



**BANYAN TREE SCHOOL, LODHI ROAD  
HOLIDAY HOMEWORK (2026-27)  
CLASS IX**

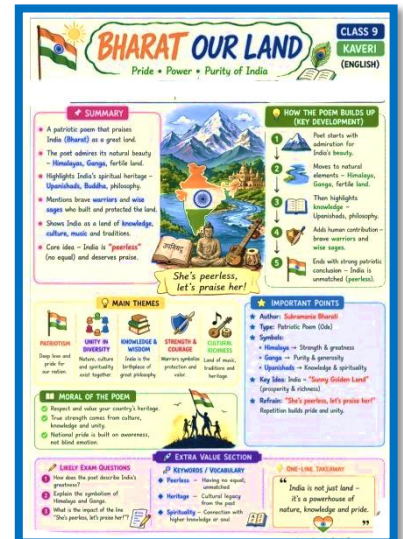
**SUBJECT: ENGLISH**

**RESEARCH WORK: MIND MAP**

Read the Poem, 'Bharat Our Land,' given in your English textbook. The poem written by the acclaimed author Subramania Bharati, highlights the rich culture, beauty, manuscripts and the great poets and warriors of India. It also emphasises on the fact that India is known as the 'cradle of the human race' and 'a land of profound spiritual wisdom.'

Use coloured A4-sized sheets, to discuss the statement keeping in mind the theme and to illustrate your favourite part from the poem.

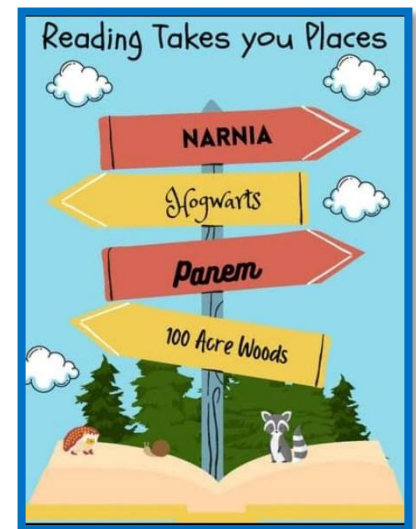
In addition, on an A3-sized sheet, draw a Mind Map, including the some important points about India, theme and tone of the poet, summary and learning outcome. Mention the name of the Author below the illustration.



**PROJECT WORK (PORTFOLIO):**

Read any two of the following books. Prepare a graphic vocabulary journal or a Pictionary with twenty new words you have learnt. Then, write each new word in it and draw or paste a picture of it. Also, write one synonym and antonym (if any) against it. In addition, draw a suitable book cover, mentioning the name of the story, the characters you liked, and what in the story inspired you the most.

- The Invisible Man by H. G. Wells
- The Diary of A Young Girl By Anne Frank
- Swami and Friends By R. K. Narayan
- The Railway Children by E. Nesbitt
- Three Men In A Boat by Jerome K. Jerome
- The Alchemist by Paulo Coelho







## ASSESSMENT RUBRIC

Please take a printout of the rubric Sheet for evaluation.

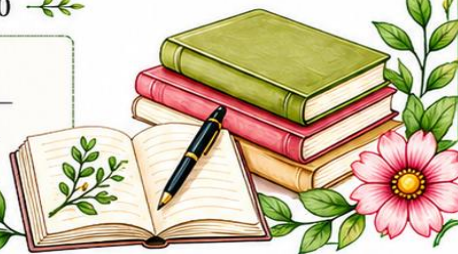
**BANYAN TREE SCHOOL, LODHI ROAD**  
— SESSION 2026-27 —  
**HOLIDAY HOMEWORK**  
**ASSESSMENT RUBRIC**  
— **CLASS IX** —

Student's Name: \_\_\_\_\_  
Class/Sec: \_\_\_\_\_

Criteria	Excellent (4)	Good (3)	Satisfactory (2)	Needs Improvement (1)	Marks Awarded
 Analytical Skills	Deep understanding with strong analysis and insight	Good understanding with relevant analysis	Basic interpretation of ideas	Weak understanding with little analysis	___ /4
 Creativity & Presentation	Highly creative, visually engaging and well-organised	Good creativity and well-presented	Simple presentation with basic effort	Minimal creativity and effort	___ /4
 Content & Research	Well-researched with relevant examples and facts	Adequate research with some relevant information	Limited research and examples	Poor or copied content	___ /4
 Writing Skills	Fluent, coherent and grammatically correct	Good expression with minor errors	Noticeable errors in grammar and expression	Frequent errors and unclear expression	___ /4
 Task Completion	All tasks completed properly and on time	Most tasks completed	Some tasks incomplete	Many tasks missing	___ /4

