
d)Fins of fish
e) Webbed legs of frog
f)Roughage
g)Proteins
3.Draw and label the following-
a) Plant
b)Shrub
c)Climber
d)Reticulate venation
4.Answer the following question-s
a)Why junk food are unhealthy?

b)What is balanced diet?

c)Give two examples of aquatic animals, terrestrial plants and aquatic animals.

5.Project-Prepare a diet chart to provide a balanced diet to a twelve-year-old child.

6.Learn chapter -

a)Diversity in the Living World

b)Mindful Eating : A Path to a Healthy Body

KENDRIYA VIDYALAYA IIT PATNA

SUMMER VACATION HOMEWORK

SUBJECT- ENGLISH

CLASS - VI

Unseen Passage

Read the passage carefully and answer the questions:

Mount Everest is the highest mountain in the world, standing at 8,848 meters above sea level. It lies in the Himalayas on the border between Nepal and Tibet. Climbing Everest is not easy. It requires months of training, physical fitness, and mental strength. Many climbers face extreme weather, lack of oxygen, and dangerous slopes. Yet, hundreds of people from around the world attempt to reach its summit every year. Tenzing Norgay from Nepal and Edmund Hillary from New Zealand were the first people to successfully climb Mount Everest in 1953. Their courage and teamwork became an inspiration for many adventurers.

Multiple Choice Questions (MCQs)

Choose the correct option:

- 1. Where is Mount Everest located?
 - a) Only in Nepal
 - b) Only in Tibet
 - c) On the border of Nepal and Tibet
 - d) In the Alps
- 2. What makes climbing Mount Everest difficult?
 - a) Long roads and rivers
 - b) Wild animals
 - c) Extreme weather and lack of oxygen
 - d) Expensive tickets
- 3. Who were the first people to climb Mount Everest?
 a) Rakesh Sharma and Kalpana Chawla
 b) Tenzing Norgay and Edmund Hillary
 c) Bachendri Pal and Santosh Yadav
 d) Neil Armstrong and Buzz Aldrin
- 4. What does the story of Tenzing and Hillary teach us?a) Climbing is pagy.
 - a) Climbing is easy
 - b) Avoid mountains
 - c) Courage and teamwork lead to success
 - d) Weather is always dangerous

Short Answer Questions

- 1. Why is climbing Mount Everest considered a great challenge?
- 2. In which year was Mount Everest first successfully climbed?
- 3. What qualities do people need to climb Mount Everest?

Q. Write an application to your Principal requesting him/her to organize an educational trip to a science museum for your class.

Q. Write a short story in about 100–120 words using the given pictures as clues.



Q. Write five sentences each of the following tense:

Present Progressive Tense

Simple Past Tense

Q. Write and learn the poem 'A Friend's Prayer' and write its Q/Ans.

KENDRIYA VIDYALAYA IIT PATNA

SUMMER VACATION HOMEWORK

SUBJECT- MATHS

CLASS - VI

- Q.1. Learn and write the tables from 2 to 20:
- Q.2. Solve:
- a) 3946+6579 + 389
- *b*) 4179 2103+ 837
- *c*) 1289 × 137
- *d*) 682592÷16

Q.3. Write the following numbers in words:

- *a*) 145307
- *b*) 91307
- c) 2123270
- *d*) 1001373

Q.4. Which number will be next in this pattern:

- (a) 18, 36, 54, 72,
- (b) 20, 18, 15, 11,

- (c) 6, 7, 9, 12, 16,
- (d) 4, 9, 16, 25,

Q.5. Find the difference between the smallest number of 5 digits and the largest number of 3 digits.

Q.6. Find the difference between the place value of two 6's in 6523689.

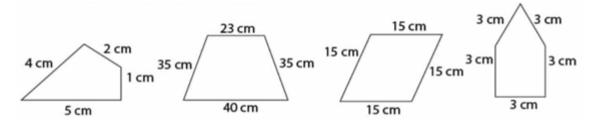
Q.7. Write each of the following numbers in numerical form:

- a) Three lakh fifty-three thousand five hundred sixteen
- b) Forty –one lakh one thousand seventy
- c) seventy-three thousand five hundred forty
- d) one Lakh ninety-three thousand five hundred sixty

Q.8. Identify and draw 5 pictures who have line symmetry and 3 pictures who have rotational symmetry.

Q.9. Make two magic squares with the help of numbers.

Q.10. Find the perimeter of each of the following shapes:



Q.11. Draw a rectangle of 9cm length and 7cm width, then find its area.

Q.12. Draw a square of 9cm length, then find its area.

Q.13. Make a Rangoli (Geometry art project) with the help of shapes, lines and angles.

Q.14. Draw a map of your Dream House.

Q.15. Download and watch the movie "The man who knew Infinity". Write the 10 things that you liked the most. Write two ideas which inspired you to study Mathematics.

SUMMER VACATION HOMEWORK

SUBJECT- COMPUTER

$\mathsf{CLASS}-\mathsf{VI}$

Type I – Long Answer Question –

1. What are the types of computer memory? Give advantages and disadvantages of each type.

2. What are the different types of printer? Give advantages and disadvantages of each.

Type II – Write Full Form of the following Terms –

- i. IC
- ii. LSI
- iii. VLSI
- iv. ENIAC
- v. UNIVAC
- vi. UPS
- vii. LED
- viii. LCD
- ix. ICU
- x. PDF
- xi. DVD
- xii. CD

xiii. ROM xiv. RAM xv. EPROM xvi. EEPROM xvii. WWW

Activity -

Create a poster or digital presentation (PPT/Handmade) on:

"Generations of Computer"

SUMMER VACATION HOMEWORK

SUBJECT- ENGLISH

CLASS - VII

Read the passage given below and answer the questions.

