

**SHAMBHU DAYAL GLOBAL SCHOOL**  
**WINTER'S HOLIDAY HOMEWORK**  
**(SESSION 2023-24)**  
**CLASS – 8 (MYP -3)**

<b>S.No</b>	<b>SUBJECT</b>	<b>CONTENT</b>
1.	<b>INDIVIDUAL &amp; SOCIETIES</b>	<p><b>The following tasks need to be done in your respective register.</b></p> <p><b>a.</b> Create a bingo game with terms related to parliamentary systems. Learn about these terms, mark them on their bingo cards.</p> <p><b>b. WORKSHEET-</b></p> <ol style="list-style-type: none"> <li>1. How do dictators use cults of personality to consolidate power?</li> <li>2. What are the economic consequences of corruption in dictatorships</li> <li>3. How do dictatorial regimes impact education and intellectual freedom?</li> <li>4. Is there a relationship between dictatorship and nationalism?</li> <li>5. How does the concept of federalism or decentralization contribute to democratic governance?</li> <li>6. What measures are in place to prevent or address corruption in democratic societies?</li> <li>7. How do democracies handle the tension between national security and individual privacy?</li> <li>8. What is the role of civil society in supporting and strengthening democracy?</li> <li>9. How do education and civic engagement contribute to the sustainability of democratic systems?</li> <li>10. Can democracies effectively address global challenges such as climate change and pandemics?</li> <li>11. How do economic systems address environmental sustainability and natural resource management?</li> <li>12. Can you discuss the role of competition in shaping economic outcomes?</li> <li>13. How do economic systems deal with issues of inequality and social justice?</li> <li>14. What are the main factors that influence economic growth in different systems?</li> <li>15. How do economic systems adapt to changing technological landscapes?</li> <li>16. What are the consequences of income inequality within an economic system?</li> <li>17. How do economic systems address the provision of public goods and services?</li> </ol>

		<p>18. Can you explain the concept of economic indicators and how they are used to measure the health of an economy?</p> <p>19. How do economic systems respond to economic crises, such as recessions or financial meltdowns?</p> <p>20. Are there any instances where a dictatorship transitioned to a more democratic form of government? What factors contributed to this transition?</p>
<p><b>2.</b></p>	<p><b>MATHS</b></p>	<p><b>On Embibe Learning platform</b></p> <p><b>Achieve journey of chapter Algebraic Expression and Exponents and powers</b></p> <p><b>Test on algebraic expressions due date 2.1.24</b></p> <p><b>Test on exponents and power due date 4th January 2024</b></p> <p><b>MATHEMATICS WORKSHEET OF CLASS VIII</b></p> <p><b>ALGEBRAIC EXPRESSIONS :TOPIC</b></p> <p><b>1. Classify the following expressions as monomials, binomials and trinomials.</b></p> <p><math>4a^2</math> _____                      <math>5a^2b+3</math> _____</p> <p><math>7b^3</math> _____                      <math>8a^2 + 7ab + b^2</math> _____</p> <p><math>4x^2 + 1</math> _____                      <math>a^2 + b^2</math> _____</p> <p><b>2. Write the degrees of the following polynomials.</b></p> <p>a) <math>2x^2 + 3xy + 5y^2 + 2</math> _____                      b) <math>7x^2y + 3xy^2 + 4xy</math> _____</p> <p>c) <math>x^3y^3 - 4x^2y + 5xy^2 + x^2y^2</math> _____                      d) <math>4x^5 + 5x^3 + 7x^2 + 2</math> _____</p> <p><b>3. Add.</b></p> <p>a) <math>(10x^2 + 5x - 3) + (7x^2 - 2x + 7) =</math></p> <p>b) <math>(3x^2y + 4x^2y^2 - 7xy^2) + (9x^2y - x^2y^2 + 3xy^2) =</math></p> <p>c) <math>(10x^2y - 3xy^2 + 5x^2y^2 + 22) + (3x^2y^2 + 7) =</math></p> <p><b>4. Subtract <math>2x^2 + 5x - 7</math> from <math>7x^2 - 5x + 3</math>.</b></p> <p><b>5. Subtract <math>2ab + 7a^2 + 8b^2</math> from <math>10b^2 + 7ab + a^2</math>.</b></p>

