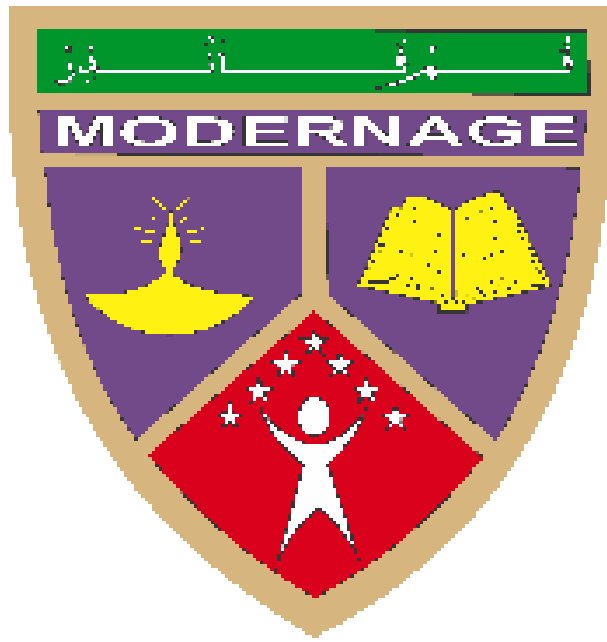


Modernage Public School & College,
Pakistan



Summer Vacation Homework

Session	2026-27
Grade	Ten
Web page	www.maps.edu.pk

Dear Parents,

The moment children finish their First Term Exams, the most exciting and much awaited time of the school year i.e., the summer vacation starts the very next day.

Summer Vacations are greeted with joy by kids and are of course a time to reinvigorate and revive. However, a balance between recreation and work must be found to ensure a break that is productive as well as relaxing. As the school closes for the summer break, we have planned some activities / projects for your children to enhance their learning skills in a fun filled way. We have tried to make the work enjoyable keeping in mind the interest of the children, so that they are engaged positively and their energies are well-directed. Mentioned below tips will not only help your child stay organized but will also make your vacation fun-filled and interesting.

Tips for Parents

There are many ways to support your child's learning by providing opportunities for reading, writing, speaking and listening while on vacation. Family discussions, word games, trips to a local bookstore or library to choose books, visiting museums and other interesting places are all fun ways to involve your child in literacy activities over the summer. As a parent, you must also promote physical activity, improve coordination, and teach good sportsmanship.

HOLIDAYS HOMEWORK FOLDER: Attempt all the activities/projects given in the Summer Vacation Task. Help your child make an attractive, handmade folder with old newspapers or charts. Decorate it and compile all the holiday homework in it. Looking forward to your cooperation.

Modernage wishes all of you happy and healthy Summer Vacation!

Summer Vacations are starting from 28th June to 27th July 2025.

School will reopen on 28th July 2025.

Follow these daily routines & Essential Values:

1. Listen when someone else is speaking.
2. Wake up early in the morning and offer prayer regularly and recite Holy Quran.
3. Take a bath daily.
4. Sweep or vacuum your room.
5. Help your mother lay out the table for meals.
6. Eat healthy food including fruits, vegetables, whole grains & drink plenty of water throughout the day to stay hydrated.
7. Wash your hands before taking food.
8. Treat others with respect.

9. Use a napkin and try not make a mess at meal times.
10. Schedule exercise or a walk for at least half an hour every day to become physically fit, strong & health.
11. Be the first to extend your greetings.
12. Limit screen time & promote outdoor activities.

1. English

Q1. Comprehend the following passage and answers the questions appended to it.

Passage:

The morning sun filtered through the thick branches of the old oak trees, casting golden patches of light on the forest floor. Dew still clung to the blades of grass, sparkling like tiny diamonds. Birds chirped cheerfully from the treetops, filling the air with their sweet melodies. A gentle breeze rustled the leaves, carrying with it the fresh scent of wildflowers and damp earth.

In the distance, a narrow stream flowed quietly, its crystal-clear water reflecting the blue of the sky. A rabbit hopped cautiously from behind a bush, its ears alert and eyes watchful. Nature had fully awakened, and the forest was alive with soft movements and harmonious sounds. It was a perfect morning—peaceful, fresh, and full of promise.