The Power of Reading

Reading is one of the best habits a person can develop. It improves vocabulary, strengthens focus, and enhances imagination. Books can take us to different worlds without even moving an inch. People who read regularly are more informed and express themselves better.

In ancient times, knowledge was passed orally. But with the invention of writing and printing, books became the main source of learning. Today, in the digital age, e-books and audiobooks have become popular, yet nothing can replace the charm of holding a physical book. Reading also reduces stress. When we read, our mind shifts away from worries and enters a new world. Schools and libraries play a key role in promoting reading habits among children. Parents are also encouraged to read to their kids from an early age.

MCQs:

- 1. The statement "Books can take us to different worlds without even moving an inch" suggests that:
 - a) Books are better than vehicles
 - b) Reading increases physical stamina
 - c) Reading enhances imagination and mental travel
 - d) Books contain maps and directions
- 2. What is the author's likely purpose in mentioning e-books and audiobooks?a) To discourage modern reading formats
 - b) To show how technology is harmful
 - c) To acknowledge changes in reading habits
 - d) To promote digital reading only
- 3. Why does the writer believe physical books still hold value in the digital age?a) They are lighter to carry
 - b) They have nostalgic and emotional appeal
 - c) They are cheaper than digital books
 - d) They are read faster than e-books

- 4. What can be concluded about reading habits among children?
 - a) They are naturally developed without effort
 - b) Schools alone are responsible for them
 - c) They require a supportive environment from both schools and families
 - d) Reading is only for academic purposes

Short Answer Questions:

- 1. How does reading help reduce stress?
- 2. What role do libraries play in developing reading habits?

Long Answer Question:

Explain why reading is considered a powerful habit. Share your own views and experience related to reading.

Q. Write a letter to your friend telling him/her about your experience of participating in a school trip to a historical place. Describe what you saw, what you learned, and how you enjoyed the trip.

Q. The Government has launched many schemes for the education of the girl child. Some of them are 'Beti Bachao Beti Padhao', 'Balika Samridhi Yojna, 'Samagra Shiksha Scheme–Kasturba Gandhi Balika Vidyalayas', etc. Write a paragraph in about 100-120 words on any one.

Q. Read the lesson ' Three Days to See' and write its Q/Ans.

Q. What are Modal verbs. Write 5 modals with their functions and give 3 examples of each.

Note- Do the homework neatly on A4 sheets.

SUMMER VACATION HOMEWORK

SUBJECT- SCIENCE

CLASS - VII

1. Classify following into carbohydrates, protein , fat, vitamin-

Cereals, ghee, paneer, wheat, papaya, milk, egg, cucumber, orange , fish, oil , carrot.

2.Explain the process of making yarn from firbe.

3.Differentiate between herbivores, carnivores and omnivores with proper example.

ART INTEGRATED PROJECTS

4. Poster (on A-4 size Paper)

Make a beautiful poster for "EAT RIGHT CAMPAIGN"

- 5. Make Your Own Mini Wastewater Filter .
- Materials Needed:
- A plastic bottle (cut in half)
- Sand
- Charcoal (optional)
- Dirty water (you can mix water with tea leaves, paper bits, etc.).
- 6. Prepare a poster on ways of 'saving water'.
- 7. Prepare a model for simple electric circuits.
- 8.Read all the topics thought taught in your classroom .

- Cotton or cloth
- Gravel

SUMMER VACATION HOMEWORK

SUBJECT- MATHS

CLASS - VII

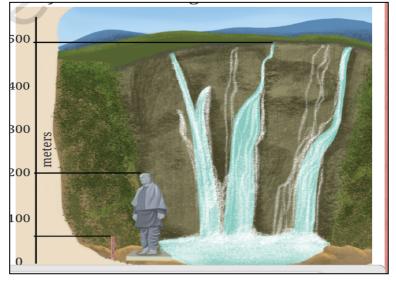
Please Note: Do all work in A4 sheet

 Look at the picture on the right. Somu is 1 metre tall. If each floor is about four times his height, what is the approximate height of the

building?

Which is taller — The Statue of Unity or this building? How much taller? _____m.

We can see that the height of the Statue of Unity is close to 4 times the height of Somu's building.



How much taller is the Kunchikal waterfall than Somu's building?_____m.

How many floors should Somu's building have to be as high as the waterfall? ______meters3

2. Prepare a number system chart comparing Indian System and American system of Place values.

Indian System		American System		
1,000	One thousand	1,000	One thousand	
10,000	Ten thousand	10,000	Ten thousand	
1,00,000	One lakh	100,000	Hundred thousand	
10,00,000	Ten lakhs	1,000,000	One million	
1,00,00,000	One crore	10,000,000	Ten million	
10,00,00,000	Ten crores	en crores 100,000,000 Hundred million		
1,00,00,00,000	One arab or One hundred crores	1,000,000,000	One billion	

Answer the following questions based on it:

- How many zeros does a thousand lakh have? _____
- How many zeros does a hundred thousand have? _____
 The number 9876501234 can be easily read by placing commas first:
 (a) 9,87,65,01,234 → 9 arab 87 crore 65 lakhs 1 thousand and 234 or 987 crore 65 lakh 1 thousand 234 (in the Indian system).
 (b) 9,876,501,234 → 9 billion 876 million 501 thousand 234 (in the American system).
- Read the following numbers in Indian place value notation and write their number names in both the Indian and American systems:
 (a) 4050678 (b) 48121620
 - (c) 20022002 (d) 246813579
 - (e) 345000543 (f) 1020304050

3. Toothpick Digits

We can write digits as shown in the image below:

] 2 4 5 6 8 8
--	---------------------------

You can either use toothpicks or matchsticks, or just write the

digits in this way, using lines to represent sticks.

