



SUMMER LEARNING PORTFOLIO

Academic Session: 2024-25

Class VII

**Fazaia Teachers' Training Institute
PAF Complex, E-9, Islamabad**

May, 2024

FAZAIA SCHOOLS AND COLLEGES

GUIDELINES FOR SUMMER LEARNING PORTFOLIO

SESSION 2024-25

Dear Parents/Guardians and Students,

The summer vacation homework has been planned keeping in view the age of the students. All tasks are to be performed individually and independently by the students. However, parents are requested to supervise their kids to ensure their safety. Read the following instructions carefully before starting the homework:

- The assignments of all subjects may please be maintained in separate learning portfolios for each subject. The students may use loose sheets, notebooks or register to submit solved learning portfolios.
- The institution's name, student's name, roll number and grade should be clearly labelled on the learning portfolio.
- The cover or title page of the portfolio is to be designed by students creatively representing their own choices and preferences. They may paste, draw or colour to make it more unique and attractive.
- All questions can be copied from the learning portfolio questionnaire in the answer book or sheet before answering. However, tasks like puzzles and pictures may be cut and pasted or drawn in the answer book before answering.
- The students are required to put date and day daily.
- All pages must be numbered consecutively from the title page.
- Homework should be completed neatly and legibly.
- Make sure all tasks are done according to the given instructions and completed on time.
- The hard copy of the summer vacation homework should be submitted to the class teachers on the first day of school.
- Late or incomplete learning portfolios will not be entertained.

Note: These guidelines are meant to describe general homework practices. Individual teachers are a source of more guidance and support. Please contact your child's teacher if you have any questions or concerns.

فضائیہ سکولز اینڈ کالجز
لرننگ پورٹ فولیو/چھٹیوں کا کام
سیشن۔ (2024-25)

محترم والدین/سرپرست اور طلباء۔

لرننگ پورٹ فولیو/ہوم ورک کی تشکیل طلباء کی عمر کو مد نظر رکھتے ہوئے کی گئی ہے۔ طلباء تمام کام کو انفرادی اور آزادانہ طور پر انجام دیں گے۔ تاہم، والدین سے گزارش ہے کہ وہ اپنے بچوں کی حفاظت کو یقینی بنانے کے لئے ان کی نگرانی کریں۔ ہوم ورک شروع کرنے سے پہلے درج ذیل ہدایات احتیاط سے پڑھیں:

- لرننگ پورٹ فولیو/ہوم ورک کو بہترین انداز میں حل کریں۔
- براہ کرم تمام مضامین کا کام پورٹ فولیو میں علیحدہ علیحدہ مضمون کے تحت کیا جائے۔ اس کے لیے ہر مضمون کے لیے الگ صفحے مختص کیے جائیں۔ صفحوں کو پورٹ فولیو یا رجسٹر میں ایک صفحے کو تھکون میں موڑ کر کیا جاسکتا ہے۔ کھلے صفحے کے لیے فائل میں ایک الگ صفحہ اور مضمون کا اندارج کیا جاسکتا ہے۔ طلباء حل شدہ لرننگ پورٹ فولیوز کے حل اور اسے جمع کروانے کیلئے کھلے پیپر، پورٹ فولیو یا رجسٹر استعمال کر سکتے ہیں۔
- ادارے کا نام، طالب علم کا نام، رول نمبر اور گریڈ واضح طور پر لرننگ پورٹ فولیو، چھٹیوں کا کام پر تحریر کریں۔
- پورٹ فولیو کا سرورق، عنوان صفحہ (Title Page) طلباء تخلیقی طور پر اپنے انتخاب اور ترجیحات کو مد نظر رکھتے ہوئے تیار کریں گے۔ وہ اسے دلکش اور پرکشش بنانے کے لئے اس کے اوپر ڈرائنگ کر سکتے ہیں، رنگ بھر سکتے ہیں یا کوئی تصویر چسپاں کر سکتے ہیں۔
- جوابات دینے سے پہلے سبھی سوالات کو لرننگ پورٹ فولیو میں مہیا کردہ سوالنامے سے جوابی کاپی یا شیٹ میں نقل کیا جاسکتا ہے۔ تاہم پہیلیاں اور تصاویر جیسے کام کو طلبہ کاٹ کر یا خود ڈرائنگ کر کے جوابی کاپی چسپاں یا تیار کر سکتے ہیں۔
- طلبہ اپنے ہوم ورک پر روزانہ کی بنیاد پر تاریخ اور دن ضرور لکھیں۔
- طلبہ تمام صفحات پر (عنوان صفحہ سے آخر تک) صفحہ نمبرز ترتیب کے ساتھ لکھیں۔
- ہوم ورک کو خوشخط اور بہترین انداز میں مکمل کریں۔
- تمام کام دی گئی ہدایات کے مطابق وقت پر مکمل کریں۔
- موسم گرما کی چھٹیوں کا کام مکمل کر کے اسکول کھلنے کے بعد پہلے ہی دن اپنے اساتذہ کو جمع کروائیں۔
- نامکمل یا دیر سے جمع کروائے گئے چھٹیوں کے کام کو اساتذہ نہیں جمع کریں گے۔

