

**MOUNT COLUMBUS SCHOOL
DAKSHINPURI, NEW DELHI – 110062**

WORKSHEET (APRIL)

CLASS- 9

ENGLISH LANGUAGE AND LITERATURE

I. Read the passage given below.

1. As the family finally sets off from home after many arguments, there is a moment of lull as the car takes off. “Alright, so where are we going for dinner now?” asks the one at the driving wheel. What follows is a chaos, as multiple voices make as many suggestions.
2. By the time, the order is restored and a decision is arrived at, tempers have risen, feelings injured and there is at least one person grumbling.
3. Twenty years ago, you would step out of home, decision of meal and venue already made with no arguments or opposition and everybody looked forward to the meal with equal enthusiasm. The decision was made by the head of the family and the others fell in line. Today every member of the family has a say in every decision which also promotes a sense of togetherness and bonding.
4. We empower our kids to take their own decisions from a very early age. We ask them the cuisine they prefer, the movie they want to see, the holiday they wish to go on and the subjects they wish to study.
5. It’s a closely connected world out there, where children consult and guide each other. A parent’s well meaning advice can sound like nothing more than unnecessary preaching. How then do we reach our children through all the conflicting views and make the voice of reason be heard? Children today question choices and prefer to go with the flow.
6. What then is the best path to take? I would say the most important thing one can do is to listen. Listen to your children and their silences. Ensure that you keep some time aside for them; insist that they share their stories with you. Step into their world. It is not as complicated as it sounds; just a daily half an hour of the quality time would do the trick.

Based on the understanding of your unseen passage, answer the following questions:-

- i. According to the passage, who said, “so, where are we going for dinner now?”
a. narrator b. one at the steering c. one of the passengers d. one of the guests
- ii. Twenty years ago, according to the passage, decisions were_____.
a. unanimous, with no argument b. made by the children
c. taken by the head of the family d. not taken by elders
- iii. The passage concludes that in modern times, children are_____ to take their own decision from a very early age.
a. forbidden b. trained c. not given permission d. allowed
- iv. Choose the antonym as given in Para 6 of this passage.
Word Antonym
Simple _____
- v. Twenty years ago, the decision was made by the head of the family and the others fell in line. How the decisions are taken now a day?

vi. What is the message conveyed by this passage? Write any two points.

1. _____

2. _____

vii. After arriving at a decision almost everyone is _____ in the family mentioned above.

a. happy b. excited c. hurt d. elated

viii. In modern times, each family member has a say in decision making points towards _____ in the family.

ix. The writer used word “hurt” in Para 2. What is the synonym of hurt as used in this Paragraph?

x. The word which means the same as a style or method of cooking in Para 4 is _____.

a. gourmet b. cuisine c. gastric d. science

II. Answer the following questions in 100 – 120 words each.

(I) Who was Kezia? In what ways did Kezia’s grandmother encourage her to get to know her father better?

(II) What did Einstein call his desk drawer at the patent office? Why? Why was he called a World Citizen?

(III) Who was Mr. APJ ABDUL KALAM? Who were his school friends? What did they later become? What characteristics does he say he inherited from his parents?

हिंदी

1. निम्नलिखित वाक्यों का अर्थ के आधार पर वाक्य भेद बताइए।

- (क) शायद बारिश बंद हो गई।
(ख) परिश्रम का फल मीठा होता है।
(ग) अरे! धोनी ने तो आज कमाल कर दिया।
(घ) यदि ठंड पड़ेगी तो मैं कोट पहनूँगा।
(ङ.) क्या आप कल जयपुर जा रहे हैं?
(च) ईश्वर तुम्हें सफलता प्रदान करें।
(छ) क्या बच्चे कक्षा में शोर मचा रहे हैं?
(ज) बाजार से सामान ले आना।
(झ) यदि पानी बरसता, तो फसल अच्छी होती।
(ञ) वाह! भारत की टीम जीत गई।

2. निम्नलिखित शब्दों का संधि-विग्रह कर संधि का नाम बताइए।

- (क) सत्यार्थ (ख) सदैव (ग) कवींद्र (घ) परमानंद (ङ) महेश्वर
(च) महोत्सव (छ) वार्षिकोत्सव (ज) परमात्मा (झ) महेंद्र (ञ) वनौषधि

