

DAV VEDANTA INTERNATIONAL SCHOOL, LANJIGARH
HOLIDAY (AUTUMN BREAK) HOME WORK – 2025
CLASS-IX
SUBJECT- ENGLISH

PA - II: Multiple Assessment

Concept Map: Any one of the lessons of PA-II

Subject Enrichment Activity

Any one of the followings:

- Podcast of 3 minutes on any current affairs
- FM Radio Show compering a song in details: lyricist, composer, singer, film, actors and actors who sung on the screen

(Share the recording to your Subject Teacher for Assessment)

Main Course Book

Unit 5: Mystery

Read The Mystery behind Bermuda Triangle, page 83 and Bermuda Triangle Theories, page 86, Bermuda Triangle Survivors, page 88:

Write an article in about 250 words giving your own observation in a scientific manner and making a visual Art of Bermuda Triangle, as per page 83

Book Review

Write a review of Harry Potter film/ Book or an episode of Malgudi Days that either you have seen (if not read) (200 words), Refer page.105

- Write in about 200 words on the topic

' Online Education Does More Harm than Good '

Refer page .126 ,Unit : Children

An Art Integrated Project - A

Grammar

1. Choose the correct reported form:

He said, "I have completed my homework."

- a) He said that he has completed his homework.
- b) He said that he had completed his homework.
- c) He said that he completed his homework.
- d) He said that he would complete his homework

2. Spot the error:

One of my friend is going abroad.

- a) One
- b) of
- c) friend
- d) is

3. Passive form: Who taught you English?

- a) By whom were you taught English?
- b) By whom are you taught English?
- c) Who you were taught English by?
- d) By whom have you taught English?

4. Identify the tense: She has been waiting for an hour.

- a) Present Perfect
- b) Present Continuous
- c) Present Perfect Continuous
- d) Past Perfect Continuous

5. Correct usage:

- a) You must to work hard.
- b) You must work hard.
- c) You musts work hard.
- d) You should to work hard.

6. Choose the correct sentence:

- a) Neither of the boys have done their work.
- b) Neither of the boys has done their work.
- c) Neither of the boy has done their work.
- d) Neither of boys have done their work.

7. Choose the correct reported form:

The teacher said, "Don't waste your time."

- a) The teacher advised us not to waste our time.
- b) The teacher told us don't waste our time.
- c) The teacher forbids us wasting time.
- d) The teacher ordered us we must not waste our time

8. Fill in the blank: If it rains, we ___ at home.

- a) stay
- b) stayed

c) will stay

d) had stayed

9. Change to passive: She writes a letter.

a) A letter written by her.

c) A letter is written by her.

b) A letter was written by her.

d) A letter has written by her.

10. Choose the most suitable modal: He ___ be the new manager. I'm not sure.

a) must

c) can

b) may

d) should

11. Identify the error:

She has gone to the market.

a) has

c) the

b) went

d) market

12. Reported form of: She said, "Let's go for a walk."

a) She said that they should go for a walk.

c) She asked them to go for a walk.

b) She suggested that they should go for a walk.

d) She told let us go for a walk

13. Choose the correct: They ___ dinner when the guests arrived.

a) were having

c) has had

b) had

d) have been having

14. Correct the error:

He is senior than me.

a) Replace "senior" with "more senior".

c) Replace "is" with "was".

b) Replace "than" with "to".

d) Replace "senior" with "eldest".

15. He said he ___ finish the project in two days, but he actually took four.

a) can

c) will

b) should

d) coul

16. Active form: The match was won by our team.

a) Our team wins the match.

c) Our team won the match.

b) Our team has won the match.

d) Our team was winning the match.

17. Choose the correct reported form:

He said, "Where are you going?"

a) He asked where I am going.

c) He asked where am I going.

b) He asked where I was going.

d) He asked me where was I going.

18. Fill in the blank: You ___ obey the rules of the school.

a) can

c) must

b) may

d) might

19. Find the correct sentence:

a) The sceneries of Kashmir are enchanting.

c) The scenery of Kashmir are enchanting.

b) The scenery of Kashmir is enchanting.

d) The sceneries of Kashmir is enchanting.

20. Choose the correct passive: They will finish the work tomorrow.

a) The work is finished tomorrow.

c) The work will be finished tomorrow.

b) The work was finished tomorrow.

d) The work has been finished tomorrow.

21. Choose the correct tense form: By next Monday, he ___ his project.

a) will completed

c) will have completed

b) has completed

d) completes

22. Reported speech: She said, "Will you come to the party tomorrow?"

a) She asked if I will come to the party the next day.

c) She asked if I come to the party the next day.

b) She asked if I would come to the party the next day.

d) She asked if I had come to the party the next day.

