

JKG INTERNATIONAL SCHOOL, VIJAY NAGAR GHAZIABAD
HOLIDAY HOME WORK
CLASS-IX

ENGLISH

1. Daily you see some ragpickers on the road and you are deeply moved by their work which is beyond your imagination. Describe the ragpickers in 100 words in your grammar N.B.
2. Collect 4 poems of favourite poet, paste them in your notebooks and write a few lines on each in your literature notebook.
3. Write an article or a story in your own words for school magazine. One is must. Write it on A4 size sheet
4. Revise the work done in the class.

HINDI

- 1 विद्यालय पत्रिका हेतु आलेख ,कहानी, कविता,पहेली,चुटकले, सामान्य ज्ञान आदि विषय पर सुस्पष्ट सुलेख में लिखिए। **A4 size sheet.**
- 2 'जल ही जीवन है' अथवा 'वृक्ष जीवन का आधार है' मूलमंत्र पर आधारित पोस्टर (रंगीन) तैयार कर स्लोगन भी लिखिए। **A4 size sheet.**
- 3 अपने नाना-नानी,दादा-दादी का साक्षात्कार लीजिए कि वह अपने समय में किस तरह शिक्षा ग्रहण करते थे। वर्तमान समय में वह क्या बदलाव देखते हैं ?
- 4 'हिंदी भाषा का महत्व' विषय पर अपने विचार व्यक्त कर दो अनुच्छेद लिखिए।
- 5 जुलाई मास में होने वाली परीक्षा हेतु समस्त पाठ्यक्रम को दोहराएँ,।

MATHS

Do all the question in assignment copy-

1. Is the number $(3 - \sqrt{7})(3 + \sqrt{7})$ rational or irrational?
2. Is the product of two irrational number always irrational? Justify your answer.
3. Show that $0.142857142857\dots = 1/7$.
4. Locate $\sqrt{10}$ on the number line.
5. Represent $\sqrt{4.5}$ on the number line.
6. Simplify $3\sqrt{192} - 2/3\sqrt{1/3} + \sqrt{1/3}$
7. If $a = 8 + 3\sqrt{7}$ and $b = 1/a$, then what will be the value of $a^2 + b^2$?
8. Find the value of $1/\sqrt{3} - \sqrt{2} - 1$ correct to three places of decimal if $\sqrt{2} = 1.414$ and $\sqrt{6} = 2.45$
9. If $x = (2 + \sqrt{5})^{1/2} + (2 - \sqrt{5})^{1/2}$ and $y = (2 + \sqrt{5})^{1/2} - (2 - \sqrt{5})^{1/2}$ then evaluate $x^2 + y^2$
10. If $a + b + c = 0$, then find the value of $a^3 + b^3 + c^3$?
11. If $x^{11} + 100$ is divided by $x + 1$, what is the remainder?
12. Using factor theorem, show that $(x-y)$ is a factor of $x(y^2 - z^2) + y(z^2 - x^2) + z(x^2 - y^2)$.
13. By actual division, find the quotient and remainder when $3x^4 - 4x^3 - 3x - 1$ is divided by $x+1$
14. Factorise $5\sqrt{5}x^2 + 30x + 8\sqrt{5}$ by splitting the middle term.
15. If $\sqrt{m} + \sqrt{n} - \sqrt{p} = 0$, then find the value of $(m + n - p)^2$.
16. Using factor theorem, factorise the polynomial $x^3 + x^2 - 4x - 4$.
17. If both $(x-2)$ and $(x-1/2)$ are factors of $px^2 + 5x + r$, show that $p = r$.
18. If the polynomial $az^3 + 4z^2 + 3z - 4$ and $z^3 - 4z + a$ leave the same remainder when divided by $z - 3$, find the value of a .
19. With actual division, prove that $2x^4 + x^3 - 14x^2 - 19x - 6$ is exactly divisible by $x^2 + 3x + 2$.
20. Write the equation of the line parallel to the x-axis at distance 3 units above x-axis.
21. Write three possible linear equations which can pass through point $(3, 2)$.
22. If the length of a rectangle is decreased by 3 units and breadth increased by 4 units, then the area will increase by 9 sq. units. Represent this situation as a linear equation in two variables.

23. Solve for x: $(5x+1)(x+3) - 8 = 5(x+1)(x+2)$
24. Draw the graph of the equation $3x + 4y = 12$ and find the co-ordinates of the points of intersection of the equation with the co-ordinate axis.
25. Solve the equation $2x+1 = x-3$, and represent the solution(s) on
(i) the number line. (ii) the cartesian plane.
26. Write the coordinates of the vertices of a rectangle whose length and breadth are 7 and 4 units respectively, one vertex at the origin, the longer side lies on the x axis and one of the vertices lies in the quadrant.
27. Plot the following points and check whether they are collinear or not:
28. (i) $(2,3)$, $(3,2)$, $(1, -5)$ (ii) $(-1, 1)$, $(-3, 3)$, $(-5, 5)$
29. Draw the quadrilateral with vertices $(-4,4)$, $(-6,0)$, $(-4,4)$, $(-2, 0)$. Name the type of quadrilateral and find its area.
30. Find the point which lies on the line $y = -3x$ having abscissa 3.
31. Revise all the work done in class for the assessment 1 in July.

SOCIAL SCIENCE

1. Make a disaster management project on the following topics. (Any one)

TOPICS

ROLL NO.

Natural Disaster-

1-25

Earthquake, Landslides, floods, Droughts, and cyclone.

Man Made Disasters

26 Onwards

Fire, Rail , Road, Air Accidents, Terrorist attacks, Epidemics

Instructions:

- a. Give the meaning , description , causes, harmful effects, mitigation strategies and recent happenings.
- b. Projects must be supported by newspaper clippings, collage work, internet material, magazine and articles.
- c. It must include 8 pages of content , acknowledgement, introduction, sub topics.
- d. It should be handmade.
2. Make a collage on
 - (i) Water scarcity. (1-25)
 - (ii) Plastic pollution (26 onwards)
3. Revise all the work done in class for the assessment 1 in July.

SCIENCE

1. Collect leaves of different plants and make a Herbarium File.
2. Make posters on the given topics on A3 size sheet.
 - a. Waste Management (Roll no 1-10)
 - b. Global warming (Roll no 11-20)
 - c. Rain water harvesting (Roll no 21-30)
 - d. Go green (Roll no 31-40)
3. Complete the practical work done in the class in your science practical file.
4. Learn science syllabus for assessment 1.