To make the digit 7, three sticks are needed.

Write or make the number 5108. How many sticks are required?

- 1. Make or write the number 42,019. It would require exactly 23 sticks.
- 2. Starting with 42,019, add or write two more sticks, and make a bigger number. One example is 42,078. What other numbers bigger than 42,019 can you make in this way?
- 3. Preetham wants to insert the digit '1' somewhere among the digits '4', '2', '0', '1' and '9'. Where should he place the digit '1' to get the biggest possible number?
- 4. What other numbers can he make by placing the digit '1'?

4. Land of Tens

In the Land of Tens, there are special calculators with special buttons.					
1. The Thoughtful Thousands only has a +1000 button. How many					
times should it be pressed to show:					
(a) Three thousand? 3 times	(1	b) 10,000?			
(c) Fifty three thousand?		(d) 90,000?			
(e) One Lakh?	(f)	? 153 times			

(g) How many thousands are required to make one lakh?

- 2. The Tedious Tens only has a +10 button. How many times should it be pressed to show: (a) Five hundred?
- (b) 780? _____
- (c) 1000? _____ (d) 3700? _____ (e) 10,000? _____

- (f) One lakh? ______? 435 times

3. The Handy Hundreds only has a +100 button. How many

times should it be pressed to show:

- (a) Four hundred? ______times (b) 3,700? _____ (c) 10,000? _____ (d) Fifty three thousand? (e) 90,000? (f) 97,600? _____
- (h) (g) 1,00,000? ? 582 times

(i) How many hundreds are required to make ten thousand?

(j) How many hundreds are required to make one lakh?

(k) Handy Hundreds says, "There are some numbers which

Tedious Tens and Thoughtful Thousands can't show but I can." Is this statement true? Think and explore.

5. Art Integrated Project (Any State Art + Maths)

Choose any Indian folk art (Warli, Madhubani, etc.) and show how lines, shapes, angles are used.

SUMMER VACATION HOMEWORK

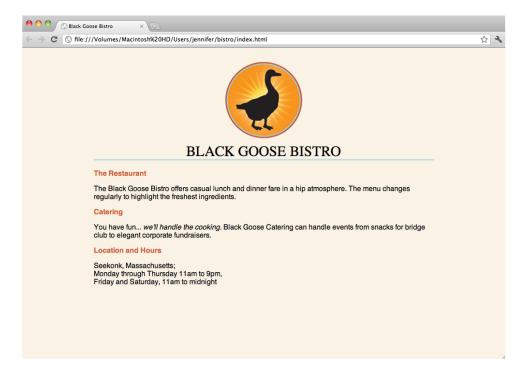
SUBJECT- COMPUTER

CLASS – VII

Q1. What are the threats of computer security?

Q2. Write difference between worms and Trojan horse.

Q3. Code the following web layout in Html.



Q4. List all the tags you have used for the above layout.

SUMMER VACATION HOMEWORK

SUBJECT- ENGLISH

CLASS - VIII

Unseen Passage 1: A Visit to a Wildlife Sanctuary

Read the passage and answer the given questions.

Last Sunday, our school organized a trip to the Sanjay Gandhi Wildlife Sanctuary. We were excited to explore the beauty of nature and observe animals in their natural habitat. As we entered, we saw deer grazing peacefully. A little further, a group of monkeys jumped from one tree to another, making cheerful noises.

Our guide informed us about the importance of protecting wildlife. He explained how animals lose their homes due to deforestation and human encroachment. We also saw endangered species like the Indian python and the pangolin. The sanctuary staff are working hard to rescue injured animals and provide them medical care.

The trip taught us that every creature plays a vital role in the ecosystem. If we do not protect them today, future generations may never see them. We returned with great memories and a deeper sense of responsibility towards nature.

MCQs:

- 1. What can be inferred about the students' attitude toward wildlife after the trip?
- a) They became indifferent to animal issues
- b) They felt disturbed by the forest environment
- c) They realized the importance of protecting wildlife
- d) They wanted to keep animals as pets
- 2. Why does the author mention endangered species like the Indian python and pangolin?
- a) To make the trip sound adventurous
- b) To emphasize the sanctuary's size
- c) To highlight the role of sanctuaries in conservation

d) To compare common and rare animals

- 3. Which of the following best reflects the central idea of the passage?
- a) Importance of entertainment in student life
- b) Role of sanctuaries in preserving wildlife and educating people
- c) Benefits of group trips with classmates
- d) The daily routine of wild animals
- 4. How does the visit to the sanctuary contribute to environmental awareness among students?
- a) By giving them a day off from school
- b) By entertaining them with animal shows
- c) By allowing them to interact with wild animals
- d) By helping them understand the impact of human actions on wildlife

Short Answer Questions:

- 1. What message did the trip convey to the students?
- 2. How are the sanctuary staff helping the animals?

Long Answer Question:

Describe the trip to the sanctuary in your own words and explain what you learned from it.

Q: Write a letter to the Municipal Corporation of your city complaining about the poor condition of roads in your locality and request immediate repair.

Q: Write a letter to your friend describing how you spent your summer vacation.

Q. Write 10 examples of each- Homonyms, binomials, palindrome and question tags.

Q. Read the lesson 'A Rupee Goes a Long Way' and write its Ques/ ans.

Note- Use A4 sheets to complete your homework.