— Total Marks: \_\_\_ /20 —

Teacher's Remarks:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



## SUBJECT: HINDI

### 1- “कविता का चित्रात्मक प्रस्तुतीकरण ु”

आपको अपनी पाठ्यपस्तक ु से किसी एक कविता का चयन करना है और उसके भाव, विचार और संदेश को चित्र / पेंटिंग / कोलाज के माध्यम से प्रस्तुत करना है।

निर्देश

- अपनी पसंद की कोई एक कविता चुनें
- कविता के मुख्य भाव (Theme) और संदेश को समझें
- उस भाव को चित्र, पेंटिंग या कोलाज के रूप में दर्शाएँ
- चित्र के साथ कविता की 2-3 महत्वपूर्ण पंक्तियाँ भी लिखें
- रंगों, प्रतीकों और कल्पनाशीलता का प्रयोग करें

रचनात्मक विचार

- प्रकृति से जुड़ी कविता → पेड़, नदी, सरजू, पहाड़ का चित्र
- भावनात्मक कविता → चेहरे के भाव, रंगों के माध्यम से अभिव्यक्ति
- सामाजिक संदेश वाली कविता → लोगों, समाज, पर्यावरण के दृश्य
- कोलाज बनाते समय → पत्रिका/अखबार की कटिंग्स का उपयोग

### 2- “प्रेरणादायक व्यक्तित्व – जीवनी”

आपको किसी एक महान/प्रेरणादायक व्यक्ति का चयन करना है और उनके जीवन पर आधारित 250-300 शब्दों की जीवनी लिखनी है। साथ ही उनके जीवन की महत्वपूर्ण घटनाओं की एक टाइमलाइन (समयरेखा) भी तैयार करनी है।

लेखन के निर्देश

- जीवनी 250-300 शब्दों में लिखें
- जन्म, शिक्षा, संघर्ष और उपलब्धियाँ शामिल करें
- उनके जीवन से मिलनेवाली प्रेरणा भी लिखें
- भाषा सरल और स्पष्ट रखें

टाइमलाइन (समयरेखा) कैसे बनाएं?

- जीवन की प्रमुख घटनाओं को क्रम में लिखें
- वर्ष (Year) के साथ घटना (Event) लिखें

## उदाहरण

- 1869 – जन्म
- 1888 – विदेश में शिक्षा
- 1915 – भारत वापसी
- 1947 – देश की स्वतंत्रता

## प्रस्तुतीकरण

- व्यक्ति का चित्र बनाएं या चिपकाएं
- रंगों और बॉर्डरर्ड का उपयोग करें
- टाइमलाइन को अलग बॉक्स/डायग्राम में दिखाएं
- आकर्षक शीर्षक लिखें

## **SUBJECT: BIOLOGY**

### **Exploring Human Biology**

#### **Theme Options**

Students may choose **one** of the following themes for their project work:

**1. Cell Culture and Cancer**

- Understand the basics of cell culture and its applications in medical research.
- Explore how uncontrolled cell division leads to cancer.
- Study lifestyle measures and awareness campaigns related to cancer.

**2. Human Musculoskeletal System**

- Investigate the structure and function of bones, joints, and muscles.
- Explore common musculoskeletal disorders (e.g., arthritis, osteoporosis).
- Highlight the importance of exercise, posture, and nutrition in maintaining a healthy musculoskeletal system.

#### **Objectives**

- To connect classroom learning with real-world applications.
- To develop research, observation, and creative presentation skills.
- To encourage awareness about health and disease prevention.

#### **Guidelines**

**1. Research Component**

- Collect information from textbooks, reference books, and reliable online sources.
- Include diagrams, flowcharts, or labeled sketches to support explanations.

**2. Practical/Observation Component**

- For **Cell Culture and Cancer**: Prepare a case study on one type of cancer (e.g., lung, breast, skin), including causes, symptoms, and preventive measures.
- For **Musculoskeletal System**: Maintain a 7-day log of your physical activity and posture habits, reflecting on their impact on your body.

### 3. Creative Component

- Design a poster/infographic on “Healthy Cells, Healthy Life” or “Strong Bones, Strong Future.”
- Write a short essay (400–500 words) on how lifestyle choices influence either cancer risk or musculoskeletal health.

### 4. Presentation

- Compile the project neatly in a folder with clear sections: Research, Practical/Observation, Creative Work, and Essay.
- Use visuals, charts, or drawings wherever possible. Cite references properly.

## Evaluation Criteria [5 marks]

- **Scientific Accuracy** (1 marks): Correctness of concepts and information.
- **Creativity & Presentation** (2 marks): Visual appeal, originality, and clarity.
- **Practical Application** (1 marks): Effort in observation logs or case study.
- **Reflection & Critical Thinking** (1 marks): Insights in essay and personal observations.

