Einstein PUBLIC SCHOOL

Nurturing a better tomorrow

SUMMER VACATION HOLIDAY HOMEWORK-2026

Class-VII

Science

Scrapbook / Chart Paper - (Do any one)

●Paste natural indicators like turmeric paper, china rose petals. Test with lemon, soap, vinegar and write if each is acidic/basic/neutral.

● Paste symbols of electric components - cell, bulb, switch, wire, battery. Also paste 3 pictures of devices at home that use circuits.

● Make a well labelled chart on chart paper showing:

pH scale with 3 acidic + 3 basic substances we use daily.

● Labelled diagram of an electric circuit with cell, bulb, switch, wire.

Poster / Report / (Create) Making - (Do any one)

• Prepare a colourful poster on

'Safe Handling of Acids and Bases at Home'

Or

Save Electricity, Save Future'

●Create 10 lines poem on a chart paper titled 'Science in My Home' covering both magic of indicators and power of electricity

● Write a report on the biography of Thomas Alva Edison include how his work on electricity relates to testing substances with indicators in labs.

•Prepare a working switch using cardboard + bottle caps. Decorate it and write 5 lines on: "How switches control electricity like indicators control detection of acids/bases".

Plantation Activity / Environmental Activity - (Do any one)

•Plant 2 saplings: one lemon/tomato plant and one aloe vera. Test the soil with turmeric indicator before planting. After 15 days, note if the plant grew well. Also put a small solar light near plants. Take pictures and write how soil type and sunlight electricity both help plants.

• Do a 'Home Science Week':

Day 1-3 Save electricity - note meter reading, switch off extra devices.

Day 4-6 -Test kitchen waste with natural indicators and separate acidic waste for compost.

Day 7-Make a report with photos on both activities.

Put an earthen pot with water for birds on terrace. Fix a small LED with solar cell nearby for night. Write how water and electricity from sun help living beings in summer.

Model making – (Do any one)

● Make a combined working model:

Eco-friendly dustbin made of cardboard to show 'Say No to Plastics'. Working electric circuit with a bulb that glows when you put the correct 'acidic waste' card in slot. Use turmeric paper as sensor concept. Decorate and label.

●. Smart Home Energy & Safety

3D house with solar panel circuit for lights + turmeric indicator stickers on kitchen shelves to identify acids/bases. Add a data table of electricity units saved.

●. pH + Power Garden

Mini garden with lemon plant and aloe vera. Soil tested with indicators. Small solar light circuit for night. Explains plant growth + acidic soil + solar electricity

●. Conductivity vs Acidity Tester Kit

Single box with 2 circuits - one tests if material conducts electricity, other tests if liquid is acid/base using LED color change. Uses waste materials.

●. Save Earth TLM Wheel

Rotating wheel chart: 1/4 shows acid/base uses, 1/4 shows electric circuit, 1/4 shows 'Say No to Plastic', 1/4 shows poem on environment.

- **Scientist Timeline Circuit**

Timeline of Thomas Edison + Robert Boyle on chart. Each scientist's name connected with copper wire + LED circuit that lights when you press their invention.

Sanskrit

1- विद्यायाः महत्त्वम् पाठ एक के तीन श्लोक का हिंदी अर्थ लिखिए

2- एक पदेन उत्तरत् -

क- राजा कुत्र पूज्यते?

ख- प निर्बलामं बलम् का ?

ग- पाणिने: गुरु: क: ?

घ- पाणिने: मातु: पितु: नाम किम्?

3- पूर्ण वाक्येन उत्तरत्

क- गज: श्रृगालं किम् पृष्टवान ?

ख- कर्पूर तिलक: अन्ते किं अवगच्छत् ?

ग- पाणिने: जन्म कुत्र अभवत् ?

घ- शिलायां गर्त: कथं जात: ?