SUMMER VACATION HOMEWORK

SUBJECT- MATHS

CLASS - VIII

Instructions for Submission:

- Use Homework notes for solving and don't write solutions from the google/internet.
- Submission Date: First day after summer vacation.
- All work must be handwritten.
- Marks will be awarded for neatness, completeness, and creativity.
- If any question is not clear, students can leave that question or ask me on WhatsApp.

VERY VERY IMPORTANT :

- Learn all the square upto 25
- learn all the cubes upto 12
- learn all the tables upto 25
- 1. Find quick ways to calculate these products: (a) $2 \times 1768 \times 50$
 - (b) 72 × 125 [Hint: 125 = 1000 8]
 - (c) 125 × 40 × 8 × 25
- 2. Calculate these products quickly.
 - (a) 25 × 12 = _____
 - (b) 25 × 240 = _____
 - (c) 250 × 120 = _____
- Find the values of the following expressions by writing the terms in each case.
 (a) 28 7 + 8

(b) 39 – 2 × 6 + 11

(c) 40 - 10 + 10 + 10

- 4. Make a place value table similar to the one above. Write each quantity in decimal form and in terms of place value, and read the number:
 - (a) 2 ones, 3 tenths and 5 hundredths
 - (b) 1 ten and 5 tenths
 - (c) 4 ones and 6 hundredths
- Add the expressions given below:
 (a) 4d 7c + 9 and 8c 11 + 9d
 - (b) 6f + 19 8s and 23 + 13f + 12s
 - (c) 8d 14c + 9 and 16c (11 + 9d)
 - (d) 6f 20 + 8s and 23 13f 12s
- 6. Create word problems from real life situations and express those using algebraic expressions.
- 7. Create a board game where moving forward or backward depends on adding or subtracting integers.
- 8. Create a weekly grocery list , calculate the total cost, apply discounts and show savings.

SUMMER VACATION HOMEWORK

SUBJECT- COMPUTER

CLASS - VIII

Section a: Algorithm Practice

Write algorithms for the following tasks:

- 1. To check whether a number is even or odd.
- 2. To find the largest of three numbers.
- 3. To calculate the area of a rectangle.
- 4. To check if a year is a leap year or not.
- 5. To find the sum of the first 10 natural numbers.

Section B: Flowchart Drawing

Draw flowcharts for the algorithms you wrote above (any 3).

Section C: Computer Security

Answer the following:

- 1. What is Computer Security? Why is it important?
- 2. List any five common cyber threats and explain them briefly.
- 3. What are strong passwords? Give 3 examples.
- 4. Explain any two safety tips to protect you online.
- 5. What is antivirus software? Give two examples.

Section D:

Part A - Convert these Binary numbers to Decimal

- 1. 1011101
- 2. 11010101
- 3. 11111111
- 4. 100000101
- 5. 1100110011

Part B - Convert these Decimal numbers to Binary

- 1. 512
- 729
 850
- 4. 999
- 5. 1023

SUMMER VACATION HOMEWORK

SUBJECT- ENGLISH

CLASS - IX

A) Unseen Passage (Factual)

India's Struggle with Water Scarcity

India is home to nearly 18% of the world's population but has only 4% of the world's freshwater resources. This mismatch has resulted in increasing water scarcity across the country. Rapid urbanization, industrialization, and population growth have placed immense pressure on water resources. According to a 2023 report by NITI Aayog, more than 600 million Indians face high to extreme water stress. Around 200,000 people die every year due to inadequate access to safe water.

One major cause of water scarcity is the overuse and wastage of water in agriculture. India uses about 80% of its water for farming, much of it inefficiently. Traditional methods like flood irrigation waste a lot of water. Moreover, pollution of rivers, lakes, and underground water sources by industrial waste and domestic sewage has worsened the crisis.

Climate change has also contributed to erratic rainfall patterns, frequent droughts, and drying rivers. Many cities like Bengaluru and Chennai have faced acute water shortages in recent years. In some areas, people wait in long queues to fill a few buckets of water from tankers.

To tackle the crisis, several measures are being implemented. These include rainwater harvesting, water recycling, and public awareness campaigns. The government has launched schemes like Jal Shakti Abhiyan and Atal Bhujal Yojana to encourage better water management.

However, solving the water problem requires active participation from all sections of society. People must understand the value of water and use it responsibly. Small steps like fixing leaking taps, using buckets instead of showers, and planting trees can make a big difference.

India must act now to conserve water, or it will face a future where clean water becomes a luxury.

Unseen Passage Questions (Total – 12 Marks)

1. Multiple Choice Questions – $(1 \times 4 = 4 \text{ marks})$

Choose the correct option:

(a) What percentage of the world's freshwater resources does India have? i. 18% ii. 4% iii. 8% iv. 14%

(b) How much water is used for agriculture in India?i. 50%ii. 40%iii. 80%iv. 90%

(c) Which of the following is a government initiative mentioned in the passage?i. Swachh Jal Missionii. Jal Shakti Abhiyaniii. Ganga Action Plan

iv. Water for All Scheme

(d) One solution to the water crisis mentioned in the passage is:

- i. Over-irrigation
- ii. Groundwater mining
- iii. Rainwater harvesting
- iv. Deforestation

2. Short Answer Questions $-(2 \times 2 = 4 \text{ marks})$

Answer the following in 30–40 words each:

(e) Mention two reasons for water scarcity in India.

(f) How has climate change affected India's water situation?

3. Long Answer Question $-(1 \times 4 = 4 \text{ marks})$

(g) What role can ordinary citizens play in solving the water crisis? Give your answer in 80–100 words.