## Submission

- Deadline: First week after reopening of school. Format: Handwritten or printed, with organized sections and proper headings.

## SUBJECT PHYSICS

### TITLE: Urban Heat Island Effect

### Objective

To investigate how urbanization affects local temperature patterns compared to rural areas, and to understand the causes, impacts, and mitigation strategies of the Urban Heat Island (UHI) effect.

### 1. Introduction & Research

Students begin with background study on UHI.

- Define Urban Heat Island Effect
- Collect information from textbooks, journals, and online sources
- Note causes: reduced vegetation, concrete/asphalt surfaces, pollution

### 2. Data Collection

Gather temperature data from different environments.

- Record temperatures in urban vs. rural/local green areas
- Use thermometer or digital sensors at fixed times (morning, afternoon, evening)
- Collect data for at least 7 consecutive days

### **3. Data Analysis**

**Compare and interpret collected data.**

- Plot graphs of temperature vs. time for urban and rural sites
- Identify peak differences and possible reasons

### **4. Impact Study**

**Explore consequences of UHI.**

- Note effects on human health (heat stress)
- Discuss impact on energy consumption (AC usage)
- Relate to climate change and biodiversity.

### **5. Mitigation Strategies**

**Suggest practical solutions to reduce UHI.**

- Planting trees and rooftop gardens
- Use of reflective building materials
- Promotion of sustainable urban planning

### **6. Project Report & Presentation**

**Compile findings into a structured project file.**

- Title page, introduction, objectives
- Data tables, graphs, and analysis
- Conclusion and recommendations
- References and acknowledgments

### **INSTRUCTIONS FOR STUDENTS**

- 1. Work individually.**
- 2. Ensure accurate data collection with proper instruments.**
- 3. Present findings with graphs, charts, and visuals.**
- 4. Highlight real-world relevance (link to local city conditions).**
- 5. Submit a hand written project file with neat formatting.**
- 6. Avoid plagiarism; originality will be rewarded.**

## Assessment Rubrics

Criteria	Excellent (4)	Good (3)	Satisfactory (2)	Needs Improvement (1)
Content & Research	In-depth, well-referenced, clear understanding	Mostly accurate, minor gaps	Basic coverage	Incomplete/incorrect
Data Collection	Accurate, systematic, multiple observations	Mostly accurate, few gaps	Limited observations	Poor or missing data
Data Analysis	Clear graphs, correct calculations, insightful interpretation	Minor errors, graphs present	Attempted but unclear	Missing or incorrect
Presentation	Neat, creative, well-organized	Mostly neat	Average	Poor
Conceptual Understanding	Strong grasp of UHI causes, impacts, solutions	Partial understanding	Basic	Weak
Originality & Creativity	Innovative ideas, practical solutions	Some originality	Limited creativity	Copied/irrelevant

### ART INTEGRATED ACTIVITY - Data Analysis and Interpretation

#### Instructions:

- Coloured ruled A-4 sheets should be used to do this activity.
- Copy/ paste the print out of the question.
- Use graph sheet to plot the given graph and then find the solutions.

The data given below shows the positions of a body at different time.

Distance (m)	0	50	100	150	150	200	250	300
Time(s)	0	2	4	6	8	10	12	14

Plot the Distance – Time graph from the above data and answer the following questions:

Calculate the speed of the body as it moves from

- 0 to 4 seconds
- 6 to 8 seconds
- 10 to 14 seconds

**NOTE: This activity will be considered as (5 marks) which will go in your portfolio file for CBSE Internal Assessment Submission record.**

**Activity will be assessed on the following parameters:**

- **Plotting and Analysis of graphs – 1.5 marks**
- **Analytical approach and application of the concept – 1.5 marks**
- **Presentation and timely submission of work –1 + 1= 2 marks**

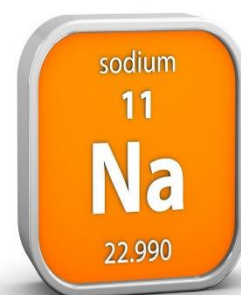
**SUBMISSION DATE: 07/07/26**

## **SUBJECT CHEMISTRY**

### **Journey of Elements**

Prepare index cards (paper card) for first 20 element of periodic table. Each card should show information:

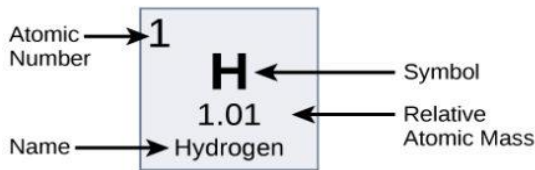
- Name, Symbol, atomic number, mass number
- Follow the given table for name of element, symbol, atomic number & mass number
- You may refer to periodic table given at the end
- You can use one A-4 size sheet to make four index cards