4- रेखांकित पद के आधार पर प्रश्न निर्माण कीजिए -

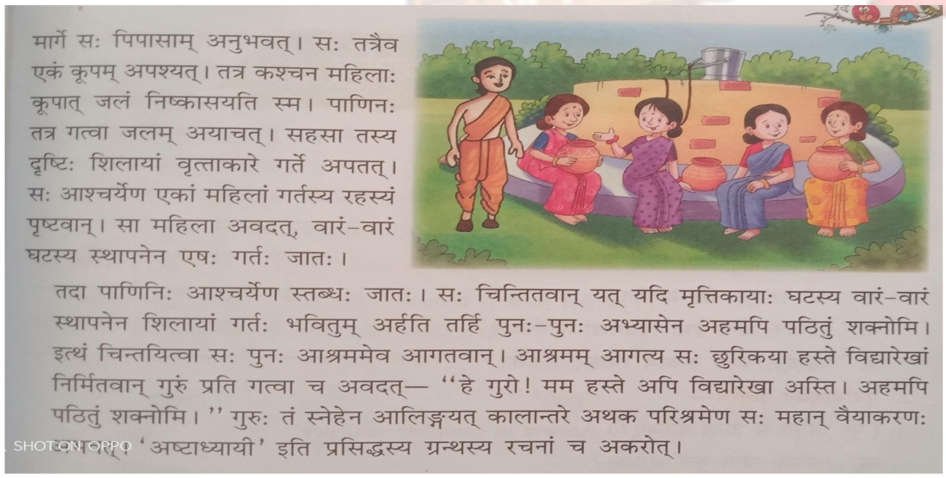
क- स: पठने बहु दुर्बल: आसीत ।

ख- सा महिला अवदत् ।

ग- स्वदेशे पूज्यते राजा ।

घ- एक: गज: वसति स्म।

5- निम्नलिखित गद्य खंड का हिंदी अर्थ लिखिए



मार्गे सः पिपासाम् अनुभवत्। सः तत्रैव एकं कूपम् अपश्यत्। तत्र कश्चन महिलाः कूपात् जलं निष्कासयति स्म। पाणिनः तत्र गत्वा जलम् अयाचत्। सहसा तस्य दृष्टिः शिलायां वृत्ताकारे गर्ते अपतत्। सः आश्चर्येण एकां महिलां गर्तस्य रहस्यं पृष्टवान्। सा महिला अवदत्, वारं-वारं घटस्य स्थापनेन एषः गर्तः जातः।

तदा पाणिनिः आश्चर्येण स्तब्धः जातः। सः चिन्तितवान् यत् यदि मृत्तिकायाः घटस्य वारं-वारं स्थापनेन शिलायां गर्तः भवितुम् अर्हति तर्हि पुनः-पुनः अभ्यासेन अहमपि पठितुं शक्नोमि। इत्थं चिन्तयित्वा सः पुनः आश्रममेव आगतवान्। आश्रमम् आगत्य सः छुरिकया हस्ते विद्यारेखां निर्मितवान् गुरुं प्रति गत्वा च अवदत्— "हे गुरो! मम हस्ते अपि विद्यारेखा अस्ति। अहमपि पठितुं शक्नोमि।" गुरुः तं स्नेहेन आलिङ्गयत् कालान्तरे अथक परिश्रमेण सः महान् वैयाकरणः [illegible] 'अष्टाध्यायी' इति प्रसिद्धस्य ग्रन्थस्य रचनां च अकरोत्।

SHOT ON OPPO

प्रश्न 6- निम्नलिखित शब्दों का मूल शब्द विभक्ति वचन लिखिए

गजः , गर्ते , तस्य , आज्ञया , राज्ञः

प्रश्न 7 निम्नलिखित अव्यय के आधार पर वाक्य निर्माण कीजिए

कदापि तत्र, यदा, तदा, उच्चै

प्रश्न 8- प्रथम पाठ के किन्हीं दो श्लोक को चार्ट पेपर पर लिखकर लाएं।

Hindi

१- यदि कहानी में आप उपवन में होते तो घायल पक्षी की सहायता कैसे करते? आपके अनूसार न्याय कैसे किया जा सकता था?

