GLOBAL NAV JEEWAN SECONDARY SCHOOL
CLASS -9th
HOLIDAY HOMEWORK

INSTRUCTIONS:

- *Some instructions for you to make the most out of your summer holidays:*

1. Set Goals: Whether it's reading a certain number of books, learning a new skill, or getting fit, and setting achievable goals will give your holidays purpose.

2. Explore Interests: Use this time to explore hobbies or interests you don't have time for during the school year. It could be painting, coding, gardening, or anything else you've been curious about.

3. Stay Active:Don't forget to stay physically active. Whether it's through sports, outdoor activities, or just going for walks, keeping your body moving is important for your overall well-being.

4. Learn Something New: Take advantage of online courses or tutorials to learn something new. It could be a language, a musical instrument, or a subject you're interested in but don't study at school.

5. Stay Connected: Spend time with friends and family. Plan outings, game nights, or just catch up over video calls if you're apart.
Enjoy your summer holidays!

➢ Every instruction is given as per the subject for your holiday homework.

➢ It is mentioned in the homework whether you need to do your work in your subject copy or holiday homework copy or on sheets.

(ENGLISH)

1.Read Scene-2 (Act -1) of Julius Caesar and fill its bookwork.

2.Do this worksheet in your English copy.

Happiness Speaking Activity

Exercise 1: Ask and answer the questions below in pairs.

1. Tell me about a happy moment in your childhood.

2. What kind of things make you happy?

3. Who in your life makes you feel happy? How? What do they do?

4. Is International Day of Happiness celebrated in your country? If not, do you think it should be?

5. Do you know anyone who is always happy and positive? Why do you think that is?

6. Do you think there is too much pressure nowadays to be happy all the time?

7. If you could plan your perfect day, what would you do?

8. Do you believe we are born with a positive/negative outlook on life, or is it due to people's life experiences?

9. It is said that Finland has the happiest population. Why do you think that might be?

10. Would you be satisfied as a stay-at-home parent, without working outside the home?

11. Do you need a lot of money to be happy?

12. What can you do now that will make you happy in 5/10 years?

13. Do you let others affect your happiness, or are you good at letting go of negative things people say to you?

14. Do you think happiness has a different meaning for everybody? What does it mean for you?

15. What do you do to look after your mental health?

3.Use these words daily while conversation.

Interesting Words Vocabulary Cards

happy
overjoyed, pretty, jolly, tremendous, enjoyable, eager, superb, cheerful, lovely, pleasant, ecstatic, stunning, content, lively, fantastic, pleased, thrilled, captivated, gleeful, terrific

next
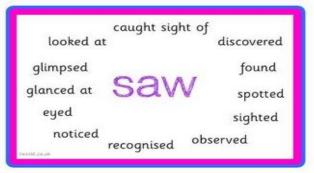first of all, after a short time, after that, following, finally, suddenly, just then, after a while, before long, meanwhile, a little later

sad
bewildered, heartbroken, alone, grumpy, glum, angry, sorrowful, bitter, distressed, cheerless, bored, horrible, dreadful, ignored, gloomy, empty, awful, terrible, hurting

said
called, whispered, stated, sounded, cried, mentioned, chattered, exclaimed, chuckled, wailed, giggled, announced, yelled, moaned, groaned, chanted, bellowed, joked, grumbled

big/small
huge, mammoth, tiny, compact, colossal, immense, miniature, dinky, tall, mini, limited, weighty, minute, great, little, enormous, massive, narrow, short, towering, vast, teeny, gigantic, measly, baby

went
ran, departed, leapt, stamped, wandered, fled, approached, searched, crept, strolled, skipped, rushed, scurried, dashed, limped, hobbled, jumped, crawled, stomped, danced

very
extremely, seriously, enormously, massively, outstandingly, highly, deeply, greatly, super, vastly, unusually, most, truly, unbelievably, hugely, especially

saw
caught sight of, looked at, discovered, glimpsed, found, glanced at, spotted, eyed, sighted, noticed, observed, recognised

4.Put yourself in the place of Bonku Babu and Imagine how you would have handled your life.Explain your actions in those particular circumstances.Make a project on it on A4 size sheets.