<b>Name of Element</b>	<b>Atomic Symbol</b>	<b>Atomic Number</b>	<b>Mass Number</b>
Hydrogen	H	1	1
Helium	He	2	4
Lithium	Li	3	7
Beryllium	Be	4	9
Boron	B	5	11
Carbon	C	6	12
Nitrogen	N	7	14
Oxygen	O	8	16
Fluorine	F	9	19
Neon	Ne	10	20
Sodium	Na	11	23
Magnesium	Mg	12	24
Aluminum	Al	13	27
Silicon	Si	14	28
Phosphorus	P	15	31
Sulphur	S	16	32
Chlorine	Cl	17	35.5
Argon	Ar	18	40
Potassium	K	19	39
Calcium	Ca	20	40

**Periodic Table of the Elements**

Group 1																		18																	
1																	2																		
1	H																	2																	
	1.01																	4.00																	
	Hydrogen																	Helium																	
2	3		4														5		6		7		8		9		10								
2	Li	Be													B	C	N	O	F	Ne															
	6.94	9.01													10.81	12.11	14.01	15.99	18.99	20.18															
	Lithium	Beryllium													Boron	Carbon	Nitrogen	Oxygen	Fluorine	Neon															
3	11		12														13		14		15		16		17		18								
3	Na	Mg													Al	Si	P	S	Cl	Ar															
	22.99	24.31													26.98	28.09	30.97	32.07	35.45	39.95															
	Sodium	Magnesium													Aluminum	Silicon	Phosphorus	Sulfur	Chlorine	Argon															
4	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36																	
4	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr																	
	39.09	40.08	44.96	47.87	50.94	51.99	54.94	55.85	58.93	58.69	63.55	65.41	69.72	72.64	74.92	78.96	79.90	83.79																	
	Potassium	Calcium	Scandium	Titanium	Vanadium	Chromium	Manganese	Iron	Cobalt	Nickel	Copper	Zinc	Gallium	Germanium	Arsenic	Selenium	Bromine	Krypton																	
5	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54																	
5	Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe																	
	85.47	87.62	88.91	91.22	92.91	95.94	[98]	101.1	102.9	106.4	107.9	112.4	114.8	118.7	121.8	127.6	126.9	131.3																	
	Rubidium	Strontium	Yttrium	Zirconium	Niobium	Molybdenum	Technetium	Ruthenium	Rhodium	Palladium	Silver	Cadmium	Indium	Tin	Antimony	Tellurium	Iodine	Xenon																	
6	55	56	57-71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86																	
6	Cs	Ba	La-Lu	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn																	
	132.9	137.3	*	178.5	180.9	183.8	186.2	190.2	192.2	195.1	196.9	200.6	204.4	207.2	208.9	[209]	[210]	[222]																	
	Cesium	Barium	Lanthanides	Hafnium	Tantalum	Tungsten	Rhenium	Osmium	Iridium	Platinum	Gold	Mercury	Thallium	Lead	Bismuth	Polonium	Astatine	Radon																	
7	87	88	89-103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118																	
7	Fr	Ra	Ac-Lr	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Cn	Uut	Fl	Uup	Lv	Uus	Uuo																	
	[223]	[226]	**	[261]	[262]	[266]	[264]	[277]	[268]	[269]	[272]	[285]	[284]	[289]	[288]	[293]	[294]	[294]																	
	Francium	Radium	Actinides	Rutherfordium	Dubnium	Seaborgium	Bohrium	Hassium	Mtnerium	Darmstadtium	Roentgenium	Copernicium	Ununtrium	Flerovium	Ununpentium	Livermorium	Ununseptium	Ununoctium																	
	* 57 La 138.9 Lanthanum, 58 Ce 140.1 Cerium, 59 Pr 140.9 Praseodymium, 60 Nd 144.2 Neodymium, 61 Pm [145] Promethium, 62 Sm 150.4 Samarium, 63 Eu 151.9 Europium, 64 Gd 157.3 Gadolinium, 65 Tb 158.9 Terbium, 66 Dy 162.5 Dysprosium, 67 Ho 164.9 Holmium, 68 Er 167.3 Erbium, 69 Tm 168.9 Thulium, 70 Yb 173.1 Ytterbium, 71 Lu 174.9 Lutetium																																		
	** 89 Ac [227] Actinium, 90 Th 232.0 Thorium, 91 Pa 231.0 Protactinium, 92 U 238.0 Uranium, 93 Np [237] Neptunium, 94 Pu [244] Plutonium, 95 Am [243] Americium, 96 Cm [247] Curium, 97 Bk [247] Berkelium, 98 Cf [251] Californium, 99 Es [252] Einsteinium, 100 Fm [257] Fermium, 101 Md [258] Mendelevium, 102 No [259] Nobelium, 103 Lr [262] Lawrencium																																		