Case-Based Passage: The Rise of Online Learning

Over the past few years, online learning has transformed the way students access education. While e-learning existed earlier in the form of distance education, it gained major popularity during the COVID-19 pandemic when schools and colleges were forced to shut down. Platforms like Zoom, Google Meet, and Microsoft Teams became common classrooms for millions of students.

The flexibility of online learning is one of its biggest advantages. Students can attend classes from the comfort of their homes, save time on travel, and access a wide variety of digital learning materials such as videos, quizzes, and e-books. It has also helped bridge the education gap for students living in remote areas where schools are not easily accessible.

However, the online mode of learning also has its drawbacks. Many students face challenges such as lack of a stable internet connection, lack of devices, and distractions at home. Moreover, students often miss the classroom environment, group activities, and face-to-face interaction with teachers and peers, which are crucial for overall development.

A recent study by the National Council of Educational Research and Training (NCERT) showed that while 70% of students found online classes helpful, around 40% reported feeling isolated and stressed. Experts believe that a blended mode of learning – which combines online and offline classes – could be the future of education in India.

As technology continues to evolve, educational institutions are exploring innovative ways to engage students digitally, including gamified learning, virtual reality classrooms, and AI-based personalised learning tools.

Questions (Total – 12 Marks)

1. Multiple Choice Questions $(1 \times 4 = 4 \text{ marks})$

(a) Which event made online learning widely popular?

i. Diwali holidays

ii. Earthquake

iii. COVID-19 pandemic

iv. Rise in school fees

(b) What is one major benefit of online learning mentioned in the passage?

i. Strict rules

ii. Easy exams

iii. Flexible learning environment

iv. Less teacher support

(c) What did 40% of students feel during online learning?

i. Excited and motivated

ii. Isolated and stressed

iii. Energetic

iv. Unaffected

(d) What is meant by blended learning?

i. Online games during classes

ii. Group projects and competitions

iii. Combination of online and offline learning

iv. Only offline classes

2. Short Answer Questions $(2 \times 2 = 4 \text{ marks})$

(e) List two drawbacks of online learning mentioned in the passage.

(f) How is technology helping to make digital learning more engaging?

3. Long Answer Question $(1 \times 4 = 4 \text{ marks})$

(g) Do you think online learning can replace traditional classrooms in the future? Justify your answer in about 80–100 words.

(B) Writing Skills

Descriptive Paragraph – Object

Write a descriptive paragraph in about 100–120 words on "My Favourite Watch" or "My School Bag".

Descriptive Paragraph – Person

Write a descriptive paragraph on "My Best Friend" or "My Grandmother".

3. Literature and Vocabulary

(a) Learn the word meanings, summary, and question-answers from the prose, poetry, and supplementary lessons taught so far in the class.

(b) Write and learn 100 new words from your textbook with their meanings.

4. Grammar – Tense Chart Activity

Prepare a Tense Chart on an A4 size paper. Include:

All 12 types of tenses (Present, Past, Future – Simple, Continuous, Perfect, Perfect Continuous)

Definition, structure, and 1 example each

Use colours and pictures to make it attractive

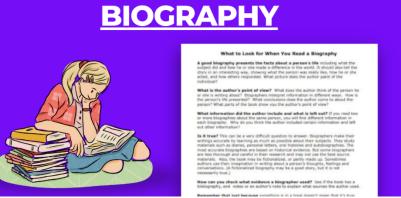
Paste the chart in your English notebook.

Note- Do your homework neatly on A4 sheets.

Holiday Homework (Summer Vacation) for Class IX (2025-26) Subject – Mathematics

Dear Students,

- Summer vacation is the best and the most fruitful time for learning and nurturing creativity. Keeping this objective in mind we have planned diverse and exciting activities that will enhance your knowledge and boost your creativity.
- Get up early in the morning and see the rising sun. Do indoor exercises/yoga and stay healthy and fit.
- "A healthy mind lives in a healthy body". So play the sport of your choice INDOORS. It will help to instill discipline, generate sporting spirits and channelize your energies constructively.
- Keep away from smartphones, virtual games and digital technologies. Spend quality time with your elders and share your thoughts and ideas with them.
- A. "Mathematician's Biography" about yourself



You have spent many hours in different Mathematics classes over the past years. Some of your experiences have been positive whereas some may have been challenging.

Let's write a:" Mathematician's Biography" about yourself based on the following criteria:

1. The first paragraph should introduce your biography. Use an interesting opening sentence.

2. In the second paragraph write your best and the worst of your class in a few sentences. Be generic in your views.

3. In your third paragraph write at least two strategies you have used to solve a problem

mathematically.

4. In the final paragraph share what are you looking forward to and your worries about mathematics in this class. Conclude with your expectation of CGPA (Cumulative Grade Point Average).

5. Use complete sentences to express yourself.

- **B.** Make a Chart of Formulas of Volume and Surface Area of Solid Figures as following Instructions for making chart-
 - Use the given chart sample for reference.
 - Use your imagination and art skills to draw figures and write names.
 - The work should be handwritten. Printouts are not allowed.
 - Present your work neatly and as creatively as possible.