2-'माँकह एक कहानी' कविता के सभी पात्रों का संक्षिप्त परिचय लिखिए।

3-'तीन बुद्धिमान' कहानी में यदि राजा ने बिना जाँच किए तीनों भाइयों को दोषी ठहरा दिया होता तो लोक कथा का परिणाम क्या होता?

4- संधि का अर्थ मेल होता है। परिवार में मेल का क्या महत्व है? ५० शब्दों में लिखिए।

5- संधि वृक्ष बनाइए।

(एक वृक्ष बनाकर संधियों को उनकी शाखाओं में दिखाइए।)

6- हिन्दी वर्णमाला रंगों का प्रयोग करते हुए लिखिए।

Computer

Teacher's Instructions

- Complete the assignment neatly in a separate notebook/file.
- Use colours and diagrams wherever necessary.
- Practical work should be done sincerely.
- Submit the holiday homework after summer vacation.

Section A – Multiple Choice Questions (MCQs)

Chapter 1: App Development

1. Which software is commonly used for app development learning?
   a) MS Paint b) App Inventor
   c) Notepad d) WordPad
2. An app is mainly designed for:
   a) Washing clothes b) Running on devices
   c) Cooking food d) Playing outdoor games
3. Which component is used to display text in an app?
   a) Button b) Label
   c) Image d) Sound
4. Which component is clicked to perform an action?
   a) Button b) Canvas
   c) Label d) Screen.
5. Mobile applications are mostly used in:
   a) Smartphones b) Television
   c) Refrigerator d) Printer.

Chapter 2: Krita Image Editing

6. Krita is mainly used for:
   a) Video editing b) Painting and image editing
   c) Typing documents d) Playing games.
7. Which tool is used to draw freehand lines in Krita?
   a) Brush Tool b) Crop Tool
   c) Fill Tool d) Text Tool.
8. Layers in Krita help us to:
   a) Delete computer files b) Work on different parts separately
   c) Increase internet speed d) Print documents.
9. Which tool is used to type text in Krita?
   a) Move Tool b) Text Tool
   c) Shape Tool d) Brush Tool .
10. Which file option is used to save an image?
   a) Open b) Close
   c) Save d) Exit.

Chapter 3: Advanced Features of Excel 2016

11. Which feature arranges data in order?
   a) Filter b) Sort
   c) Chart d) Formula.

12. Which feature shows only selected data?
    a) Filter b) Sum
    c) Average d) Merge.
13. A chart in Excel is used to:
    a) Draw cartoons b) Represent data graphically
    c) Type stories d) Edit photos.
14. Which function finds the highest number?
    a) MIN b) MAX
    c) COUNT d) SUM.
15. Which shortcut is used to save an Excel file?
    a) Ctrl + P b) Ctrl + S
    c) Ctrl + C d) Ctrl + Z.

Section B – Fill in the Blanks.

1. _____ is software used for digital painting.
2. A _____ is used to perform actions in an app.
3. Excel charts help in _____ representation of data.
4. The _____ tool is used for drawing in Krita.
5. The _____ feature displays selected records only.

Section C – True / False

1. Krita is an image editing software.
2. A Label component is used for clicking actions.
3. Excel can create charts and graphs.
4. Layers cannot be edited separately in Krita.
5. Sorting helps arrange data in ascending or descending order.

Section D – Short Answer Questions

1. What is an app?
2. Write any two uses of Krita software.
3. What is the use of layers in image editing?
4. Define sorting in Excel.
5. What is the difference between Sort and Filter?