Color Code	
<span style="background-color: #e0e0e0; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Other non-metals	<span style="background-color: #fff2cc; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Noble gases
<span style="background-color: #cfe2f3; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Alkali metals	<span style="background-color: #fff2cc; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Lanthanides
<span style="background-color: #fff2cc; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Transition metals	<span style="background-color: #d9ead3; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Actinides
<span style="background-color: #d9ead3; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Other metals	<span style="background-color: #fff2cc; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Unknown chemical properties
<span style="background-color: #f4cccc; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Alkaline earth metals	
<span style="background-color: #cfe2f3; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Halogens	

## SUBJECT: MATHEMATICS

### GENERAL INSTRUCTIONS:

- Holiday Homework must be done in a very neat and presentable manner.
- Homework will be assessed on the basis of creativity, presentation, completion of all questions, and proper indexing of work.
- Avoid cutting and overwriting.
- Creativity and originality of work will be appreciated.
- Read the instructions carefully and submit the work accordingly.
- Rubrics for each activity are attached at the end.

### ACTIVITY 1 – SQUARE ROOT SPIRAL

To represent real numbers on the number line.

#### Instructions:

- Represent  $\sqrt{2}$ ,  $\sqrt{3}$ ,  $\sqrt{4}$ ,  $\sqrt{5}$ ,  $\sqrt{6}$ ,  $\sqrt{7}$ ,  $\sqrt{8}$ ,  $\sqrt{9}$ ,  $\sqrt{10}$ ,  $\sqrt{11}$ ,  $\sqrt{12}$ ,  $\sqrt{13}$ ,  $\sqrt{14}$ ,  $\sqrt{15}$  and  $\sqrt{16}$ .
- Reference images for the spiral has been attached. Use your creativity to create the square root spiral.



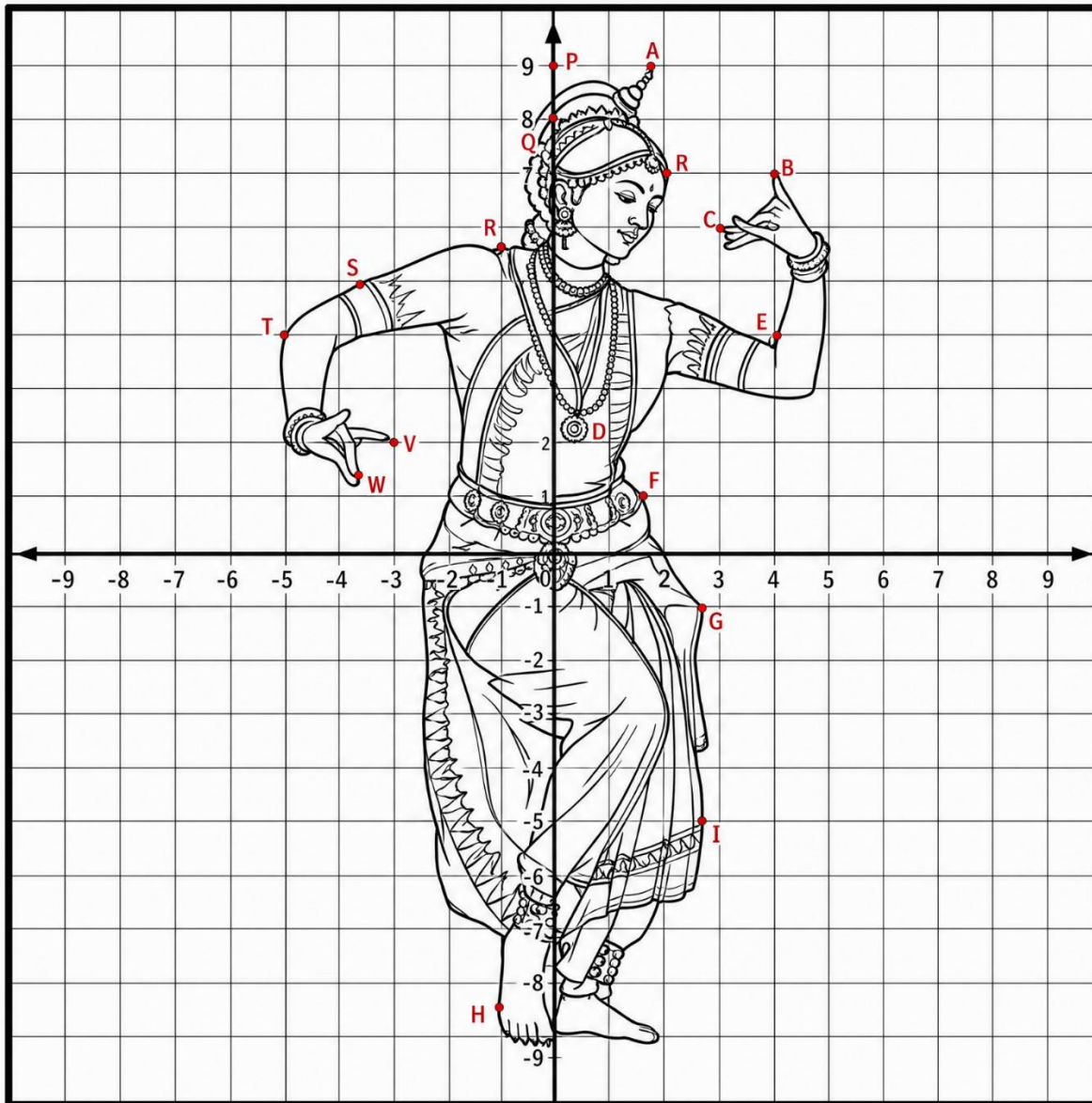
**ACTIVITY 1 – SQUARE ROOT SPIRAL  
RUBRIC**