Questions:

1. What kind of trees are mentioned in the passage?
 2. What time of day is being described in the passage?
 3. Write a sentence using the word “filtered” in your own context.
 4. How does the author use sensory details to describe the forest?
 5. Imagine you were in the forest. Write two more sentences to continue the description.
 6. Do you think the forest in the passage is a safe place? Why or why not?
 7. What does the phrase “sparkling like tiny diamonds” suggest about the dew?
 8. Identify two adjectives and two adverbs used in the passage.
 9. What can you infer about the atmosphere of the forest from the details given?
 10. How does the author structure the paragraph to describe the scene?
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Q2. Comprehend the following stanza and answers the questions appended to it.

Stanza:

*The sky is lit with golden fire,
As day breaks on the hill.
The birds awake with songs so sweet,
The world is calm and still.*

Comprehension Questions:

1. What time of day is described in the stanza?
2. What lights up the sky according to the poet?
3. Which two natural elements are mentioned in the stanza?
4. How do the birds behave in the morning?
5. What is the mood or feeling of the scene described in the stanza?
6. Find two adjectives used in the stanza.

7. What do the words “calm and still” suggest about the environment?
8. Can you think of another title for this stanza?
9. What poetic device is used in the line “The sky is lit with golden fire”?
10. Write your own two-line stanza to describe the morning.

Q3. Write an essay of 250 words on one of the following:

- My Uncle’s Characteristics
- My after-school routine.

Q4. Write a dialogue of at least 12 lines between two friends who met after a long time.

Q5. Write five assertive, five interrogative and five imperative statements in direct speech and convert them to indirect speech.

2. Biology

1. Identify and list the causes and symptoms of bronchitis, asthma, emphysema, pneumonia, and lung cancer.
2. “It is not as if one species is eliminated to give rise to a new one, “justify the statement.
3. Explain the functions of the nasal cavity, pharynx, glottis, and trachea in the human respiratory system.
4. What is the role of bacteria and fungi in an ecosystem?
5. What are the problems caused by the non-biodegradable waste that we generate?
6. Food chains generally consist of only 3 or 4 trophic levels. Why is it so?
7. Reasoning-based question: -
 - a) Define and classify different types of excretion in plants with suitable examples
 - b) Compare and contrast hemodialysis and peritoneal dialysis in terms of process and effectiveness.
 - c) Describe and label the structure of the lungs with the help of a diagram.
8. Explain the role of kidneys in controlling the composition of urine.
9. Construct 20 MCQs from the topics: eye, brain, and ear to assess conceptual understanding.
10. Explain the importance of chemical coordination in the human body?

3. Computer

MCQs

1. Which of the following best describes an algorithm?
 - a) A programming language
 - b) A step-by-step procedure for solving a problem
 - c) A software application
 - d) A hardware component
2. Symbol is used to represent the start and end of a flowchart?
 - a) Rectangle
 - b) Diamond
 - c) Oval
 - d) Parallelogram
3. In a flowchart, what does a diamond shape represent?
 - a) Start/End
 - b) Process
 - c) Decision
 - d) Input/Output

4. Which of the following is NOT a characteristic of a good algorithm?
 - a) Finiteness
 - b) Unambiguity
 - c) Efficiency
 - d) Complexity
5. In a flowchart, which shape is used to represent a process or instruction?
 - a) Rectangle
 - b) Diamond
 - c) Oval
 - d) Parallelogram
6. Which of the following best describes a flowchart?
 - a) A textual description of a process
 - b) A graphical representation of the steps in a process
 - c) A type of algorithm
 - d) A coding language
7. does the parallelogram symbol in a flowchart indicate?
 - a) Process
 - b) Decision
 - c) Input/Output
 - d) Connector
8. Which of the following is true about algorithms?
 - a) They can only be written in programming languages.
 - b) They must always be written in a flowchart.
 - c) They can be expressed in natural language, pseudocode, or flowcharts.
 - d) They are used only in computer science.
9. What is the primary purpose of a flowchart in problem-solving?
 - a) To create a visual representation of a program's source code
 - b) To debug a program
 - c) To outline the sequence of actions to be taken to solve a problem
 - d) To compile a program
10. In a flowchart, how is the flow of control typically represented?
 - a) By using different colors for different paths
 - b) By using arrows to connect the symbols
 - c) By numbering the steps
 - d) By using different shapes for different paths
11. What is a computer program?
 - a) A type of hardware
 - b) A set of instructions that a computer follows to perform a task
 - c) A data storage device
 - d) A network protocol
12. Which of the following is an example of a high-level programming language?
 - a) Assembly
 - b) Machine code
 - c) Java
 - d) Binary
13. What does an Integrated Development Environment (IDE) typically include?
 - a) A text editor, debugger, and compiler
 - b) Only a text editor
 - c) A hardware component
 - d) A web browser
14. Which of the following is true about a compiler?