23. He ___ in this company since 2010.

a) worked

c) has been working

b) is working

d) was working

24. Identify correct passive form: Open the door.

a) The door be opened.

c) Let the door be opened.

b) The door is opened.

d) The door should opened.

25. Choose the correct option: You look tired; you ___ take some rest.

a) should

b) can

c) must

d) might

H H W. 25-IX-Hindi

1. अर्थ के आधार पर वाक्य भेद पर आधारित अवधारणा नक्शा बनाइए ।
2. अनुच्छेद लिखिए- त्योहारों का जीवन में महत्व
3. आपके जन्मदिन पर आपके मित्र द्वारा भेजे गए उपहार के लिए आभार प्रकट करते हुए पत्र लिखिए।
- 4.क) 'जल जमाव की समस्या' पर दो पड़ोसियों का संवाद लिखिए।

Holiday homework (2025-26)

ନବମ ଶ୍ରେଣୀ (ଓଡ଼ିଆ)

୧- 'ଛାତ୍ର ଓ ସମାଜ ସେବା' – ବିଷୟରେ ଏକ ପ୍ରବନ୍ଧ ଲେଖ ।

(ଉପକ୍ରମ , ସମାଜ ସେବାର ଆବଶ୍ୟକତା , ସମାଜ ସେବାର ମହତ୍ତ୍ୱ , ପ୍ରତିବନ୍ଧକ , ସମାଧାନ , ଉପସଂହାର)

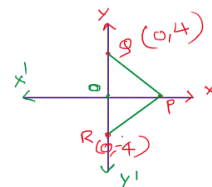
୨ – ପ୍ରାକୃତିକ ବିପର୍ଯ୍ୟୟ ଓ ତା'ର ନିରାକରଣ – ସମ୍ପର୍କରେ ଏକ ରଚନା ଲେଖ ।

(ଉପକ୍ରମ , ପ୍ରାକୃତିକ ବିପର୍ଯ୍ୟୟର କାରଣ, ଏହାର ପ୍ରଭାବ , କ୍ଷୟକ୍ଷତି , ସମାଧାନ , ଉପସଂହାର)

୩ – ତୁମ ଗ୍ରାମରେ ଏକ ସୁଲଭ ମୂଲ୍ୟର ଦୋକାନ ଖୋଲିବା ପାଇଁ ଖାଦ୍ୟ ଯୋଗାଣ ବିଭାଗର ମୁଖ୍ୟ ଅଧିକାରୀଙ୍କୁ ଏକ ଦରଖାସ୍ତ ଲେଖ ।

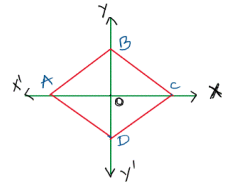
୪ – ତୁମ ଅଞ୍ଚଳରେ ଡେଙ୍ଗୁ ଜ୍ୱରର ପ୍ରାଦୁର୍ଭାବ ବଢ଼ି ଯାଇଥିବାରୁ ତାର ନିରାକରଣ ନିମନ୍ତେ ବିଭାଗୀୟ କର୍ତ୍ତୃପକ୍ଷଙ୍କ ନିକଟକୁ ଦରଖାସ୍ତ ଲେଖ ।