Criteria	Excellent (4-5 Marks)	Good (3-4 Marks)	Satisfactory (2-3 Marks)	Needs Improvement (0-1 Mark)	Marks Allotted
<b>Accuracy</b>	All roots ( $\sqrt{2}$ to $\sqrt{16}$ ) correctly plotted; spiral follows exact measurements.	Minor errors in plotting.	Significant errors in spiral.	Incorrect/missing roots.	____ /5
<b>Neatness &amp; Precision</b>	Clean, labelled diagram with ruler/compass.	Slightly messy but readable.	Rough sketch; no labels.	Illegible work.	____ /5
<b>Creativity</b>	Enhanced with colours, patterns, or 3D effects.	Basic spiral with minimal decor.	No creativity.	Incomplete.	____ /5

**ACTIVITY 2– KNOW THE DANCE FORMS OF INDIA (TAMIL NADU)**

**Instructions:**

- Explore the famous dance form of Tamil Nadu.
- Locate the marked points in the provided picture.
- Write all marked points on a sheet of paper and segregate them according to different quadrants and the x- and y-axes.
- Write a short write-up on the dance form and its significance.
- Take a printout of the given dance form and colour it neatly.



**ACTIVITY 2– KNOW THE DANCE FORMS OF INDIA (TAMIL NADU)  
RUBRIC**

Criteria	Excellent (4-5 Marks)	Good (3-4 Marks)	Satisfactory (2-3 Marks)	Needs Improvement (0-1 Mark)	Marks Allotted
<b>Coordinate Geometry</b>	All marked points correctly segregated into quadrants/axes.	1–2 errors in segregation.	Multiple errors.	No attempt.	_____/5

<b>Dance Form Write-up</b>	Insightful description with cultural significance.	Basic write-up with few details.	Very short/vague.	Missing/copied.	_____/5
<b>Artwork &amp; Colouring</b>	Neatly coloured print; artistic enhancements.	Coloured but lacks detail.	Poor colouring.	Uncoloured/scribbled.	_____/5

**ART INTEGRATED PROJECT- 1**  
**COMIC STRIP – “MATH ICONS: STORIES THAT INSPIRE”**

Create a comic strip in the form of a foldable booklet showcasing the life and contributions of an Indian mathematician such as Srinivasa Ramanujan, Aryabhata, or Brahmagupta. The booklet should be creative, neatly presented, and include colourful illustrations along with speech bubbles. Through your comic, present the mathematician’s early life, challenges, major discoveries, real-life applications of their work, and their lasting legacy in a clear and well-sequenced manner.

Remember, a comic is not just about drawing—it is about storytelling. Try to bring out the excitement and wonder of mathematical discoveries through your work.

Criteria	Excellent (4–5 Marks)	Good (3–4 Marks)	Satisfactory (2-3 Marks)	Needs Improvement (0–1 Mark)	Marks Allotted
<b>Content Coverage</b>	All aspects (life, struggles, contribution, application, legacy) clearly covered	Most aspects covered	Few aspects covered	Incomplete content	_____/5
<b>Concept Understanding</b>	Mathematical contribution and its application clearly and correctly explained	Mostly clear with minor gaps	Limited clarity	Not understood	_____/5
<b>Creativity &amp; Innovation</b>	Highly creative (foldable, interactive elements, engaging storytelling)	Some creativity shown	Minimal creativity	No creative effort	_____/5
<b>Presentation &amp; Neatness</b>	Very neat, well-organized, colourful, and visually appealing	Neat but lacks detailing	Somewhat messy	Poor presentation	_____/5
<b>Sequencing &amp; Storytelling</b>	Excellent flow with engaging storytelling	Logical sequence maintained	Some gaps in flow	No clear sequence	_____/5

**PROJECT 2: "Geometry in Warli Art: Blending Mathematics with Cultural Heritage"**

To enhance understanding of geometric shapes, symmetry, and patterns by integrating them into Warli art, thereby blending mathematical concepts with cultural expression.