Section E – Long Answer Questions

1. Explain the steps to create a simple mobile app in App Inventor.
2. Describe different tools used in Krita Image Editing software.
3. Explain the advanced features of Excel 2016 with examples:
    - Sorting
    - Filtering

- Charts
- Conditional Formatting

Section F – Practical Activities

Activity 1: App Development

Create a simple app with:

- One Label
- One Button
- One Image

When the button is clicked, display a message like:

“Welcome to App Development”

Activity 2: Krita Drawing

Draw a colorful scenery or cartoon using Krita tools:

- Brush Tool
- Fill Tool
- Shapes Tool
- Text Tool

Paste or print the drawing in your notebook/file.

Activity 3: Excel Practice

Create a worksheet showing marks of 5 students in:

- English
- Maths
- Science
- Computer

Apply:

- Sorting
- Filtering
- Charts

Use formulas:

=SUM (B2:E2)

=AVERAGE (B2:E2)

=MAX (B2:E2)

Section G – Creative Homework

1. Make a chart showing different app components and their functions.
2. Prepare a poster on “Digital Art with Krita”.
3. Draw any one Excel chart neatly in your notebook.
4. Write 10 advantages of using Excel in daily life.

Section H -Book Exercise

1. Do fill exercise chapter 3 to 5.
2. Learn question answer chapter 1 and 2.

Mathematics

Theme: “Math Around Us – Creative, Logical & Fun Learning”

Instructions

Complete work neatly with colors and creativity.

Include diagrams, charts, and handmade models wherever required.

Submit with a decorated cover page.

Section A – Number System Activities

1. Number System Chart Work

Prepare a colorful chart showing:

• Natural Numbers

• Whole Numbers

• Integers

• Rational Numbers

Include definitions, examples, number line representation, and real-life examples.

Creative Idea: Use different colors and arrows to connect the types of numbers.

2. Decimal Expansion Activity

Write decimal expansion of: 1/2, 3/4, 7/8, 5/16, 9/20

Bonus Task: Find 5 decimal numbers used in daily life.

Draw number lines and represent: 2.3, 4.7, 6.25, 8.09, 9.99

Use proper markings up to two decimal places.

Section B – Arithmetic Creativity

4. Creative Chitti Activity

Make a foldable paper Math Chitti containing multiplication tricks.

5. Handy Hundred

Prepare a 10×10 number grid from 1–100.

Mark prime numbers in red, multiples of 2 in blue, multiples of 5 in green, and perfect squares in yellow.

Write observations about patterns.

6. Thoughtful Thousand

Write 10 interesting facts about numbers between 1 and 1000.

Find the largest 3-digit prime number, smallest perfect cube, and numbers divisible by both 3 and 9.

Section C – Algebraic Expressions

7. Variables and Constants Hunt

Find examples of variables and constants from daily life.

Make a table with situation, variable, and constant.

8. Addition and Subtraction of Algebraic Expressions

Solve:

$(3x + 5y) + (2x – 4y)$

$(7a – 2b) – (3a + b)$

$(9m + 6n) + (5m – 2n)$

$(12p – 7q) – (4p + 3q)$

9. Matchstick Algebra Model

Create algebraic expressions using matchsticks or ice-cream sticks.

Section D – Logical Thinking & Fun Math

10. Sudoku Challenge

Solve any 2 Sudoku puzzles and paste them.

11. Magic Square Activity

Create a 3×3 magic square where every row, column, and diagonal has the same sum.

Section E – Model Work

Choose any ONE model:

• Decimal Place Value Machine

• Number Line Rope Model

• Algebra Balance Model

Teacher's Remarks

_____

"Mathematics is not only about numbers, it is about understanding patterns and thinking creatively."

English

Theme: "Fun with English – Learn by Doing!"

Rules: Use simple words. Write neatly.

Q1. "My Summer Diary" – Diary Entries

Write 5 diary entries, 50-60 words each. One for each week. Use past tense.

Topics:

- A new game I learned
- A helping day
- A funny moment
- A rainy day
- My summer dream

Submit small handmade diary

Q2. "Grammar from News" – Newspaper Cuttings

Collect 10 cuttings. Find: 4 Action Verbs, 3 Describing Words, 3 Naming Words. Paste on a chart paper. Underline the word. Write your own sentence below each.

