



MOUNT COLUMBUS SCHOOL
DAKSHINPURI, NEW DELHI-110019

CLASS- VII

WORKSHEET- APRIL

ENGLISH

A. Identify the Subject and Predicate. Write Subject (S) and Predicate (P) for each sentence.

1. The sun rises in the east.
2. My best friend lives in Delhi.
3. The children are playing in the park.
4. Riya baked a chocolate cake.
5. The old man walked slowly down the street.

B. Sentence Transformation-

Change the sentences from Affirmative to Negative:

1. She is always happy.
2. They like to eat pizza.

Change Assertive sentences to Interrogative:

1. You are coming to the party.
2. She knows the answer.

Change Exclamatory to Assertive:

1. What a beautiful painting!
2. How fast he runs!

C. Rewrite the given sentences using the appropriate transformation rules as instructed.

1. Change "too...to" to "so...that...not"

The box is too heavy to lift.

2. Use "not as...as" for comparative sentences

This car is faster than that one.

3. Use "no other" and "as...as" for superlatives

Mount Everest is the highest mountain in the world.

4. Change "always" to "never" and its adjective to the opposite

He always tells the truth.

5. Change "everyone" to "no one" and the adjective to its opposite

Everyone enjoyed the show.

हिंदी

प्रश्न 1. निम्नलिखित प्रश्नों के उत्तर लिखिए-

- (क) प्रार्थना कविता में कवि ईश्वर से क्या वरदान माँगता है?
- (ख) प्रार्थना कविता का मूल भाव क्या है?
- (ग) कवि प्रार्थना कविता में किस प्रकार के मार्ग पर चलने की कामना करता है?
- (घ) प्रार्थना कविता में कवि की क्या भावना है?
- (ङ) घोड़ा पाने के लिए खड़क सिंह ने क्या किया?
- (च) बाबा के वचनों को सुनकर खड़क सिंह ने क्या सोचा?
- (छ) भाषा द्वारा किसकी रक्षा होती है ?
- (ज) मधुर-भाषण और शिष्टाचार से किस-किस का पता चलता है ?

प्रश्न 2. निम्नलिखित प्रश्नों के उत्तर विकल्पों के माध्यम से चुनिए -

- (क) लिपि क्या है?
 - (अ) भाषा को लिखने का तरीका
 - (ब) भाषा को बोलने का तरीका
 - (स) दोनों
 - (द) उपरोक्त में से कोई नहीं
- (ख) 'बोली' किसे कहते हैं?
 - (अ) लिखित भाषा
 - (ब) केवल संस्कृत
 - (स) किसी क्षेत्र विशेष में बोले जाने वाले भाषा रूप को
 - (द) विदेशी भाषा
- (ग) व्याकरण का मुख्य कार्य क्या है?
 - (अ) कविता बनाना
 - (ब) भाषा को सुंदर बनाना
 - (स) भाषा को नियमबद्ध करना
 - (द) कहानी लिखना
- (घ) स्वर वर्ण कौन से हैं?
 - (अ) अ, आ, इ, ई, उ, ऊ, ए, ऐ, ओ, औ
 - (ब) क, ख, ग, घ, ङ
 - (स) च, छ, ज, झ, ञ
 - (द) उपरोक्त में से कोई नहीं
- (ङ) मंगल का वर्ण विच्छेद क्या होगा?
 - (अ) म + अ + न + ग + ल
 - (ब) म + अ + ङ + ग + ल
 - (स) म + आ + ङ + ग + ल
 - (द) म + अ + न्ग + ल

संस्कृत

प्रश्न 1. अधोलिखितान् गद्यांशान् पठित्वा प्रश्नानाम् उत्तराणि लिखत ।

एकदा ग्रामे एकः बालकः निवसति स्म। सः प्रतिदिनं प्रातःकाले उत्तिष्ठति, स्नानं कृत्वा पाठशालां गच्छति। तत्र सः गुरुणा उपदेशं श्रद्धया शृणोति। सः पाठशालायाम् अध्ययनं कृत्वा गृहं प्रत्यागच्छति। सायंकाले सः मित्रैः सह क्रीडति। तस्य माता स्वादिष्टं भोजनं निर्माति। सः मातरं साहाय्यं अपि करोति। बालकः विनीतः, अध्ययनशीलः च अस्ति। ग्रामे सर्वे जनाः तं बालकं प्रियतमेण पश्यन्ति।

(i) बालकः कुत्र निवसति?

(ii) सः कदा पाठशालां गच्छति?

(iii) बालकः पाठशालायाम् किम् करोति?

(iv) सः सायंकाले किम् करोति?

(v) ग्रामवासिनः तं बालकं कथं पश्यन्ति?