Name of the solid	Figure	Volume	Laterial/Curved Surface Area	Total Surface Area
Cuboid		lbh	2lh + 2bh or 2h(l+b)	2lh+2bh+ <mark>2lb</mark> or 2(lh+bh+lb)
Cube	a a a	a³	4a ²	4a ² +2a ² or 6a ²
Right circular cylinder	h	$\pi r^2 h$	2πrh	$\frac{2\pi rh + 2\pi r^2}{or}$ $\frac{2\pi r(h+r)}{2\pi r(h+r)}$
Right circular cone	h	$\frac{1}{3}\pi r^{2}h$	πrl	$\pi rl + \pi r^{2}$ or $\pi r(l+r)$
Sphere	r	$\frac{4}{3}\pi r^3$	$4\pi r^2$	$4\pi r^2$
Hemisphere	r	$\frac{2}{3}\pi r^3$	$2\pi r^2$	$\frac{2\pi r^2 + \pi r^2}{\sigma r}$

- 3. Make a project on the title " π WORLD'S MOST MYSTERIOUS NUMBER"
- 4. Activity : OBJECTIVE : To construct a square-root spiral up to at least v23"
- 5. Write and learn all the algebraic identities.
- 6. Write and learn square number upto 30.
- 7. Write and learn square root upto 30.

8. Write and learn cube number upto 30.
 9. Write and learn square root upto 30.
 10. Complete your notebook .

KENDRIYA VIDYALAYA IIT PATNA

SUMMER VACATION HOMEWORK

SUBJECT- COMPUTER

CLASS –IX

SECTION A: Communication Skills

Instructions: Answer the following questions:-

- 1. What is the difference between verbal and non-verbal communication? Give examples.
- 2. Write any 5 barriers to effective communication.
- 3. List any 4 elements of effective communication.

SECTION B: Self-Development Skills

Instructions: Reflect and write your answers clearly.

- 1. What do you understand by Self-confidence and Positive thinking?
- 2. Write about a time when you overcame a difficult situation using your inner strength. (8–10 lines)
- 3. List 5 ways to improve self-motivation.
- 4. Make a goal-setting chart for your studies (short-term and long-term goals).

SECTION C: ICT Skills

Instructions: Attempt all questions. Use diagrams or screenshots where possible.

- 1. What is ICT? Mention any 4 examples of ICT tools.
- 2. Differentiate between Input, Output, and Storage devices with examples.
- 3. List 5 features of MS excel MS power point and MS word.

4. Explain the steps to create and send an email with an attachment.

ACTIVITY:

Create a poster or digital presentation (PPT/Handmade) on:

"Digital Safety and Etiquette"

Include topics like strong passwords, cyber bullying, privacy, and respectful online behaviour.

SUMMER VACATION HOMEWORK

SUBJECT- ENGLISH

CLASS – X

PASSAGE 1

Read the following passage and answer the questions that follow: (12 Marks)

(1) Forest conservation is essential for our fight against climate change. Forests act as carbon sinks and help foster biodiversity. However, human activity and rising emissions have broken this delicate balance. Flooding, drought, and habitat loss are results of this phenomenon.
 (2) India must achieve a steep climate target within this decade. We need to accelerate our carbon offsetting and sequestration efforts if we intend to reduce our carbon emissions by one billion tonnes by 2030. A Global Forest Watch report states that we have lost over two million hectares of tree cover in the last 21 years. On average, we are losing approximately one lakh hectare of tree cover every year. In this context, tree cover refers to any vegetation that exceeds a height of five meters.

(3) Interpreting the available forest data is also a challenge. According to the Indian State of Forest Report, the country's forest cover has marginally increased, but the increase accounts for plantations and patches as well. Thus, collecting accurate and highly granular forest data is extremely important for safeguarding them. More importantly, making this data accessible to multiple stakeholders at once will further accelerate conservation efforts.

(4) Another issue that threatens our biodiversity is topsoil erosion. Nutrient-rich topsoil is a crucial layer of the earth without which flora, fauna, and our entire agricultural ecosystem would not exist. Unfortunately, climate change is washing away this essential layer. India loses approximately 16 tonnes per hectare of topsoil annually. This is much greater than normal levels; in foothill regions, the loss increases by 25 times.

(5) We must understand how this affects the lives of citizens. Apart from the devastating impact on our environment, this has a huge effect on the livelihoods of the rural population. Lack of topsoil means that forests and arable lands will not be able to retain water, which further leads to flash floods, unpredictable droughts, and several other problems. The agricultural industry is the worst affected. Due to low groundwater reserves, irrigation becomes a challenge. And consistently degrading crop yields result in huge economic losses. A study published in the Journal of Agricultural Research estimates a loss of over 200 billion rupees annually due to topsoil erosion. However, solving such a complex and multifaceted issue requires multiple interventions, both from the technological front and policy-wise. Watershed development is one such method that helps tackle both these problems together.

(6) Government initiatives such as the National Afforestation Program (NAP) and Integrated Watershed Management Program (IWMP) are underway to help increase the forest area. In India, watershed development (WSD) projects are heavily funded by governments. But the scale of these projects, the awareness around WSD, and the approach are constant challenges.

(7) WSDs can help the flora and fauna of an area thrive while mitigating the devastating impacts of climate change. The urgency to develop WSD across the country's green areas has skyrocketed, and we require the right technology to fulfil such a goal.

(8) Before delving into how we can integrate drone technology to save our forests, it is essential to understand watersheds first. Watersheds are crucial for low-lying areas as they regulate water flow, prevent flash floods, and protect the topsoil from surface runoff.

(9) Effective watersheds contribute in several ways to society. Firstly, they help harbour a lot of biodiversity that is essential to saving our forests. Secondly, they have a direct impact on the lives of the rural population. From water availability to agriculture, they provide numerous benefits. WSD often involves building conservation structures such as check dams and reservoirs, which not only employ manual labourers but also promote horticulture and aquaculture activities. Therefore, indirectly, watersheds could help strengthen the hyper-local economy and prevent high migration to cities.