**Instructions:**

- Provide a brief overview of the history of Warli art.
- Highlight its connection to mathematics, focusing on the use of geometric shapes like triangles, circles, and squares.
- Design a layout using geometric shapes.
- Examples: -
  - Triangles for human figures
  - Circles for faces, sun, and moon

- Lines and dots for patterns and borders
- Ensure the design includes symmetrical patterns and tessellations.

Criteria	Excellent (4–5 Marks)	Good (3–4 Marks)	Satisfactory (2-3 Marks)	Needs Improvement (0–1 Mark)	Marks Allotted
<b>Understanding &amp; Explanation</b>	Clear and accurate explanation of Warli art and its link to geometry	Mostly clear with minor gaps	Limited explanation	Very little or incorrect explanation	____ /5
<b>Use of Geometry</b>	Correct and creative use of shapes, symmetry, and patterns	Mostly correct use with few errors	Some use but with errors	Minimal or incorrect use	____ /5
<b>Creativity &amp; Design</b>	Highly creative and well-organized artwork	Good creativity and design	Basic design	Lacks creativity and effort	____ /5
<b>Presentation &amp; Neatness</b>	Very neat, well-presented, proper use of tools	Neat with few issues	Somewhat untidy	Untidy and poorly presented	____ /5

### SUBMISSION OF HOLIDAY HOMEWORK

The last date for submission of the homework is **6th July 2026**.

Complete all activities and project work as directed. Holiday homework is a part of internal assessment as per CBSE guidelines.

### SUBJECT: HISTORY

#### 1. The "Stone Age Tech" 3D Project

**Goal:** To visualize the physical evolution of tools from the Palaeolithic to the Neolithic era.

Step-by-Step Instructions:

1. Preparation (Step 1): Divide a sturdy cardboard base (A4 or slightly larger) into three distinct zones labeled: Palaeolithic, Mesolithic, and Neolithic.
2. Modeling (Step 2): Create 3D models of the following tools using clay, dough, or carved soap:
  - Paleolithic: Large, rough "Hand-Axes" or "Choppers." Focus on the "flaked" look (jagged edges).
  - Mesolithic: "Microliths" (tiny stone blades). Show one blade attached to a twig or bone to form a spear or arrow.
  - Neolithic: "Polished Celts" (axes) or "Grinding Stones." These should look smooth and ground down, showing the transition to farming.
3. The Research Card (Step 3): For each era, write a small index card (3x5 inches) detailing:
  - The Stone Used: (e.g., Flint, Quartzite, or Chert).
  - The Purpose: (e.g., scavenging, hunting fast animals, or harvesting wild grains).
  - The Technique: Explain "Stone-on-Stone" vs. "Pressure Flaking."

## 2. Cinematic Critique: *The Croods*

Goal: To analyze the "Caveman" stereotype versus the archaeological reality of early humans.

Instructions:

1. Watch: Watch the movie *The Croods* (Part 1).
2. The Reality Check: Write a two-page report in your notebook answering:
  - The movie shows the family living in a dark cave out of fear. Based on your reading of early humans, were they really "stuck" in caves, or were they Nomadic? Explain why they had to move constantly.
  - Identify three "Hollywood fictions" in the movie (e.g., animals that didn't exist or tools they wouldn't have had) and explain what the reality was according to your textbook.
3. Illustration: Draw a scene from the movie that shows a "tool" being used and write whether that tool fits the Paleolithic or Mesolithic technology level.

## 3. Literary Analysis: *Unstoppable Us*

Goal: To understand why *Homo sapiens* became the "most dangerous" species on Earth.

Instructions:

1. Read: *Unstoppable Us* by Yuval Noah Harari.
2. The Summary: Write a two-page summary in your notebook.
3. The Key Question: Harari talks about "cooperation." Write a detailed paragraph on how humans used imagination to create better tools and work together in groups larger than any other animal. Use bullet points for key facts.

## 4. Academic Revision

- Reading: Read the first chapter of your History textbook (focusing on the story of human evolution or the earliest societies).
  - Workbook: Complete the provided Worksheet/Booklet for Chapter 1 in your Question-Answer notebook.
5. Map Work: Mark relevant sites/places for all three stone age periods (Palaeolithic, mesolithic and neolithic ) on three separate political maps of India pasted on A4 sheets.

## SUBJECT GEOGRAPHY

### GENERAL INSTRUCTIONS

- Use maps, diagrams, and colors
- Maintain neatness and creativity
- Submit after holidays

## **Atmosphere & Climate**

- Name layers of the atmosphere
- Difference between weather and climate
- What are elements of weather?