نوٹ: مندرجہ بالا ہدایات ہوم ورک سرانجام دینے کے عمومی طریقوں پر مشتمل ہیں۔ انفرادی طور پر متعلقہ اساتذہ اکرام بہترین معاون و مددگار ہیں۔ اگر بچوں کے ہوم ورک کے حوالے سے آپ کے کوئی سوالات ہیں تو براہ کرم اپنے بچے کے اساتذہ سے رابطہ کریں۔

اسلامیات

- ۱۔ قرآن مجید میں سے حضرت ابراہیم علیہم السلام اور حضرت موسیٰ علیہم السلام کے قصص پر مبنی مختلف سورتیں تلاوت کریں۔ ان کا ترجمہ پڑھیں۔
- ۲۔ سورۃ التین، سورۃ العلق اور سورۃ القدر کو حفظ کریں۔ نماز اور نماز کے علاوہ زبانی تلاوت کریں۔
- ۳۔ حضرت نوح علیہم السلام کی دعا رَبِّ اغْفِرْ لِيْ وَ لِوَالِدَيَّ وَ لِمَنْ دَخَلَ بَيْتِيْ مُؤْمِنًا وَ لِلْمُؤْمِنِيْنَ وَ الْمُؤْمِنَاتِ وَ لَا تَزِدِ الظَّالِمِيْنَ اِلَّا تَبَارًا (۲۸)۔ اے میرے رب! مجھے اور میرے والدین کو بخش دے اور ہر اس شخص کو جو میرے گھر میں مومن ہو کر داخل ہوا اور (سب) مومن مردوں اور (سب) مومن عورتوں کو بھی اور ظالموں کی ہلاکت ہی میں اضافہ کر۔ یہ دعا یاد کریں اور زبانی پڑھیں۔
- ۴۔ ختم نبوت کے موضوع پر ایک آیت اور دو مستند احادیث مع ترجمہ لکھیں۔ ایک پیرا گراف لکھیں کہ ختم نبوت کے عقیدے کی کیا اہمیت ہے اور اس کے کیا تقاضے ہیں۔
- ۵۔ فرشتوں کے ناموں اور ذمہ داریوں کی فہرست بنائیں۔ اور پورٹ فولیو میں لکھیں۔