1. Express the number $15.\overline{712}$ in the form of p/q .
2. Prove that $\frac{(2)^n + (2)^{n-1}}{(2)^{n+1} - (2)^n} = 3/2$.
3. If $\sqrt{2} = 1.414$ and $\sqrt{3} = 1.732$, find the value of $\frac{4}{3\sqrt{3}-2\sqrt{2}} + \frac{3}{3\sqrt{3}+2\sqrt{2}}$.
4. If $a = \frac{2^{x-1}}{2^{x-2}}$, $b = \frac{2^{-x}}{2^{x+1}}$ and $a-b=0$, find the value of x .
5. If $\frac{5+2\sqrt{3}}{7+4\sqrt{3}} = a + b\sqrt{3}$, then find the value of a and b .
6. Prove that: $\frac{1}{3-\sqrt{8}} - \frac{1}{\sqrt{8}-\sqrt{7}} + \frac{1}{\sqrt{7}-\sqrt{6}} - \frac{1}{\sqrt{6}-\sqrt{5}} + \frac{1}{\sqrt{5}-2} = 5$.
7. If $x = 1 - \sqrt{2}$, find the value of $x^3 - \frac{1}{x^3}$.
8. If $abc = 1$, then, Prove that $\frac{1}{1+a+b^{-1}} + \frac{1}{1+b+c^{-1}} + \frac{1}{1+c+a^{-1}} = 1$.
9. If $x = \frac{\sqrt{3}+\sqrt{2}}{\sqrt{3}-\sqrt{2}}$ and $y = \frac{\sqrt{3}-\sqrt{2}}{\sqrt{3}+\sqrt{2}}$, find $x^2 + y^2 - 5xy$.
10. If $x = 3$ and $x = 0$ are zeros of the polynomial $2x^3 - 8x^2 + ax + b$, then find the values of a and b .
11. If $p(x) = x^2 - 2\sqrt{2}x + 1$, find the value of $p(2\sqrt{2})$.
12. If $q(x) = x^3 + 3x^2 + 3x + 1$, find $q(-2) + q(-3) + q\left(\frac{1}{2}\right)$.
13. If $f(x) = x - 9$, find $f(x) - f(-x)$.
14. If $x^2 + \frac{1}{x^2} = 27$, find $x - \frac{1}{x}$ and $x + \frac{1}{x}$.
15. If $3x+2y = 12$ and $xy = 6$, find the value of $9x^2 + 4y^2$.
16. Factorize: $\frac{a^2}{16} + \frac{b^2}{4} + 1 - \frac{ab}{4} - b + \frac{a}{2}$.
17. If $a+b+c = 9$ and $ab+bc+ca = 40$, find $a^2 + b^2 + c^2$.
18. If $a+b+c = 0$, then write the value of $\frac{a^2}{bc} + \frac{b^2}{ca} + \frac{c^2}{ab}$.
19. If $a+b+c = 0$, then write the value of $\frac{(b+c)^2}{bc} + \frac{(a+c)^2}{ca} + \frac{(b+a)^2}{ab}$.
20. Prove that: $\frac{0.87 \times 0.87 \times 0.87 + 0.13 \times 0.13 \times 0.13}{0.87 \times 0.87 - 0.87 \times 0.13 + 0.13 \times 0.13} = 1$. (Without multiplying)
21. If the polynomial $ax^3 + 4x^2 + 3x - 4$ and $x^3 - 4x + a$ leave the same remainder when divided by $(x-3)$, find the value of a .
22. Let R_1 and R_2 are the remainders when the polynomials $x^3 + 2x^2 - 5ax - 7$ and $x^3 + ax^2 - 12x + 6$ are divided by $x+1$ and $x-2$ respectively. If $2R_1 + R_2 = 6$, find the value of a .
23. If both $x-2$ and $x - \frac{1}{2}$ are factors of $px^2 + 5x + r$, show that $p = r$.
24. If $x+1$ is a factor of $x^3 + a$, then write the value of a .
25. If $(a)^{1/3} + (b)^{1/3} + (c)^{1/3} = 0$, then prove that $(a + b + c)^3 = 27abc$.
26. If $\frac{a}{b} + \frac{b}{a} = -1$, then prove that $a^3 - b^3 = 0$.
27. Find k , if $x^{140} + 2x^{151} + k$ is divisible by $x+1$.
28. If $(x^3 + ax^2 + bx + 6)$ has $(x - 2)$ as a factor and leaves a remainder 3 when divided by $(x - 3)$, then find the values of a and b .
29. Factorize: $a^7 - ab^6$.
30. Find the zeros of the polynomial $2x^3 + 3x^2 - 11x - 6$.
31. Factorize: $x^2 + \frac{1}{x^2} + 2 - 2x - \frac{2}{x}$.
32. In the adjoining figure, PQR is an equilateral triangle in which coordinates of Q and R are $(0,4)$ and $(0,-4)$, respectively. Find the coordinates of the vertex P.



33. In the fig, ABCD is a rhombus with diagonals AC=16 cm and BD=8 cm.

Find the Coordinates of A, B, C and D.



34. (i) Plot the points M (5, - 3) and N (- 3, - 3) (ii) What is the length of MN?

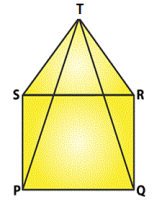
(iii) Find the coordinates of points A, B and C lying on MN, such that MA = AB = BC = CN.

35. PQRS is a quadrilateral and T and U are respectively. Points on PS and RS such that

PQ = RQ, $\angle PQT = \angle RQU$ and $\angle TQS = \angle UQS$. Prove that QT = QU.