3. निम्नलिखित प्रत्यय जोड़कर दो-दो नवीन शब्द बनाइए।

- (क) आन (ख) इक (ग) आई (घ) अक्कड़ (ङ) इत
(च) ना (छ) दार (ज) ता (झ) आवट (ञ) आरा

4. निम्नलिखित शब्दों में से उपसर्ग व मूलशब्द अलग-अलग करके लिखे।

- (क) निर्बल (ख) अभिमान (ग) दुश्शासन (घ) सुयोग (ङ) कुपुत्र
(च) चिरकाल (छ) अतिक्रमण (ज) निराहार (झ) सफल (ञ) समालोचना

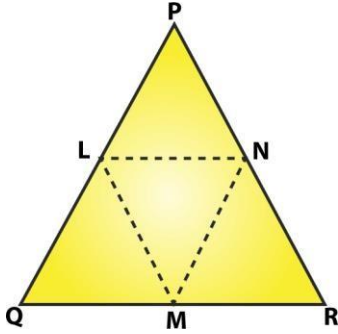
5. निम्नलिखित शब्दों में उचित स्थान पर अनुस्वार/ अनुनासिक का प्रयोग कर पुनः लिखे।

- (क) व्यजन (ख) कुवारा (ग) सास (घ) बूद (ङ) कुडली
(च) चचल (छ) नदन (ज) अधेरा (झ) ककर (ञ) चंगुल

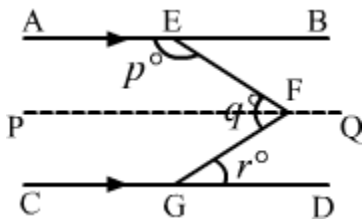
MATHEMATICS

Q1. If $a^2 + b^2 + c^2 = 83$ and $a + b + c = 15$ then the value of $ab + bc + ca$ is.

Q2. In a $\triangle PQR$, if $PQ = QR$ and L, M and N are the mid-points of the sides PQ, QR and RP , respectively. Prove that $LN = MN$.



Q3. In the given figure, $AB \parallel CD$ and $PQ \parallel CD$ Prove that $p + q - r = 180$.



Q4. Express the following linear equations in the form $ax + by + c = 0$ and indicate the values of a, b and c in each case:

(i) $x - y/5 - 10 = 0$

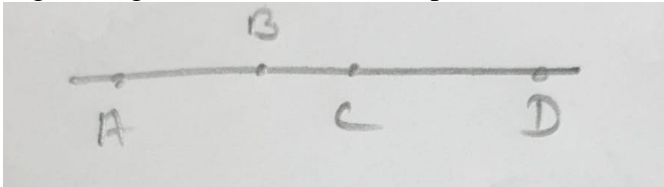
(ii) $-2x + 3y = 6$

Q5. Factorise $x^2 - 1 - 2a - a^2$.

Q6. Write the following cubes in expanded form:

(i) $(2a - 3b)^3$ (ii) $(3x/2 + 1)^3$ (iii) $(x - 2y/3)^3$

Q7. In the given figure, if $AC = BD$, then prove that $AB = CD$.



Q8. If a point R lies between two points P and Q such that $PR = QR$, then prove that $PR = 1/2 PQ$. Explain by drawing the figure.

SCIENCE

Q1. Write the functions of-

- a. Chloroplast b. Mitochondria c. Golgi apparatus d. Xylem e. Phloem f. Parenchyma
g. Collenchyma h. Nucleus i. Tendon

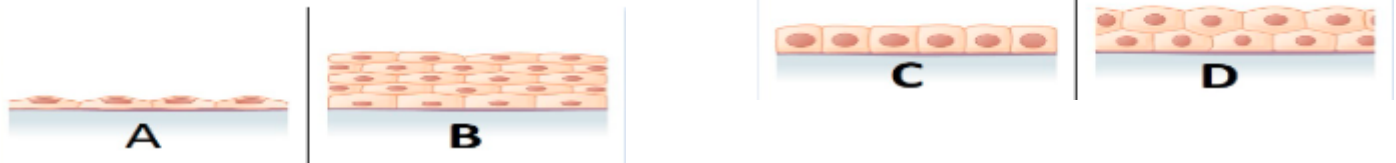
Q2. Explain the third law motion.