اُردو

- ۱۔ انٹرنیٹ یا قریبی بک شاپ سے خرید کر کوئی سی دس کہانیاں پڑھیں۔ کہانیاں پڑھنے کے بعد کوئی سی تین کہانیوں کو پورٹ فولیو پر اپنے الفاظ میں تحریر کریں۔ کہانیاں پڑھنے کے لیے اس لنک کو بھی استعمال کر سکتے ہیں:
- https://drive.google.com/file/d/1LlOSdL4SRHy-KAFWYfZyRUpt287fafiR/view?usp=drive_link
- ۲۔ اپنی اردو کی کتاب میں سے حمد، نعت، طب نبوی ﷺ، بابائے اردو مولوی عبدالحق، برسات کی بہاریں (نظم)، آؤ بچو سیر کرائیں تم کو پاکستان کی کیڑی چھائی کریں اور مشقی سوالات حل کرنے کی کوشش کریں۔
- ۳۔ "اردو زبان، ہماری پہچان"، "پاکستان میں موسم برسات اور مون سون"، "اور" سوشل میڈیا کا بڑھتا ہوا استعمال اور اس کے اثرات " ان عنوانات پر ۲۰۰ الفاظ کے مضامین تحریر کریں۔
- ۴۔ پورٹ فولیو پر علامہ اقبال کے کچھ اشعار اور ان کا مفہوم خوشخط کر کے لکھیں۔

ENGLISH

Task 1 – Reading and Writing (do any four)

- **Book Reading.** Select a book of your choice from the nearest library or download it from the internet. Read ten pages each day.
- After reading the book, write a short summary telling the theme, characters, plot, settings of the book, new ideas mentioned in the book and why do you like it.
- **Newspaper Article Reading.** Choose a newspaper article from a reliable source (newspaper or e-paper) and read it. Write down 20 new vocabulary words you learned from the article. Look for their meanings in dictionary and use each one in sentences.
- **Root Words and Derivatives.** Look for the root words of the vocabulary words you selected from the newspaper article using your dictionary. Write two derivatives / derived words from the root words. Derivatives are formed by adding prefixes, suffixes or making changes to the base or root word, resulting in new words with related meanings or different grammatical forms. Example is given below:

Root word	Associate Words
Care	Careful (adjective) Caring (adjective) Caretaker (noun) Carefully (adverb)

- **Reading a Poem.** Read a poem from a magazine, book or website and write a paragraph describing the theme of the poem and its rhyme scheme.
- **Descriptive Writing.** Describe your favourite fictional character from a book, movie, or TV show. Include details about their appearance, personality and memorable traits.
- **Imaginative Writing.** Write a short story about a magical object that grants wishes. Describe how the object is discovered, the wishes that are made, and the consequences of those wishes.
- **Letter Writing.** Write a letter to your favourite author, expressing your admiration for their work and asking them questions about their writing process or a specific book.

Task 2 – Grammar (do any four)

- **Punctuation.** Write a short paragraph on any topic without any punctuation marks. Then, revise the paragraph and add appropriate punctuation marks (commas, periods, question marks, etc.) where needed.
- **Main and Auxiliary Verbs.** Write a paragraph describing your daily routine using both main verbs and auxiliary verbs. Highlight the auxiliary verbs used in the paragraph.

- **Articles.** Read a short passage from the book you have selected and identify all the instances where articles (a, an, the) are used. Rewrite the passage without the articles and see how the meaning changes.
- **Pronouns.** Create a dialogue between two characters, where one character uses singular pronoun, and the other character uses plural pronouns. Pay attention to subject pronouns, object pronouns, and possessive pronouns.
- **Phrasal Verbs.** While writing dialogue, use at least five phrasal verbs. At the end of the dialogue, write the phrasal verbs with their meanings as used in the dialogue.
- **Phrases and Clauses.** Select a paragraph from the book/ newspaper article you read; identify and underline phrases and clauses in a given paragraph. Then, rewrite the paragraph, separating the phrases and clauses to understand their roles in the sentences.
- **Simile and Metaphor.** Write three sentences, one using a metaphor, one using a simile, and one using neither. Explain the meaning behind the metaphor and simile you created.

MATHEMATICS

Task 1

- i. Find the power set for the following sets (Write 3 examples of each)
 - a) Two sets A & B both having any 2 elements
 - b) Two sets A & B both having any 3 elements
 - c) Two sets A & B both having any 4 elements
- ii. If $A = \{b, c, d, e, f\}$, $B = \{a, e, i, o, u\}$, $U = \{a, b, c, d, e, f, g, h, i, j, k, l, o, u, v, z\}$. Perform the following operations on sets and find the solutions.
 - a) $A \cup B$
 - b) $A \cap B$
 - c) A'
 - d) $A - B$
- iii. Form sets A, B & U by yourselves. Verify De Morgan's laws (form at least 5 different examples).
 - a) $(A \cup B)' = A' \cap B'$
 - b) $(A \cap B)' = A' \cup B'$
- iv. Prove the following properties for any three sets $A \cap (B \cup C) = (A \cap B) \cup (A \cap C)$ and $A \cup (B \cap C) = (A \cup B) \cap (A \cup C)$

Task 2 – Represent each of the negative rational numbers on the number line.