- a) It executes code line by line
 - b) It translates an entire program into machine code before executing it
 - c) It is used for network configuration
 - d) It is a type of operating system
15. What is the primary purpose of an algorithm within a computer program?
- a) To provide a graphical interface
 - b) To perform a specific task or solve a problem
 - c) To connect to the internet
 - d) To manage hardware resources

Questions

1. Explain the role of constants in programming. How do they differ from variables? Give an example of a constant used in a program.
 2. Imagine you are developing a new programming language. Discuss the factors you would consider when deciding whether to implement a compiler or an interpreter for this language. Provide examples of languages that use each approach and explain why that approach was chosen.
 3. Create a PowerPoint presentation explaining the relationship between flowcharts and algorithms in the context of computer programming.
 4. Explain the basic structure of a C program. Include the essential parts such as the `main` function, preprocessor directives, and comments. Provide an example of a simple C program and describe each part of its structure.
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4. Chemistry

Q no 1. Multiple choice questions:

- i. The boiling point of petrol is: A) below 20°C, B) 35-70°C, C) 70-120°C, D) 170-250°C
- ii. Which acid is present in tomato? A) Citric acid, B) Oxalic acid, C) Lactic acid, D) Hydrochloric acid
- iii. $\text{Na}_2\text{CO}_3 \cdot \text{H}_2\text{O}$ is known as: A) baking soda, B) baking powder, C) washing soda, D) bleaching powder.
- iv. The process in which metal ions are reduced to free metals is: A) smelting, B) roasting, C) bessemerization, D) concentration
- v. Which of the following organic base is not present in RNA? A) adenine, B) thymine, C) uracil, D) guanine
- vi. Aeroplanes fly in: A) troposphere, B) stratosphere, C) mesosphere, D) thermosphere
- vii. Which of the following is a primary pollutant? A) sulphuric acid, B) ammonia, C) carbonic acid, D) peroxy acetyl nitrate
- viii. Deforestation causes: A) greenhouse effects, C) air pollution, D) all of these
- ix. Cotton contains cellulose: A) 30%, B) 65%, C) 85%, D) 95%
- x. The first time the biochemistry was used by German chemist Carl Neuberg in: A) 1885, B) 1890, C) 1903, D) 1933

Q no 2. What do u mean by hardness of water? Describe its types and the methods of their removal:

Q no 3. How vitamins play a vital role in our daily life?

Q no 4. Derive the equation for law of mass action:

Q no 5. How will you differentiate between Arrhenius, Lowry-Bronsted and Lewis acids and bas concept?

Q no 6. How will you explain different types of functional groups with general formula?

Q no 7. How alkenes react with halogens, hydrogen, hydrogen halide, water, and oxidizing agent?

Q no 8. Balance and complete the following reaction:

- a) $\text{Na} + \text{HCl} \rightarrow$
- b) $\text{CaO} + \text{H}_2\text{SO}_4 \rightarrow$
- c) $\text{Na}_2\text{CO}_3 + \text{HNO}_3 \rightarrow$
- d) $\text{Fe} + \text{S} \rightarrow$
- e) $\text{Br}_2 + \text{H}_2 \rightarrow$
- f) $\text{CH}_4 + \text{O}_2 \rightarrow$

Q no 9. How urea can be prepared?