## **Climate Change**

Write 3 pointers on each of the following -

- Causes of climate change
- Effects on environment
- Suggest measures to reduce carbon footprint

## **Oceans**

- Importance of oceans
- How do oceans affect climate?

## **Short Answer Questions**

- What is sustainable development?
- What is global warming?
  
- What is monsoon?

## **PPT PROJECT**

Topic: Climate Change & Sustainable Development

Instructions:

Prepare a 10–12 slide PPT

Content:

1. Meaning of Climate Change
2. Causes (pollution, deforestation)
3. Effects (floods, droughts)
4. Carbon Footprint
5. Sustainable Development
6. Role of students
7. Conclusion

Design Tips:

- Use images, charts, diagrams
- Avoid too much text

## **POSTER MAKING**

Topic (Choose One):

- Save Environment
- Stop Climate Change
- Save Earth
- Reduce Carbon Footprint

Instructions:

- Use A4/chart paper
- Add slogans + drawings

**Sample Slogans:**

- “There is No Planet B”
- “Act Now, Save Tomorrow”
- “Go Green, Keep Earth Clean”

**ACTIVITY WORK**

Weather Observation

- Record daily weather for 5 days
- Note:
  - o Temperature
  - o Rainfall
  - o Wind

**ASSESSMENT CRITERIA**

- Neatness & presentation
- Accuracy
- Creativity (PPT & Poster)
- Completion of work

## **SUBJECT POL SCIENCE**

**General Instructions:**

1. Complete the homework in a neat file on A4 sheets.
2. Write your Name, Class, Section, Roll Number on the cover page.
3. Use blue/black pen only.
4. Support answers with pictures, newspaper cuttings, charts, and examples.
5. Submit the homework after summer vacation.
6. Maintain cleanliness, creativity, and originality.

**Topic: Understanding Democracy**

**Section A – Project Work (Compulsory)**

**Project Title: Democracy in India**

Prepare a project file including:

1. Meaning of Democracy
2. Features of Democracy
3. Importance of Elections
4. Role of Citizens in Democracy
5. Fundamental Rights
6. India as the world's largest democracy
7. Challenges faced by democracy
8. Conclusion – Why democracy is the best form of government

### **Section B – Worksheet**

1. What is democracy?
2. Name any four features of democracy.
3. Why are elections necessary in a democracy?
4. What is universal adult franchise?
5. Explain majority rule with example.
6. How does democracy improve decision-making?
7. What are the rights of citizens in a democracy?
8. Why is accountability important in government?
9. Mention any two challenges to democracy.
10. Why should citizens vote responsibly?

### **Section C – Current Affairs Activity**

Collect and paste any 3 newspaper articles related to elections, parliament decisions, welfare schemes, women leadership, youth participation in politics. Write a 50-word summary of each.

### **Section D – Case Study**

Write one page on Mahatma Gandhi, Dr. B. R. Ambedkar, or Nelson Mandela and their contribution to democracy.

### **Section E – Creative Activity**

1. Poster on Save Democracy
2. Slogan writing on Voting Awareness
3. Collage on Democratic Values
4. Chart on Features of Democracy

### **Section F – Map Activity**

1. New Delhi
2. Neighbouring countries
3. States with capitals (any 10)
4. Parliament House location in Delhi

### **Section G – Viva Preparation**

Democracy, Election, Constitution, Rights, Equality, Majority Rule, Accountability, Representation, Franchise, Government

## **Reflection Section**

How can students become responsible democratic citizens?

## **Teacher's Note**

***Marks will be awarded for neatness, originality, presentation, and timely submission.***

## **SUBJECT: ARTIFICIAL INTELLIGENCE**

### **AI Around Us**

- Identify 10 real-life applications of AI (e.g., Google Maps, Alexa, Chatbots).
- Write:
  - Name of application
  - Where it is used
  - How AI is helping

☞ Present in a neat tabular format.

### **Ethics in AI**

- Write a short note (100–120 words each):
- Bias in AI
- Privacy concerns
- Importance of ethical AI

### **Poster Making**

- Topic: **“AI for Good”**
- Use A4 sheet
- Add slogans, drawings, and examples

### **AI Comic Strip / Story**

- Create a short comic video or story showing:
  - A robot helping humans
  - OR AI solving a real-world problem

## **SUBJECT: PAT**

**Make one project file on the following topics :-**

1. Choose any one topic from Employability Skills.
2. Choose any one topic from Subject specific skills.

**Make Practical File on the following Topics :-**

1. Make one Physical Activity Session of 1 hour.
2. Equipment's name with picture.
3. Rules, Regulation of any one sport with field diagram.
4. Describe the various aspects of safety management.

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