(10) The current rate of population growth will induce extreme stress on our limited resources. Alongside awareness about watershed development, there needs to be transparent collaboration between governments, NGOs, and private stakeholders. This is critical for the fight against climate change and for averting the water shortage crisis. The more liberalized this process becomes, the faster we can combat this issue and save our forests.

Answer the following questions:

- 1. What is the primary function of watersheds mentioned in the passage? (1)
 - a. Regulate air flow
 - b. Prevent flash floods
 - c. Increase topsoil erosion
 - d. Promote urbanization
- 2. How does topsoil erosion impact rural livelihoods and agricultural productivity in India, according to the passage? (30–40 words) (2)
- 3. What does "biodiversity" refer to in the context of environmental conservation? (1)
- 4. What is emphasized as a critical factor for effectively combating climate change and water shortage crisis in the passage? (1)
 - a. Increase in population growth
 - b. Transparent collaboration between governments, NGOs, and private stakeholders
 - c. Implementation of urbanization projects
 - d. Reduction in forest conservation efforts
- 5. According to the passage, what is the impact of topsoil erosion on agriculture in India? (1)

- a. Increase in crop yields
- b. Enhancement of groundwater reserves
- c. Challenge in irrigation due to low groundwater reserves
- d. Reduction in economic losses
- 6. Why is transparent collaboration among stakeholders emphasized for combating climate change and water shortage crises? (2)
- 7. Which government initiatives are mentioned as efforts to increase forest area in India? (1) a. National Afforestation Program (NAP)
 - b. Integrated Watershed Management Program (IWMP)
 - c. Both a and b
 - d. Rural Employment Guarantee Scheme (REGS)
- 8. Explain the term "topsoil erosion" as mentioned in the passage. (1)
- 9. State whether the following statement is **true** or **false**: (1) According to the Global Forest Watch report, India has experienced a significant increase in tree cover over the past two decades.
- 10. Find a word from the passage which is a synonym of 'regularly' (para 5). (1)

PASSAGE 2

Read the following passage and answer the questions that follow: (12 Marks)

(1) In an era marked by rapid technological advancements, the integration of artificial intelligence (AI) into various aspects of our lives has become increasingly prevalent. From virtual assistants to self-driving cars, AI has revolutionized industries and reshaped the way we live, work, and interact with the world around us. One area where AI holds immense potential for transformation is education. By harnessing the power of AI, educators can create more personalized learning experiences, improve student outcomes, and prepare learners for the challenges of the 21st century.

(2) At its core, AI refers to the simulation of human intelligence in machines, enabling them to perform tasks that typically require human intelligence, such as learning, reasoning, problemsolving, and decision-making. In the field of education, AI technologies offer a wide range of applications, including adaptive learning platforms, intelligent tutoring systems, virtual reality simulations, and data-driven analytics tools. These technologies have the potential to revolutionize the traditional classroom model and cater to the diverse needs and learning styles of individual students.

(3) One of the most significant benefits of AI in education is its ability to personalize learning experiences for students. By analysing vast amounts of data on student performance, preferences, and behaviours, AI-powered systems can generate personalized learning paths and recommendations tailored to each student's unique strengths, weaknesses, and interests. This personalized approach allows students to learn at their own pace, receive targeted support and feedback, and engage more deeply with the material, ultimately leading to improved learning outcomes.

(4) Furthermore, AI can enhance the effectiveness of teaching and instruction by providing educators with valuable insights and resources to support their practice. For example, AI-powered analytics tools can analyse student data to identify trends, patterns, and areas of

improvement, enabling teachers to adapt their instruction and interventions accordingly. Additionally, intelligent tutoring systems can provide real-time feedback and guidance to students, supplementing traditional classroom instruction and helping students master complex concepts more effectively.

(5) Moreover, AI technologies can facilitate the creation of immersive and interactive learning experiences that transcend the limitations of traditional textbooks and lectures. Virtual reality simulations, for example, allow students to explore and interact with complex concepts in a simulated environment, making learning more engaging, memorable, and effective. Similarly, AI-powered chatbots and virtual assistants can provide students with on-demand support and guidance, answering questions, providing explanations, and offering assistance whenever needed.

(6) In addition to personalized learning and enhanced instruction, AI can also play a crucial role in addressing systemic challenges and inequalities in education. For example, AI-powered adaptive learning platforms can help bridge the gap between privileged and disadvantaged students by providing access to high-quality educational resources and support regardless of socio-economic background or geographic location. Similarly, AI technologies can support language acquisition and literacy development for students with diverse linguistic backgrounds, facilitating greater inclusivity and equity in the classroom.

(7) However, despite its immense potential, the widespread adoption of AI in education also raises important ethical and practical considerations. Concerns about data privacy, algorithmic bias, and the displacement of human teachers are just a few of the challenges that must be addressed to ensure that AI technologies are deployed responsibly and ethically in educational settings. Additionally, there is a need for ongoing research and evaluation to assess the effectiveness of AI-powered interventions and to identify best practices for integrating AI into teaching and learning.

(8) In conclusion, artificial intelligence has the potential to revolutionize education by personalizing learning experiences, enhancing instruction, and addressing systemic inequalities. By harnessing the power of AI, educators can create more engaging, effective, and equitable learning environments that empower students to reach their full potential. However, realizing the full benefits of AI in education will require careful consideration of ethical, privacy, and equity concerns, as well as ongoing research and collaboration to ensure that AI technologies are deployed responsibly and ethically to benefit all learners.