36. In the fig, PQRS is a square and SRT is an equilateral triangle. Prove that

(i) PT = QT (ii) $\angle TQR = 15^\circ$

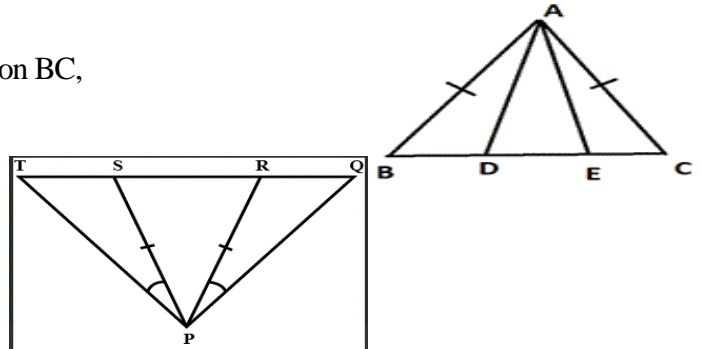


37. ABC is a triangle. BA and CA have been produced unto D and E such that BA=AD and CA = AE. Prove that DE is parallel to BC.

38. In a right triangle, one acute angle is double the other. Prove that the hypotenuse is double the smallest side.

39. ABC is an isosceles triangle with AB = AC. BD and CE are two medians of the triangle. Prove that BD = CE.

40. In the given figure, AD=AE. D and E are points on BC, such that BD=EC. Prove that AB=AC.



41. In the given figure, PS = PR. $\angle TPS = \angle QPR$.

Then PT = PQ.

42. The perimeter of a triangle is 50cm. One side of a triangle is 4cm longer than the smaller side and third side is 6cm less than twice the smaller side. Find the area of the triangle.

43. The length of the two sides of a right triangle containing the right angle differs by 2cm.

If the area of the triangle is 24cm^2 , then the perimeter of the triangle.

44. The sides of a triangle are p, q and r. If $p + q = 45$, $q + r = 40$ and $p + r = 35$, then find the area of the triangle.

45. If each side of a triangle is doubled, then find the % increase in the area of the triangle.

SECTION-A [CHEMISTRY]

- 1. (a)** Explain why the shape and volume of solids, liquids, and gases differ. How do the arrangement and movement of particles account for these differences?

(b) If you heat a solid gradually, describe the changes it undergoes at the particle level before becoming a liquid.
- 2. (a)** Why do gases expand to fill any container, whereas solids and liquids do not? Analyse this behaviour using particle movement.

(b) Compare the behavior of water at 0°C and at 100°C in terms of particle motion and energy. What happens between these temperatures?
- 3. (a)** If air is considered matter, how would you explain its presence even though it is invisible?

(b) Design an experiment to demonstrate that matter occupies space, even when it is not easily visible.
- 4. (a)** How would life be affected if matter did not have mass or volume? Predict the changes in daily activities.

(b) Explain why dissolving sugar in water is a physical change, but burning sugar is a chemical change, using particle-level reasoning.
- 5. (a)** How does pressure affect the behavior of gases? Provide examples from real-life situations such as breathing or cooking.

(b) Analyze why ice floats on water although it is solid and denser than most solids. What makes water unique in this behavior?
- 6.(a)** Write comparative study of true solution, colloidal solution and suspension.

(b) Differentiate between homogeneous and heterogeneous mixtures with examples from daily life. Why is air considered homogeneous even though it contains many gases?
- 7. (a)** If you are given an unknown sample, how would you determine whether it is a pure substance or a mixture? Design an experiment using simple laboratory equipment.

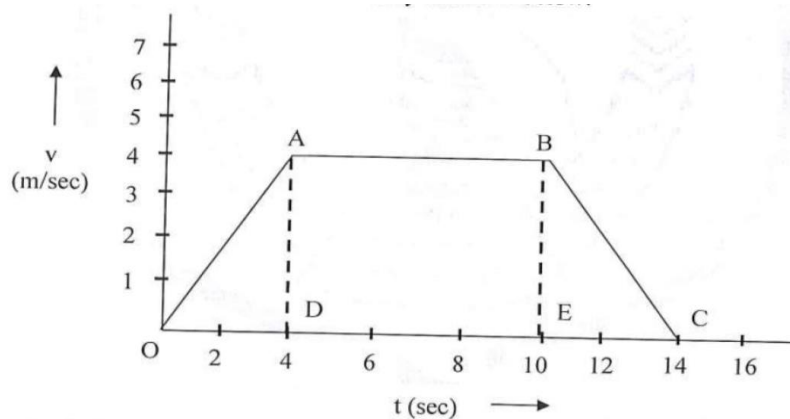
(b) Explain how the presence of impurities affects the melting and boiling points of a substance, using real-life examples such as road salt or impure metals.
- 8. (a)** A student mixes 30 g of salt with 200 g of water. Calculate the mass percentage of salt in the solution. What does this tell you about the concentration of the solution?