Q3. Write the factors on which the following depends:

- a. Momentum b. Inertia

Q4. How is suspension different from colloid.

Q5. Identify the given types of epithelial tissues:



Q6. Why do fielders pull their hand gradually with the moving ball while holding a catch?

SOCIAL SCIENCE

1. Who formed the First and Second Estate of French Society?
2. Define Tithe and Taille.
3. Describe the Reign of Terror and role played by Robespierre in it.
4. Discuss the various causes of French Revolution.
5. Elucidate the participation of women in political clubs, their activities and demands.
6. Who were Liberals? Why do you think they were not democrats?
7. What were the demands referred in Lenin's "April Theses"?
8. Explain the impact of the Russian Revolution on the world.
9. Elaborate the main causes of the Russian Revolution.
10. MAP SKILL - On the outline map of World locate the following-
 - i. Central Powers of First World War- a) Germany b) Austria- Hungary c) Turkey.
 - ii. Allied Powers of First World War- a) France b) England c) Russia d) America.
 - iii. Vegetation type- Tropical evergreen forest, Thorn forest, Mangrove
 - iv. National parks- Corbett, Kaziranga, Simlipal and Manas.
 - v. Wild life Sanctuaries- Rajaji, Dachigam, Sariska and Mudumalai.
11. On the outline map of France label the following- A) Paris B) Bordeaux C) Marseilles.
12. Name two water bodies which separate India from Sri Lanka.
13. Describe how the geographical features of India have fostered unity and homogeneity in the Indian society.
14. Give an account of four divisions of Himalayas from west to east.
15. In what ways a Democratic Government is different from Non-Democratic Government?
16. How was Apartheid system practiced in South Africa?
17. "Election Commission is an independent and powerful body." In the light of this statement explain the composition and powers of the Election Commission.
18. Explain the difference between economic activity and non-economic activity?
19. What are the different causes of poverty? Explain?
20. Elucidate the targeted anti-poverty programmes under taken by the government.

INFORMATION TECHNOLOGY

1. Mr. Joshi is a business manager. He needs to analyse data by applying some automatic calculations. Which software is best suited for this?
 - a. MS Excel
 - b. Open Office Calc
 - c. Google Sheets online
 - d. Any of these
2. Ravi has typed the heading *NAMES* in cell B3. In the cells below it, he typed names of his friends, one in each consecutive row. What is the cell address of the last friend's name?
 - a. B9
 - b. B8
 - c. G3
 - d. G9
3. If cell A1 contains a formula $=5*2$, then what will Formula bar display?
 - a. $=5*2$
 - b. 10
 - c. A1
 - d. Error
4. An active cell is represented by _____ cursor.
 - a. Blinking
 - b. Rectangular
 - c. Mouse
 - d. + shaped
5. Ravi has entered headings *Name*, *Date of birth* and *Address* in cells A1, B1 and C1. Below each heading, in consecutive cells, he entered names, dates of birth and addresses of his 10 friends, one record in each row. He wants to select entire range of headings and data. What will be the valid range?
 - a. A1:C11
 - b. A2:C11
 - c. A1:C10
 - d. A2:C11
6. Cell A1 has value 1 in it. Dragging fill handle downwards will fill the cells below A1 with:
 - a. 1
 - b. 1, 2, 3, and so on
 - c. Nothing
 - d. 1,3,5,7 and so on
7. Ravi copied the formula $=B5*D5$ from cell C2 to cell D1. How will the formula in cell C1 look like?
 - a. $C4*E4$
 - b. $C5*E5$
 - c. $A4*C4$
 - d. $A5*C5$