- | | |
|----------------|-----------------|
| i. $(-5)/7$ | v. $(-3)/12$ |
| ii. $(-2)/5$ | vi. $-3/8$ |
| iii. $(-4)/5$ | vii. $22/(-51)$ |
| iv. $(-13)/32$ | |

Task 3 – Add:

- i. $3/4 + 1/4$
- ii. $2/3 + 1/3$
- iii. $5/6 + 2/6$
- iv. $7/8 + 1/8$
- v. $4/5 + 3/5$

Task 4 – Simplify the following fractions:

- i. $1/2 - 3/8 + 1/2$
- ii. $2/3 + 1/6 - 3/5$
- iii. $5/4 - 3/2$
- iv. $7/6 + 1/3$
- v. $4/7 + 2/7$

Task 5 – Solve the word problems:

- Lisa drank $\frac{3}{8}$ liter of orange juice and then drank $\frac{1}{4}$ liter of apple juice. How much juice did she drink in total?
- A recipe requires $\frac{2}{3}$ cup of flour and $\frac{1}{6}$ cup of sugar. How much flour and sugar is needed in total?
- John ran $\frac{5}{6}$ of a mile and then ran an additional $\frac{2}{3}$ of a mile. How far did he run in total?

Task 6 – Find squares of the following numbers:

- | | | | |
|------|----|-----|----|
| i. | 21 | iv. | 30 |
| ii. | 15 | v. | 14 |
| iii. | 12 | vi. | 13 |

Task 7 – Find the square roots of the following decimal numbers:

- (a) 1056.25 (b) 10020.01

Task 8 – Evaluate the following:

- (a) $\sqrt{169}$ (b) $\sqrt{3364}$
(c) $\sqrt{15625}$ (d) $\sqrt{7569}$
(e) $\sqrt{98596}$

GENERAL SCIENCE

Note: Complete any two of the three assigned tasks. All tasks are to be performed individually and independently. Parents are requested to supervise their kids for safety.

Task 1 – Seed Germination Investigation

- The students are to investigate the process of seed germination during their summer vacation.
- They will select different types of seeds, such as beans, peas, or sunflower seeds.
- Encourage students to set up a germination experiment by placing the seeds in different conditions, such as light vs. dark, or wet vs. dry. Moreover, they need to pot the same seed in more than one pots.
- They should observe and document the changes that occur over time, including the emergence of roots and shoots.

Task 2 – Heart Rate Investigation

- Students will investigate their heart rate during different physical activities.
- They will measure their resting heart rate and then record their heart rate after performing activities such as walking, running, or jumping.
- They are to compare and analyse their heart rate data, noting any changes based on activity intensity.
- They will explain the relationship between heart rate and physical activity.

Task 3 – Infectious Disease Investigation

- The students are to investigate an infectious disease.
- They will choose a specific infectious disease, such as the flu, common cold, or COVID-19, and research its causes, symptoms, and preventive measures.
- Students are to create informative posters or presentations about the disease, including its transmission methods and ways to protect oneself from infection.
- They will explain the importance of personal hygiene and vaccination in preventing the spread of infectious diseases.
- Following the summer vacation, the students will be given an opportunity to present their findings to the class or organize an "Infectious Disease Awareness Campaign" where they can share their posters or presentations with their peers.