Q no 10. What are the causes of acid rain? Explain with chemical equations:

5. Mathematics

- I. Solve Ex:1.1 Q#1(i,iii) Q#2 (ii,iv) Q#3 (iii) Q#6
- II. Solve Ex:1.2 Q#1 (ii,iv,vii,ix)
- III. Solve Ex:1.3 Q#1,5,9.
- IV. Solve Ex:2.1 Q#1 (i,iii) Q#2 (ii), Q#3 (iii), Q#6,Q#7
- V. Solve Ex:2.2 Q#1,Q#2 (iii),Q#3 (ii),Q#4(i)
- VI. Solve Ex 2.3 Q#1, Q#3, Q5
- VII. Solve Ex 2.4 Q#1, Q2, Q#4

6. Physics

1. Write down all the Practical's on your notebook.

Writing process

- a) Experiment name
 - b) Apparatus
 - c) Procedure
 - d) Observation & calculation table on blank page
2. Solve the numerical and examples of first two chapters of Federal Board Book

کل نمبر 50

7- سبق: مطالعہ پاکستان

1. پرویز مشرف کی متعارف کردہ مقامی حکومت کے نظام کا تجزیہ کریں: اس نظام نے عام شہری کی سیاسی شمولیت پر کیا اثرات ڈالے؟
2. بینظیر بھٹو اور نواز شریف کی پالیسیوں کا تقابلی تجزیہ کریں: دونوں کی حکمت عملیوں نے پاکستان کی جمہوریت اور معیشت پر کیا دیرپا اثرات ڈالے؟
3. O.I.C اور سارک کی کارکردگی کا تنقیدی جائزہ لیں: دونوں تنظیموں نے اپنے مقاصد کے حصول میں کہاں کامیابی یا ناکامی حاصل کی؟
4. 1998 کے ایٹمی دھماکوں کے بعد پاکستان کی خارجہ پالیسی میں آنے والی تبدیلیوں کا تجزیہ کریں: کیا یہ تبدیلیاں قومی مفاد میں تھی؟

1. Analyze the structure of local governments introduced by Pervez Musharraf: How did this system impact political participation at the grassroots level?
2. Compare and contrast the leadership approaches of Benazir Bhutto and Nawaz Sharif. What long-term effects did their governance have on Pakistan's democracy and economy?
3. Critically evaluate the performance of OIC and SAARC: To what extent have these organizations achieved their stated goals?
4. Critically examine the changes in Pakistan's foreign policy after the 1998 nuclear tests. Were these changes effective in achieving long-term national objectives?
5. Write 50 MCQS from lesson number 1 and 2 on note book.

8. مضمون: اسلامیات۔ مطالعہ قرآن

- سوال نمبر 1۔ سورۃ الاحزاب اور غزوہ احزاب کا مکمل تعارف لکھیں۔
- سوال نمبر 2۔ غسل اور وضو کا مسنون طریقہ لکھیں۔
- سوال نمبر 3۔ احادیث کی اہمیت پر نوٹ لکھیں۔
- سوال نمبر 4۔ قصہ اصحاب کعبہ قرآن کی روشنی میں تحریر کریں۔
- سوال نمبر 5۔ واقعہ معراج کے بارے میں آپ کیا جانتے ہیں؟

9. مضمون: اردو

درج ذیل سوالات کے جوابات لکھیں۔

سوال نمبر 1. درج ذیل عنوانات پر مضمون لکھیں۔

قرآن پاک کے فضائل، پاکستان کی ثقافت، علامہ اقبال کا تصور خودی

سوال نمبر 2۔ جملہ اسمیہ کے پانچ جملے لکھ کر ان کی ترکیب نحوی کریں۔

سوال نمبر 3: علم بدیع کی تعریف اور مثالیں تحریر کریں۔

سوال نمبر 4: روزمرہ، محاورہ اور ضرب المثل کی تعریف اور مثالیں لکھیں۔

سوال نمبر 5: ذو معنی الفاظ کسے کہتے ہیں؟ کوئی سے پانچ ذو معنی الفاظ کے معنی لکھ کر جملے بنائیں۔