Submit the chart paper..

Q3. "Tense Clock" – Tenses with Structures + Sentences

Draw a big clock on a chart paper . 12 numbers = 12 tenses. For each number write: Name + Structure + 1 sentence about your day.

Ex: At 3 = Past Continuous → I was eating mangoes.

Make it fun: Add clock hands with paper.

Submit the chart paper.

Q4. “Word Ladder” – 50 Synonyms + 50 Antonyms

Draw a ladder on a chat paper. Left side steps = 50 words + Synonym. Right side = 50 words + Antonym. Use easy words:

Synonyms

happy-joyful

fast-quick

Antonyms

big-small

cold-hot

Make it fun: Color each step.

Submit the chart paper.

Q5. “My Word Dictionary” – Vocabulary

Find 20 new words this summer. Make mini-dictionary: Word | Meaning in easy words | Your sentence. Group: 10 Nouns, 5 Verbs, 5 Adjectives.

Q6. “Many or Much Jar” – Countable/Uncountable Nouns

Draw 2 jars.

Jar 1 = Countable: 3 mangoes, 4 books.

Jar 2 = Uncountable: milk, sugar.

Write 5 examples each. Below write rule: “We say many mangoes but much milk”.

Make Fun: Stick some real rice on “rice” word.

Social Science

Theme: Landscapes, Legends, and Livelihoods

Project 1: Geographical Diversity of India (Geography)

Activity Type: Travel Brochure Design & Geographical Analysis

Task: "The Incredible India Travel Agency"

Imagine you own a premium travel agency, and you need to pitch a 3-day travel itinerary to tourists exploring India's contrasting landscapes.

Step 1: Take an A4 sheet and fold it twice to create a **tri-fold travel brochure**.

Step 2: Choose **two contrasting regions** of India from your chapter (e.g., The Cold Desert of Ladakh vs. The Hot Desert of Thar, OR The Northern Plains vs. The Coastal Plains).

Step 3 (Creative Artwork): Decorate the cover page with a catchy title (e.g., *"Peaks to Plateaus: Discover India"*), hand-drawn sketches, or cut-outs representing these landforms.

Written Work: Inside the brochure, write a brief guide for tourists visiting these two regions:

Climate & Clothing: What kind of weather will they face, and what should they pack?

Flora and Fauna: Name two unique plants and two unique animals they might spot there.

Human Adaptation: Write a short paragraph (4–5 lines) explaining how the local people have adapted their housing and food habits to survive in that specific geography.

Project 2: New Beginning: Cities and States (History)

Activity Type: Poster Making & Architectural Journalism

Task: "Chronicles of a Medieval Kingdom"

During the early medieval period, India saw the rise of magnificent new dynasties, massive forts, and bustling urban trade centres (like the Cholas, Rajputs, or Delhi Sultanate).

Part A: Poster Making – "The Royal Proclamation"

On a chart paper (A3 or standard size), design a royal poster or "Farman" (decree) from a king of any medieval city/state studied in your chapter.

Give your poster an antique look by lightly staining the edges of the paper with a damp tea bag or coffee water and letting it dry.

Draw the grand gateway of a fort or a temple from that dynasty at the centre.

Write a catchy royal slogan celebrating the king's conquests or administrative reforms.

Part B: Investigative Report (Written Work)

Imagine you are a foreign traveler (like Ibn Battuta or Marco Polo) visiting a newly flourishing medieval Indian city. Write a letter back to your homeland in your notebook covering:

The strategic reason why this city was built near a river or a trade route.

A description of the local markets—what unique goods are being bought and sold?

The role of temples or fortifications in keeping the city powerful.

Project 3: From Barter to Money (Civics / Economics)

Activity Type: Experiential Game & Debate Preparation

Task A: The Summer "Double Coincidence" Experiment

The Activity: Try to live the "Barter System" life at home for just one afternoon! Take 3 items you own but don't need immediately (e.g., an old comic book, a duplicate sketch pen, an extra sharpener).