प्रश्न 2) निम्न संस्कृत संख्यावाचक शब्दाः लिखत ।

(क) 12 (ख) 10 (ग) 15 (घ) 19 (ङ) 5

प्रश्न 3) बालक शब्दस्य विभक्ति रूपाणि पूरयत ।

	एकवचन	द्विवचन	बहुवचन
प्रथमा	बालकः	_____	_____
तृतीया	_____	बालकाभ्याम्	_____

प्रश्न 4) रिक्त स्थानानि पूरयत ।

	एकवचन	द्विवचन	बहुवचन
प्रथम पुरुष	भविष्यति	_____	भविष्यन्ति
मध्यम पुरुष	_____	भविष्यथः	_____
उत्तम पुरुष	भविष्यामि	_____	भविष्यामः

प्रश्न 5) पञ्च शाकानि नामानि लिखत ।

प्रश्न 6) पञ्च फलानि नामानि लिखत ।

प्रश्न 7) पूर्णवाक्येन उत्तरत ।

(i) कीदृशः दुर्जनः सदा परिहर्तव्यः?

(ii) पंडितः कः भवति ?

(iii) छात्राः कुत्र एकत्रिताः सन्ति?

(iv) के केदारं खनतः?

प्रश्न 8) मञ्जूषात् पदानि चित्वा चित्रं दृष्ट्वा रिक्त स्थानानि पूरयत ।



(मञ्जूषा : वृक्षाः, सुन्दरं, पक्षिणः, सूर्यः, रमणीयं)

चित्रे एकं (i) ----- उद्यानं दृश्यते।

उद्याने अनेकानि (ii) ----- सन्ति। वृक्षेषु पुष्पाणि फलं च विकसन्ति।

चित्रे चटका, मयूरः च वृक्षेषु उपविष्टाः सन्ति।

(iii) ----- आकाशे उड्डीयन्ति।

उद्याने बालकाः बालिकाः च सन्तुष्टाः।

(iv) ----- आकाशे तेजः ददाति।

सम्पूर्ण दृश्यं (v) ----- अस्ति।

MATHS

Q1. FILL IN THE BLANKS:

- 1) _____ is the additive identity and _____ is the multiplicative identity of integers.
- 2) $38 \div 0 =$ _____
- 3) $0 \div 11 =$ _____
- 4) $13 \div 1 +$ _____
- 5) $[(-7) + 9] + (\text{_____}) = 9 + [-7 + 4]$

Q2. Find

- (i) $42 \div [(-2) + 5]$ (ii) $(-70) \times (10 - 8 - 39 + 107)$

Q3. Arrange -36, 35, -108, -156, 203, 4209, 0, -1 in descending order.

Q4. A man has Rs. 20,000 in his account in a bank. He withdraws Rs. 3000 per month for the first two months and deposits double of this amount on third month. What will be the balance in his account after 3 months?

Q5. Arrange 7, -5, 4, 0 and -4 in ascending order.

Q6. Verify the following:

- (i) $(-25) \times [(-7) + (-15)] = [(-25) \times (-7)] + [(-25) \times (-15)]$
(ii) $(-7) \times [(-8) + 9] = [-7 \times (-8)] + [(-7) \times 9]$

Q7. What is the probability of choosing a vowel from the set of English alphabets?

Q8. A die is rolled. What is the probability of getting a number greater than 4?

Q9. Write the sample space for tossing a coin.

Q10. Write the sample space for rolling a die.

Q11. A box contains 10 balls, 4 of which are blue and 6 are red. What is the probability of drawing a blue ball?

SCIENCE

1. Choose the correct pairs.

- A. Green plants – Autotrophs
- B. Rhizobium – Parasitic
- C. Cuscuta – Insectivorous
- D. Mushrooms – Saprophytes

Codes (a) A and B

(b) B and C

(c) C and D

(d) (iv), (iii), (ii), (i)

2. Lichen is an example of a symbiotic association. Here two different species live together and help each other in obtaining food. It can be represented by lichen \otimes A + B. Choose appropriate term for A and B

Codes (a) A–Bacteria, B–Fungi

(b) A–Fungi, B–Algae

(c) A–Bacteria, B–Algae

(d) A–Fungi, B–Legumes

3. Which of the following statements about photosynthesis is/are correct?

- A. Energy is released during photosynthesis.
- B. Photosynthesis occurs only in the presence of CO_2 .
- C. Glucose is a product formed during photosynthesis.
- D. A plant kept in dark can photosynthesize.

Choose the correct option.