COMPUTER SCIENCE

Tasks – Research on Emerging Technologies

- a.** Identify and select any six emerging technologies from the given list:
 - Biometrics
 - Open-source software
 - Robotics and its four different types
 - Artificial Intelligence (AI)
 - 3D Printing,
 - Virtual Reality (VR)
 - Augmented Reality
 - 3D Holograms
- b.** For each selected technology, create MS Word document and write a brief description, working mechanism and explanation on how these emerging technologies are used in various walks of life.
- c.** Create a visually appealing presentation (PPT) highlighting the research findings.
- d.** Include images, diagrams, or videos to illustrate the emerging technologies and associated hardware components

GEOGRAPHY

Note: Complete any two of the three assigned tasks. All tasks are to be performed individually and independently.

Task 1 – Water Cycle Poster

Create an informative and visually appealing poster about the water cycle. Include the following elements in your poster:

- Clear and labeled illustrations or diagrams depicting each stage of the water cycle (evaporation, condensation, precipitation, and collection).
- Brief explanations or captions for each stage to describe the processes involved.
- Additional information about the importance of the water cycle for the Earth's ecosystems and human life.
- Examples of different types of precipitation (rain, snow, hail) and their characteristics.
- Use colors, images, and fonts that are easy to read and eye-catching.
- Consider adding arrows or connecting lines to show the continuous flow of water throughout the cycle.

Task 2 – Landforms around the World (Brochure)

Choose a specific landform (e.g., mountains, valleys, plateaus) found in a country of your choice. Research and gather information about the landform, including its characteristics, formation process, and notable examples from around the world. Design a brochure that highlights the chosen landform, providing interesting facts, key features, and photographs or illustrations. Include a map showing the location of the landform and its surrounding areas. Write descriptive paragraphs that capture the uniqueness and significance of the landform. Use appealing colors, fonts, and images to make your brochure visually appealing. Print or create a digital version of the brochure to share with your classmates or present it to your teacher after the summer break.

Task 3 – Mapping Natural Disasters

Choose a specific natural disaster (e.g., earthquake, flood, hurricane) and research its occurrence in different parts of the world. Create a world map or use an online mapping tool to mark the locations where the chosen natural disaster has occurred. Include additional information about each marked location, such as the date, magnitude, and impact of the natural disaster. Enhance your map with color-coded symbols or icons to represent the severity or frequency of natural disasters. Present your mapped natural disasters to your classmates or teacher after the summer break.

Task 4 – Using GPS and Google Maps

Use GPS and Google Maps to plan a virtual trip to a city or country of your choice. Research your chosen destination to gather information about popular attractions, landmarks, and cultural sites. Create an itinerary for your virtual trip, including the locations you would like to visit and the activities you would engage in. Use GPS coordinates and Google Maps to plot the route between different attractions on your itinerary. Write a detailed description for each location, highlighting its significance and what you find interesting about it.

HISTORY

Note: Complete any three of the five assigned tasks. All tasks are to be performed individually and independently.

Task 1 – Constructing Timeline

Research the major events and developments during the Middle Ages in Europe. Create a timeline presenting these significant events; the fall of the Western Roman Empire, the rise of feudalism, the Crusades and the Renaissance. Include brief descriptions and dates for each event. Use an online tool, such as Canva or PowerPoint to create a timeline.

Task 2 – Collage Making

Pakistan is home to several UNESCO World Heritage Sites. Research these sites and name the UNESCO World Heritage Sites located in Pakistan. Virtually visit any one of the heritage sites and use the virtual tour to create a collage of the site you have visited.

Task 3 – Poster Making

Explore and create a poster of inventions, discoveries and specific contributions by following Muslim scholars/ scientists.

- (a) Al-Khwarizmi's contributions to Mathematics
- (b) Al-Razi's contributions to medicine
- (c) Jabir bin Hayyan's contributions to Chemistry.

Task 4 – Map Marking

Create a map that shows the territorial expansion of the Abbasid Dynasty that ruled from 750 to 1258 CE. Mark the capital cities of the Abbasid Dynasty and identify key regions and cities that were under Abbasid control.

Task 5 – Compare and Contrast

Create a Venn diagram to highlight the similarities and differences between the Abbasid Caliphate and Ottoman Empire. Research and compare the political structure, cultural achievements and governance of these empires.