(b) Why is it important to know whether a substance is pure when manufacturing medicines or chemicals? Discuss the risks of using impure substances.
- 9. (a)** A solution is prepared by dissolving 40 g of glucose in 160 g of water. Calculate the mass percent of glucose in the solution. Would increasing the temperature help dissolve more glucose? Why or why not?

(b). If the boiling point of pure water is 100°C , why does seawater boil at a higher temperature? Explain the effect of dissolved salts.
- 10.** A sample contains 15 g of a solute dissolved in 85 g of solvent. Calculate the mass percentage and interpret the result. Is this solution dilute or concentrated?

SECTION-B [PHYSICS]

1. A train moves from station A to B with a speed of v_1 and returns to A with a speed of v_2 . What is the average speed and average velocity of the train?
2. What can you say about the motion of a body, if
 - (i) its distance-time graph is a straight line, making a constant angle with the time axis?
 - (ii) its velocity-time graph is a straight line parallel to time axis?
3. Velocity – time graph for motion of a body is shown below



Answer the following questions:

- (a) Which part of the graph shows accelerated motion? Also, calculate the acceleration.
 - (b) Which part of the graph shows retarded motion? Also, calculate the retardation.
 - (c) Which part of the graph shows constant velocity? What is the value of that velocity?
4. The gravitational force between the two objects is 200 N. How should the distance between the object be changed, so that the force between them reduces to 100 N?
 5. A horse pulls a cart. According to Newton's third law of motion cart also pulls the horse with an equal force and in the opposite direction. How do the horse and the cart move at all?
 6. A bullet travelling at 360 m/sec strikes a block of soft wood. The mass of the bullet is 2 g. The bullet comes to rest after penetrating 10 cm in the wood. Find average deceleration offered by wood and time taken by bullet to come to rest.
 7. A bullet of mass 100 g leaves the gun with velocity 500 m/s. The velocity of recoil of the gun is 10 m/s. Calculate the mass of the gun.
 8. A stone is thrown vertically with a speed of 29.4 m/s. Taking $g = 9.8 \text{ m/s}^2$, find
 - (i) The time taken by the stone to reach the maximum height.
 - (ii) Maximum height reached by the stone.
 - (iii) Show that the time of ascent is equal to the time of descent.
 9. Show that the weight of the body on moon = $1/6$ of the weight of the body in earth.
 10. A child drops a coin from the top of a building, 50 m high. Calculate
 - (a) the velocity of the coin when it falls through 20 m distance and
 - (b) the velocity with which the coin strikes the ground.

SECTION-C [BIOLOGY]

- Q1) Discuss the role of areolar connective tissue in a plant body.
- Q2) A nail is inserted in the trunk of a tree at a height of 2 metre from the ground level. After 3 years, what will be the position of the nail? Justify your answer with reasons.
- Q3) Make list of at least five of communicable diseases, causative agent and the modes through which they spread, in a tabular form.
- Q4) The trunks of the trees are firm and stiff, but the branches sway in the direction of wind. Explain with reasons.
- Q5) Intestine absorb the digested food materials. Which type of epithelial cells are responsible for that?
- Q6) Discuss briefly about the muscular tissue which function throughout the life continuously without fatigue.
- Q7) Write the role of Nissl's granules.
- Q8) How the rate of water loss gets reduced in desert plants?
- Q9) A long tree has several branches. Name the tissue that helps in the sideways conduction of water in the branches.
- Q10) Draw a mind-map on "Why do we fall ill?" on A4 size paper. Learn the portions from the extra reading material of the chapter "Why do we fall ill?" supplied by CBSE (refer website).

DAV VEDANTA INTERNATIONAL SCHOOL, LANJIGARH
HOLIDAY HOME WORK (2025-2026)

CLASS-IX

SUBJECT- SOCIAL SCIENCE

Geography:

1. Prepare a Project on Natural vegetation and wildlife.

HOLIDAY HOME WORK

SUB –SKT

CLASS-IX

1. तरवे नमोऽस्तु इति पाठस्य एकं श्लोकं स्वीकृत्य CHATR PAPER मध्ये लिखत ।
2. उच्चारण स्थानानां नामानि लिखत ।
3. सेव्, रुच्, नम् धातोः लट् लृट् धातुरूपाणि लिखत ।
4. न धर्म वृद्धेषु वयः समीक्ष्यते A4 PAPER मध्ये लिखत ।