8. Ravi wants to create a formula to calculate percentage marks in MS Excel. Which operators he must use?
- * and /
 - * and \
 - percentage function
 - + -
9. How many text alignments are there in MS Excel spreadsheet?
- 3
 - 6
 - We cannot align text in spreadsheet.
 - 8
10. Wrap text changes the _____ of the cell.
- Height
 - Width
 - Both a) and b)
 - None of these
11. *Middle* alignment is different from *Center* alignment in MS Excel in that:
- It aligns the text horizontally in the cell's center.
 - It aligns the text vertically in the cell's center.
 - Middle and Center are same.
 - There is no option by the name *Middle*.
12. *Auto-hide Ribbons* option also hides the tabs.
- True
 - False
13. The currency symbol can be changed using _____ dialog box.
- Format Number
 - Format Currency
 - Format Cells
 - Format Data
14. Font style does not include Font size.
- True
 - False
15. *Delete* dialog box is displayed when we select _____ option in *Delete* drop-down, in *Cells* group under *Home* tab.
- Delete cells
 - Delete Sheet Columns
 - Delete Sheet Rows
 - None of these
16. *Print Area* setting allows you to:
- Print current sheet
 - All the worksheets in a workbook
 - Selected cell range
 - All of these

ARTIFICIAL INTELLIGENCE

Section A: Multiple Choice Questions

1. What is the first stage of the AI project cycle?

- a) Data collection
- b) Problem Scoping
- c) Model development
- d) Testing

2. Which of the following is a benefit of AI reflection?

- a) Increased efficiency
- b) Improved accuracy
- c) Alignment with human values
- d) Reduced cost

3. What is the primary goal of AI ethics?

- a) To increase AI efficiency
- b) To reduce AI costs
- c) To ensure AI fairness and transparency
- d) To improve AI accuracy

4. Which stage of the AI project cycle involves testing AI systems?

- a) Problem definition
- b) Data collection
- c) Model development
- d) Deployment

5. What is bias in AI?

- a) Unfair or discriminatory outcomes
- b) Accurate or fair outcomes
- c) Efficient or effective outcomes
- d) Cost-effective or reduced outcomes

6. What is transparency in AI?

- a) The ability to explain AI decisions
- b) The ability to improve AI accuracy
- c) The ability to reduce AI costs
- d) The ability to increase AI efficiency

7. Why is diverse data important in AI development?

- a) To increase AI efficiency
- b) To reduce AI costs
- c) To ensure AI fairness and accuracy
- d) To improve AI transparency

8. What is the role of human oversight in AI development?

- a) To increase AI efficiency
- b) To reduce AI costs
- c) To ensure AI fairness and accuracy
- d) To improve AI transparency

9. Which of the following is a benefit of AI transparency?

- a) Increased efficiency
- b) Improved accuracy
- c) Building trust with stakeholders
- d) Reduced cost

10. What is the primary goal of the AI project cycle?

- a) To develop efficient AI systems
- b) To develop accurate AI systems
- c) To develop fair and transparent AI systems
- d) To develop cost-effective AI systems

11. Which stage of the AI project cycle involves defining the problem?

- a) Data collection
- b) Problem definition
- c) Model development
- d) Testing

12. What is the role of ethics in AI development?

- a) To increase AI efficiency
- b) To reduce AI costs
- c) To ensure AI fairness and transparency
- d) To improve AI accuracy

13. Which of the following is a strategy for addressing bias in AI?

- a) Using diverse data sets
- b) Improving AI accuracy
- c) Reducing AI costs
- d) Increasing AI efficiency

14. What is the significance of reflection in AI development?

- a) To increase AI efficiency
- b) To reduce AI costs
- c) To ensure AI fairness and transparency
- d) To align AI with human values

15. Which of the following is a benefit of AI ethics?

- a) Increased efficiency
- b) Improved accuracy
- c) Fairness and transparency
- d) Reduced cost

Section B: Short Answer Questions

1. What is AI reflection?
2. What are the stages of the AI project cycle?
3. Why is ethics important in AI development?
4. What is bias in AI?
5. What is transparency in AI?

Section C: Long Answer Questions

1. Describe the role of reflection in AI development and its importance in ensuring AI systems align with human values.
2. Explain the stages of the AI project cycle and their significance in developing effective AI solutions.
3. Discuss the importance of ethics in AI development and its role in mitigating potential negative consequences.
4. Describe strategies for addressing bias in AI development and ensuring diverse perspectives are represented.
5. Explain the significance of transparency in AI decision-making and its role in building trust with stakeholders.