5. Draw a sketch of Julius Caesar on A3 size sheet.

(*MATHS*)

1.Do these worksheets:

Worksheet -1

1. Rational number $\frac{3}{40}$ is equal to:

(a) 0.75   (b) 0.12   (c) 0.012   (d) 0.075

2. A rational number between 3 and 4 is:

(a) $\frac{3}{2}$ (b) $\frac{4}{3}$ (c) $\frac{7}{2}$ (d) $\frac{7}{4}$

3. A rational number between $\frac{3}{5}$ and $\frac{4}{5}$ is:

(a) $\frac{7}{5}$ (b) $\frac{7}{10}$ (c) $\frac{3}{10}$ (d) $\frac{4}{10}$

4. A rational number between $\frac{1}{2}$ and $\frac{3}{4}$ is:

(a) $\frac{2}{5}$ (b) $\frac{5}{8}$ (c) $\frac{4}{3}$ (d) $\frac{1}{4}$

5. Which one of the following is not a rational number:

(a) $\sqrt{2}$ (b) 0   (c) $\sqrt{4}$ (d) $\sqrt{-16}$

6. Which one of the following is an irrational number:

(a) $\sqrt{4}$ (b) $3\sqrt{8}$ (c) $\sqrt{100}$ (d) $-\sqrt{0.64}$

7. Decimal representation of $\frac{1}{5}$ is :

(a) 0.2   (b) 0.5   (c) 0.02   (d) 0.002

8. $3\frac{3}{8}$ in decimal form is:

(a) 3.35   (b) 3.375   (c) 33.75   (d) 337.5

9. $\frac{5}{6}$ in the decimal form is:

(a) $0.8\overline{3}$ (b) $0.8\overline{33}$ (c) $0.6\overline{3}$ (d) $0.6\overline{33}$

10. Decimal representation of rational number $\frac{8}{27}$ is:

(a) $0.\overline{296}$ (b) $0.29\overline{6}$ (c) $0.2\overline{96}$ (d) 0.296

Worksheet -2

1. Find the amount and compound interest for $2000 lent for 2 years at 2% rate of interest p.a.

2. Find the amount and compound interest for $8000 lent for 3 years at 5% rate of interest, compounded annually.

3. Find the difference between compound interest and simple interest for a sum of $5000 lent for 3 years at 5% rate of interest p.a.

4. A sum of $8000 becomes $8800 in 1 year at a certain rate of interest per annum.

(i) Calculate the compound interest on the sum for 2 years at the same rate of interest.

(ii) Calculate the amount after 3 years at the same rate of compound interest.

5. Which one of the following is larger?

(i) Compound interest on $2500 for 2 years at the rate of 10% per annum.

(ii) Simple interest on $2000 for 3 years at the rate of 12 1/2% per annum.

6. Ron had borrowed $15000 for 3 years at 5%p.a., compound interest. Sam borrowed the same amount for the same number of years at the same rate p.a., simple interest. Find the amount paid by both at the end of 3 years. Who has to pay more and by how much?

7. Jack borrowed $50000 for 3 years at 15% per annum compound interest. Find the interest earned in the second year.

8. Shelly invests $66000 at 6% per annum compound interest for 3 years.

(i) Calculate the interest for the first year.

(ii) Calculate the amount at the end of the second year.

(iii) Calculate the interest for the third year.

(iv) Calculate the total compound interest.

9. A sum of $ 30000 is invested for 3 years at 7 ½ % per annum compound interest.

(i) What is the sum at the end of the second year?

(ii) What is the sum at the end of the 3 years?

(iii) What is the total interest earned in 3 years?

10. Jack borrowed $400000 from a money lender. He was charged 8% interest half yearly. What amount did he have to return after 1 ½ year?

Worksheet-3

1. Prove that $\sqrt{5} - \sqrt{3}$ is not a rational number.

2. Arrange the following in descending order of magnitude: $\sqrt[8]{90}, \sqrt[4]{10}, \sqrt{6}$

3. Simplify the following:

   (i) $\left(4\sqrt{3} - 2\sqrt{2}\right)\left(3\sqrt{2} + 4\sqrt{3}\right)$

   (ii) $\left(2 + \sqrt{3}\right)\left(3 + \sqrt{5}\right)$

   (iii) $\left(\sqrt{3} + \sqrt{2}\right)^2$

   (iv) $\left(\dfrac{2}{3}\sqrt{7} - \dfrac{1}{2}\sqrt{2} + 6\sqrt{11}\right) + \left(\dfrac{1}{3}\sqrt{7} + \dfrac{3}{2}\sqrt{2} - \sqrt{11}\right)$

4. Rationalize the denominator of the following:

   (i) $\dfrac{2}{\sqrt{3} - \sqrt{5}}$
   (ii) $\dfrac{\sqrt{3} + \sqrt{2}}{\sqrt{3} - \sqrt{2}}$
   (iii) $\dfrac{6}{\sqrt{5} + \sqrt{2}}$
   (iv) $\dfrac{1}{8 + 5\sqrt{2}}$