The Challenge: Try to trade these items with your siblings, cousins, or parents for something you actually want *without using any pocket money*.

Written Work: In your notebook, document your experiment:

What items did you try to trade? Did you succeed?

What difficulties did you face? Did you encounter the problem of **"Double Coincidence of Wants"** (where the other person didn't want what you had to offer)?

Write down **three major reasons** why early humans shifted from coins made of precious metals (gold/silver) to modern paper currency and digital wallets.

Task B: Debate Preparation (Speaking Skills)

Prepare strong talking points for an upcoming classroom debate.

Motion: *"A Cashless Society: Is a completely digital economy better than using physical paper notes and coins?"*

Instructions: In your notebook, prepare arguments for both sides so you are ready for any position:

Write **3 points FOR** the motion (Benefits of digital money like UPI, cards, convenience, safety).

Write **3 points AGAINST** the motion (Problems like internet issues, cyber fraud, difficulty for poor people or elders who cannot use smartphones)

Task: Build a 3D Topographical Diorama

Instead of just drawing India's diverse landforms, build a miniature 3D cross-section of India's geography inside a recycled shoebox or on a thick piece of cardboard.

How to Build It:

Use clay, playdough, paper-mâché, or layers of stacked cardboard to create the physical relief features of India.

The Features: Show the dramatic drop from the high, jagged Himalayan Peaks (Northern Mountains) down into the flat Northern Plains, sloping into the uneven Deccan Plateau, and meeting the Coastal Plains.

Color Coding: Paint or color your model using traditional geographic colors: Brown for mountains, green for plains, yellow/orange for plateaus, and blue for rivers cutting through them.

The Interactive Element: Use toothpicks and small paper flags to create 3D labels for key geographical landmarks (e.g., The Thar Desert, Mt. K2, River Ganga, Eastern Ghats).

Or

Task: Reconstruct a Medieval Fortification Gate or Temple Complex

Medieval Indian cities and states were famous for their strategic architecture. You will act as a medieval chief architect and build a 3D scale model of a historical structure.

How to Build It:

Use recycled materials like empty cardboard boxes (juice cartons, toothpaste boxes), popsicle sticks, paper cups, and acrylic paints.

Choose one structure typical of early medieval dynasties:

A Rajput/Sultanate Fort Gate: Complete with defensive battlements, watchtowers, and a grand archway.

A Chola Temple Structure: Build a multi-layered, stepped Vimana (the main tower of the temple) using stacked, decreasing sizes of cardboard boxes.

The Written Element: Paste an index card at the base of your 3D model explaining two defensive or architectural features of your structure (e.g., “The thick walls and narrow windows allowed soldiers to shoot arrows while remaining safe from enemies”)

Or

3D Option for Civics/Economics: “The Museum of Money”

Replaces or adds to: The Barter System Experiment (From Barter to Money)

Task: Sculpt the Evolution of Currency

Create a 3D timeline display showing how human beings shifted from physical goods to standardized money.

How to Build It:

Take a sturdy base (like a wooden board or a stiff piece of cardboard cut from a delivery box).

Sculpt or gather 3D replicas representing 4 major stages of money:

The Barter Era: Sculpt a small fish, a sack of grain, or a cowrie shell out of clay.

The Metallic Coin Era: Use clay or foil-wrapped cardboard circles to create ancient, irregular punch-marked coins with historical symbols stamped onto them.

The Royal Mint Era: Design a detailed, perfectly round medieval gold/silver coin with an inscription or a king’s face engraved using a toothpick on air-dry clay.

The Modern Era: Design your own futuristic 3D “Smart Token” or a stylized plastic card representing digital/crypto currency.

The Interactive Element: Arrange them chronologically on your board and use thread or twine to connect the 3D items, showing the physical transformation of wealth over thousands of years.