Answer the following questions:

- 1. What is one of the primary benefits of integrating AI into education, as stated in the passage? (1)
 - a. Reducing the need for human teachers
 - b. Creating more engaging and effective learning environments
 - c. Increasing the cost of educational resources
 - d. Limiting access to high-quality education
- 2. What is the tone of the writer in the given lines from para 7? Rationalise your response in about 40 words. (2)

"However, despite its immense potential, the widespread adoption of AI in education also raises important ethical and practical considerations. Concerns about data privacy, algorithmic bias, and the displacement of human teachers are just a few of the challenges..."

- 3. How does AI contribute to personalized learning according to the passage? (2 Marks)
- 4. What role can AI play in addressing educational inequalities? (1 Mark)
- 5. Which of the following is NOT a potential application of AI in education? (1 Mark)
 - a. Adaptive learning platforms
 - b. Intelligent tutoring systems
 - c. Virtual reality simulations
 - d. Manual chalkboard teaching
- 6. What does the term "adaptive learning platforms" refer to? (1 Mark)
- 7. State whether the following statement is True or False: (1 Mark)

AI can only be used to teach privileged students with access to technology.

8. Find a word from paragraph 3 that means "specific advice or suggestions." (1 Mark)

2. You are Satvika/Satvik, class leader of Class X section B. The projector in your classroom is malfunctioning. Report this to the Principal in an email.

3. You were a student of class X and you recently passed your board exams. Now you wish to join some other school. Write an email to the Principal, requesting him/her to issue your TC.

4. Read the hints given below and complete the following description of Jaipur in not more than a 100 words.

- Origin: 18 November 1727 by Maharaja Sawai Jai Singh II of Amber
- Known as the Pink City, is the capital and largest city of Rajasthan; popular tourist

destination

• First planned city of India – wide and regular streets laid out into six sectors separated

by broad streets

• Palace – Hawa Mahal, formal gardens, and a small lake; Nahargarh Fort, residence of

King Sawai Jai Singh II on a hill; observatory, Jantar Mantar – a World Heritage Site

5. Read the hints given below and complete the following description of Agastya's grandmother in not more than a 100 words.

Surajmukhi Devi – 72 years old, grey hair, brown eyes, sweet voice – lost her husband at the

age of 39 – 5 children, 8 grandchildren – keeps unwell, but has a very strong nature, lively –

we enjoy listening to her stories/experiences/singing – generation gap but shares bond – best friend.

6. Revise taught lessons (word meanings, Ques/ Ans, character sketch, theme) and grammar topics (Tense, Modals). Do the exercises given in workbook.

7. Complete Unit- 1 to 3 of Main Course Book.

8. Read the drama ' The Dear Departed' and write its summary.

SUMMER VACATION HOMEWORK

SUBJECT- MATHS

CLASS – X

1. Prove that:

- a) V2 is an irrational number.
- b) V3 is an irrational number.

2. Write 5 examples each of:

- Linear polynomial
- Quadratic polynomial
- Cubic polynomial
- 3. Find the HCF and LCM of 56 and 72 using prime factorization.

4.For the quadratic polynomial $x^2 - 5x + 6$, find its zeros and verify the relationship between the zeros and the coefficients.

5. Verify that:

- HCF × LCM = Product of the two numbers for (48, 84).
- 6. Find the prime factorisation of 360 and express it as a product of primes.

7. Prove that $3 + 2\sqrt{5}$ is irrational.

- 8. Prove that $7\sqrt{2}$ is irrational.
- 9. Write the degree and number of terms in the following polynomials:
 - $4x^3 3x^2 + 2x 7$
 - $x^2 + 2x$
 - 7

10. Find the zero(s) of the following polynomials:

• $x^2 - 7x + 10$ • $x^2 + 2x - 15$ • $x^2 - 9$

11. If α and β are the zeros of the polynomial $x^2 - 3x + 2$, find:

- $\circ \alpha + \beta$
- $\circ \quad \alpha\beta$
- Verify the relationship with coefficients.

12. Form a quadratic polynomial whose sum and product of zeroes are:

- (a) 4, 1
- (b) −3, 2

13. If one zero of the polynomial $x^2 + kx + 6$ is 2, find the value of k and the other zero.

14. Form a pair of linear equations in two variables using the following

Information and solve it graphically: Five years ago, Sheela was twice as

old as Tina. Ten year later Sheela's age will be ten years more than Tina's

age. Find their present ages. What was the age of Sheela when Tina was

born?

15. Madhu went to a bank to withdraw 10000. He asked the cashier to give

her 100 and 200 notes only. Madhu got 60 notes in all. Find how many

notes of 100 and 200 she received.

16. COMPLETE YOUR PORTFOLIO

17. COMPLETE YOUR PRACTICAL FILE.

18. COMPLETE PREVIOUS YEAR QUESTIONS OF FIRST 4 CHAPTERS FROM THE PROVIDED PDF FILE.

SUMMER VACATION HOMEWORK

SUBJECT- COMPUTER

CLASS –X

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SECTION A: Communication Skills

Instructions: Answer the following questions:-

1. What are the barriers of effective communication?

SECTION B: Self-Development Skills

Instructions: Reflect and write your answers clearly.

- 1. What do you understand by Self-confidence and Positive thinking?
- 2. Write about a time when you overcame a difficult situation using your inner strength. (8–10 lines)
- 3. List 5 ways to improve self-motivation.
- 4. Make a **goal-setting chart** for your studies (short-term and long-term goals).

SECTION C: ICT Skills

Instructions: Attempt all questions. Use diagrams or screenshots where possible.

- 1. What is **ICT**? Mention any **4 examples** of ICT tools.
- 2. Write Differences between Ai and Automation.

ACTIVITY:

Create a poster or digital presentation (PPT/Handmade) on:

"The Role of ICT in Education" Or "Artificial Intelligence: Future of Technology"