   (v) $\dfrac{3 - 2\sqrt{2}}{3 + 2\sqrt{2}}$
   (vi) $\dfrac{\sqrt{3} - 1}{\sqrt{3} + 1}$
   (vii) $\dfrac{4}{\sqrt{7} + \sqrt{3}}$
   (viii) $\dfrac{1}{5 + 3\sqrt{2}}$

5. Rationalise the denominator of the following:

   (i) $\dfrac{2}{3\sqrt{3}}$
   (ii) $\dfrac{16}{\sqrt{41} - 5}$
   (iii) $\dfrac{\sqrt{5} + \sqrt{2}}{\sqrt{5} - \sqrt{2}}$

   (iv) $\dfrac{\sqrt{40}}{\sqrt{3}}$
   (v) $\dfrac{3 + \sqrt{2}}{4\sqrt{2}}$
   (vi) $\dfrac{2 + \sqrt{3}}{2 - \sqrt{3}}$

   (vii) $\dfrac{\sqrt{6}}{\sqrt{2} + \sqrt{3}}$
   (viii) $\dfrac{3\sqrt{5} + \sqrt{3}}{\sqrt{5} - \sqrt{3}}$
   (ix) $\dfrac{4\sqrt{3} + 5\sqrt{2}}{\sqrt{48} + \sqrt{18}}$

6. If $a = 6 - \sqrt{35}$, find the value of $a^2 + \dfrac{1}{a^2}$.

7. If $x = 3 + \sqrt{8}$, find the value of (i) $x^2 + \dfrac{1}{x^2}$ and (ii) $x^4 + \dfrac{1}{x^4}$

8. Simplify, by rationalizing the denominator $\dfrac{2\sqrt{6}}{\sqrt{2} + \sqrt{3}} + \dfrac{6\sqrt{2}}{\sqrt{6} + \sqrt{3}} - \dfrac{8\sqrt{3}}{\sqrt{6} + \sqrt{2}}$

9. Simplify, by rationalizing the denominator

   $\dfrac{1}{3 - \sqrt{8}} - \dfrac{1}{\sqrt{8} - \sqrt{7}} + \dfrac{1}{\sqrt{7} - \sqrt{6}} - \dfrac{1}{\sqrt{6} - \sqrt{5}} + \dfrac{1}{\sqrt{5} - 2}$

10. If $x = \dfrac{\sqrt{2} + 1}{\sqrt{2} - 1}$ and $y = \dfrac{\sqrt{2} - 1}{\sqrt{2} + 1}$, find the value of $x^2 + y^2 + xy$.

❖ Project Work
o 1Conduct a survey of a group of students and represent it graphically - height, weight, number of family members, pocket money, etc.

   OR

o Planning delivery routes for a postman/milkman.

(SCIENCE)

❖ Biology:

Write all Experiments in your Biology practical file

Q1) To prepare temporary Stained Mount of an onion peel and observe it under the microscope for studying various parts of the cell.

Q2) To study a cross pollinated flower (Hibiscus :shoe flower) identify and label its various parts.

Q3) To study and examine the structure of germinating bean seed and maize grain .

Q4) To prepare a temporary stained mount of human cheek cells and observe it under the microscope for studying various parts of the cell.

Q5) Learn and write all Important Topics of chapter 1 and 2 in Holiday homework copy.

❖ Chemistry:

Write all Experiments in your Chemistry practical file

Q1) To identify An unknown gas by dry heating test

Q2) To study the effect of heat on the given (unknown) substance, make observations, identify any products and make deductions where possible

Q3) Write Down in your holiday homework copy symbols used by Dalton to Represent various elements

Q4) Learn and write in your holiday homework copy first 30 elements and their symbols with Electronic configuration

Q5) Write Down about 5 male and female Indian scientist in your holiday homework copy

❖ Physics:

Write all Experiments in your physics practical file

Q1) To Determine the least count of the Vernier callipers and measure the length and diameter of a small cylindrical rod

Q2) To Determine the pitch and least count of the given screw gauge and measure the mean radius of the given wire

Q3) Write Experiment no 3 Calculation of volume

Q4) Write Experiment no 4 Measurement of volume

Q5) write Experiment no 11 To obtain the weight…

<div align="center">(SOCIAL SCIENCE)</div>

1.. Collect newspaper cuttings about 2024 Lok Sabha election In India. Paste and make a project report on it.