(a) A and B

(b) B and C

(c) C and D

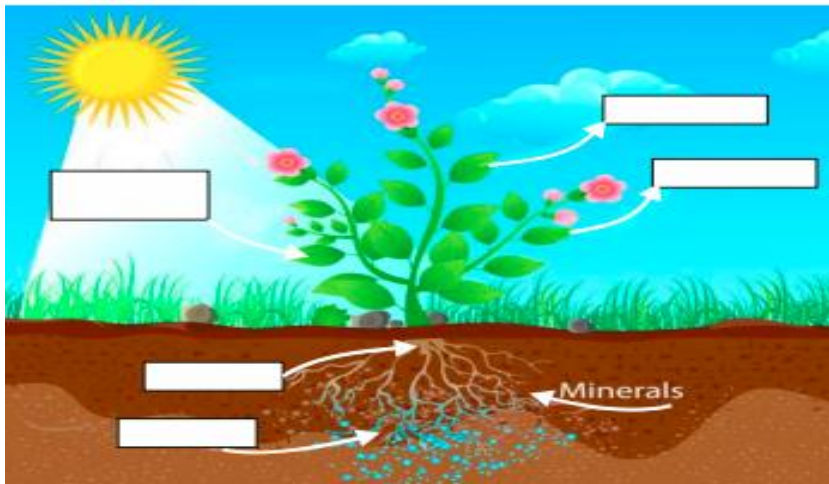
(d) All are correct

4. Which property of a conducting wire is utilized in making electric fuse?

5. Fig. below shows four cells fixed on a board. Draw lines to indicate how you will connect their terminals with wires to make a battery of four cells.



6. Label the following diagram:



SOCIAL SCIENCE

A. Fill in the blanks.

1. _____ environment includes abiotic and biotic components.
2. The mixture of gases that surrounds the earth is called the _____.
3. Lithosphere consists of _____ and _____.
4. The _____ is the right to vote enjoyed by all adult citizens of a country.
5. The _____ is the most common form of inequality in India

B. Match column A with column B.

Column A

Column B

- | | |
|-------------------|---------------------|
| 1. lithosphere | a) air |
| 2. carbon dioxide | b) water |
| 3. biosphere | c) land |
| 4. hydrosphere | d) living organisms |
| 5. atmosphere | e) plants |

C. State whether the following statements are true or false.

1. The atmosphere is also known as the crust.
2. The water present on the earth in the liquid form makes the hydrosphere.
3. All the living beings are interdependent on each other.
4. The government is authorized by the Constitution of India to take special measures for the advancement of the disadvantaged groups.
5. The civil rights movement aimed at prohibiting discrimination against African Americans in the USA.
5. Discrimination hurts the respect and dignity of the people.

D. Answer the questions in brief.

1. What does the word 'environment' mean?
2. What is natural environment?
3. What is untouchability?
4. Cite two examples of discriminatory practices against women.

INFORMATION TECHNOLOGY

Q1. Match the Following:

Column A

Binary Number System

Decimal Number System

Octal Number System

Hexadecimal Number System

Column B

a. Base 8

b . Base 2

c. Base 10

d. Base 16

Q.2 Fill in the Blanks

1. The binary number system uses only two digits: _____ and _____.
2. The decimal number system has a base of _____.
3. Computers understand only the _____ number system.
4. In the hexadecimal system, the letter 'A' represents the number _____.
5. One nibble is equal to _____ bits.

Q.3 Convert the following numbers:

1. $(13)_{10}$ to binary = _____
2. $(1101)_2$ to decimal = _____
3. $(21)_8$ to decimal = _____
4. $(2F)_{16}$ to decimal = _____
5. $(45)_{10}$ to hexadecimal = _____

Q.4. Fun Fact + Challenge!

Fun Fact: The word "bit" stands for **Binary Digit**. It's the smallest unit of data in a computer.

Challenge: Write your name using binary code (Hint: Use ASCII binary codes for letters!)

Example: A = 01000001

Your Name in Binary: _____

ARTIFICIAL INTELLIGENCE

Instructions: Answer all questions to the best of your ability.

Part A: Multiple Choice Questions (Choose the best answer)

1. Which of the following best describes Artificial Intelligence (AI)?
 - a) A type of computer hardware.
 - b) The simulation of human intelligence processes by machines.
 - c) A programming language used for complex calculations.
 - d) A network of interconnected computers.
2. ELIZA, one of the early AI programs, is best known for its ability to:
 - a) Play complex board games like chess.
 - b) Recognize and classify images.
 - c) Simulate a psychotherapist by responding to user input.
 - d) Control robotic arms in manufacturing.
3. Image annotation, as seen in the provided tool, primarily involves:
 - a) Enhancing the visual quality of images.
 - b) Automatically generating artistic renditions of images.
 - c) Describing the content of images using text labels.
 - d) Compressing image file sizes for efficient storage.
4. The field of AI ethics primarily focuses on:
 - a) Improving the technical performance of AI algorithms.
 - b) Ensuring AI systems are affordable and accessible to all.
 - c) Addressing the moral and societal implications of AI development and deployment.
 - d) Developing new programming languages specifically for AI.

5. Dialogflow is a platform commonly used for:

- a) Training complex machine learning models from scratch.
- b) Creating conversational AI agents like chatbots.
- c) Analyzing large datasets to identify patterns.
- d) Designing the hardware components of AI systems.

Part B: Short Answer Questions

- 1. In your own words, explain one potential benefit of using AI in everyday life.
- 2. Based on your interaction with the Image Annotation Viewer, describe one challenge that AI might face when trying to "understand" an image.
- 3. What was one key characteristic or limitation of the ELIZA program that you observed during your interaction?
- 4. Why is it important to consider the ethical implications of Artificial Intelligence as it continues to develop? Provide one specific example.
- 5. What is the main purpose of a chatbot, and what are some common applications where chatbots are used?