2. Write a report on the need of Sustainable development in the present world.

3. Read history chapter 3 Jainism and Buddhism. Make notes and write about the similarities and differences between Jainism and Buddhism.

4. Prepare for UT and revise all the chapters done till now.

<div align="center"># (HINDI)</div>

प्र -1-बात अठन्नीकी पाठ का सारांश अपने शब्दों में लिखिए।

प्र -2 -गद्य बात अठन्नी की पाठ के प्रश्न /उत्तर याद कीजिए।

प्र -3-पद्य - कबीर की साखी का व्याख्या के प्रश्न /उत्तर याद करो।

प्र-4- (क)संज्ञा के भेदों का प्रोजेक्ट कार्य (A4 sheet) में बनाओं।(Roll no -1 to14)

(ख) विशेषण के भेदों का प्रोजेक्ट कार्य (A4 sheet)पर बनाओं। (Roll no 15 to27)

प्र-5- अखबार की कटिंग (assignment copy) में चिपकाए और विशेषण व क्रिया विशेषण छांटकर लिखिए।

प्रश्न 6- संस्कार की भावना पाठ एकांकी के दो प्रमुख पात्रों का चरित्र चित्रणअपने शब्दों में लिखिए।

<div align="center">❖ कार्यपत्रक</div>

1. निम्नलिखित वाक्यों में क्रिया-विशेषण छाँट कर लिखें—
   (i) दादा जी धीरे-धीरे चल रहे हैं।
   (ii) बहुत मेहनत करो, ताकि सफल हो जाओ।
   (iii) विकास अंदर गया था।
   (iv) गौरव परसों आएगा।
   (v) यह पुस्तक धड़ाधड़ बिक रही है।
   (vi) बच्चा थोड़ा-थोड़ा बोलने लगा है।
   (vii) वर्षा दिन-भर होती रही।
   (viii) वह अचानक गिर पड़ा।
   (ix) पानी निरंतर बह रहा है।
   (x) यहाँ से चले जाइए।

2. निम्नलिखित वाक्यों में रिक्त स्थानों की पूर्ति संबंधबोधक अव्ययों से करें—
   (i) मेरे घर ----------- एक दर्जी रहता है।
   (ii) उसने गणित ----------- इतिहास विषय ले लिया।
   (iii) छात्र बीमारी ----------- अनुपस्थित था।
   (iv) मैंने दाल ----------- रोटी खाई।
   (v) मज़दूर पेड़ ----------- लेटा है।
   (vi) बड़ों ----------- नहीं बोलना चाहिए।
   (vii) खरगोश ----------- कछुआ दौड़ जीत गया।
   (viii) मुझे पत्र ----------- सूचित करना।
   (ix) वह दर्द ----------- कराह रहा था।
   (x) केशव घर ----------- सो रहा है।

3. निम्नलिखित वाक्यों में समुच्चयबोधक अव्यय लगाकर रिक्त-स्थानों की पूर्ति करें—
   (i) बच्चे ने पत्थर उठाया ----------- कुत्ते को दे मारा।
   (ii) शांत हो जाओ ----------- मार पड़ेगी।
   (iii) बादल गरजे ----------- वर्षा नहीं हुई।
   (iv) उसने परिश्रम किया, ----------- अच्छे अंक हासिल किए।
   (v) तेज चलो ----------- समय पर पहुँच सको।
   (vi) वह न माने ----------- उससे कहिएगा।
   (vii) राम दुबला है ----------- बहुत ताकतवर है।
   (viii) महान पुरुष अभिमानी नहीं ----------- विनम्र होते हैं।
   (ix) वह परीक्षा न दे सका ----------- वह बीमार था।
   (x) उसने मेहनत नहीं की ----------- फेल हो गया।

COMPUTER

1. What is a computer? Describe its main components.

2. Explain the differences between hardware and software. Provide examples of each.

3. What are the basic functions of an operating system?

4. Define the term 'algorithm' and explain its importance in computer science.

5. What is the difference between primary memory (RAM) and secondary memory (hard drive)?

6. Explain the term 'network' and describe different types of networks (LAN, WAN, MAN).

7. What is the Internet? How is it different from the World Wide Web?

8. Describe the role of a browser in accessing web content.

9. What are the various types of software licenses? Explain the difference between proprietary software and open-source software.

10. What is cloud computing? List some advantages and disadvantages of using cloud services.

PROJECT

1. Research and write a short essay on the history and evolution of programming languages.

2. Explore the impact of social media on society and summarize your findings in a report.

3. Investigate how artificial intelligence is being used in different industries and write a brief report on your findings.