**Subtract  $5a^3 - 2a^2 + 7$  from the sum of  $a^3 - 3a^2 + 5a + 1$  and  $7a^2 + a + 3$ .**

**What should be added to  $x^4 + 2x^2 - 7$  to obtain  $4x^4 - 3x^3 + x^2 + 2$ ?**

**What must be subtracted from  $4x^2y^2 + 3xy + 3xy^2$  to obtain  $8xy^2 - 4x^2y + 7x^2y^2 + 10xy$ ?**

**Find the products of the following expressions.**

1.  $(2x - 1)(x + 2) =$

2.  $(p^2 + q^2)(p + q) =$

3.  $\left(\frac{2}{3}x + y\right)(x^2 - y^2) =$

4.  $(2x - 1)(x^2 + x + 1) =$

5.  $(3a + 1)\left(\frac{a^3}{5} - a + 1\right) =$

6.  $(x + xy)\left(\frac{x^2}{2} + xy + y^2\right) =$

**Evaluate the following by using the formulae for  $(a + b)^2$  and  $(a - b)^2$ .**

a)  $(101)^2 =$

b)  $(99)^2 =$

c)  $(198)^2 =$

EXPONENT AND POWERS :TOPIC

		<p>1. Write in exponential form:  a) <math>5 \times 5 \times 5 \times 5 \times 5</math>  b) <math>(-4) \times (-4) \times (-4)</math></p> <p>2. Value of <math>(-1)^{15} \times (-1)^{16}</math> equals:  (a) 1 (b) -1 (c) -240 (d) 240</p> <p>3. Express each of the following in exponential form:  (a) 1024 (b) 1331/343</p> <p>4. Which is greater:  (a) <math>3^6</math> or <math>6^3</math>?  (b) <math>(-5^2)</math> or <math>(-5)^2</math>?</p> <p>5. Express each of the following numbers as a product of powers of its prime factors:  a) 128  b) 625</p> <p>6. Find the value:  a) <math>(25)^{3/2}</math>  b) <math>(27)^{4/3}</math>  c) <math>(\frac{4}{9})^{3/2}</math></p> <p>7. Evaluate (i) <math>\left\{ \left( \frac{1}{3} \right)^{-1} - \left( \frac{1}{4} \right)^{-1} \right\}^{-1}</math> (ii) <math>\left( \frac{5}{8} \right)^{-7} \times \left( \frac{8}{5} \right)^{-4}</math></p> <p>8. Find the value of <math>m</math> for which <math>5^m \div 5^{-3} = 5^5</math>.</p> <p>9. Simplify.  (i) <math>\frac{25 \times t^{-4}}{5^{-3} \times 10 \times t^{-8}} \quad (t \neq 0)</math> (ii) <math>\frac{3^{-5} \times 10^{-5} \times 125}{5^{-7} \times 6^{-5}}</math></p> <p>10. Simplify and express each of the following in exponential form using laws of exponents:  a) <math>(4^2)^3</math>  b) <math>2^3 \times 5^3</math>  c) <math>a^4 \times a^7</math>  d) <math>5^{12} \div 5^4</math></p>
3	Hindi	<p><b>प्र.1 अपठित' गद्यांश को पढ़कर प्रश्नों के उत्तर पुस्तिका में लिखिए  </b></p> <p>बातचीत करते समय हमें शब्दों के चयन पर विशेष ध्यान देना चाहिए, क्योंकि सम्मानजनक शब्द व्यक्ति को उदात्त एवं महान बनाते हैं। बातचीत को सुगम एवं प्रभावशाली बनाने के लिए सदैव प्रचलित भाषा का ही प्रयोग करना चाहिए। अत्यंत साहित्यिक एवं क्लिष्ट भाषा के प्रयोग से कहीं ऐसा न हो कि हमारा व्यक्तित्व चोट खा जाए। बातचीत में केवल विचारों का ही आदानप्रदान नहीं होता, बल्कि व्यक्तित्व का भी आदान-प्रदान होता है। अतः शिक्षक वर्ग को शब्दों का चयन सोच-समझकर करना चाहिए। शिक्षक वास्तव में एक अच्छा अभिनेता होता है, जो अपने व्यक्तित्व, शैली, बोलचाल और हावभाव से विद्यार्थियों का ध्यान अपनी ओर आकर्षित करता है और उन पर अपनी छाप छोड़ता है।</p> <p><b>(i) शिक्षक होता है ?</b></p> <p>(क) राजनेता  (ख) साहित्यकार</p>

(ग) अभिनेता

(घ) कवि

**(ii) बातचीत में किस प्रकार की भाषा का प्रयोग करना चाहिए?**

(क) अप्रचलित

(ख) प्रचलित

(ग) क्लिष्ट

(घ) रहस्यमयी

**(iii) शिक्षक वर्ग को बोलना चाहिए?**

(क) सोच-समझकर

(ख) ज्यादा

(ग) बिना सोचे-समझे

(घ) तुरंत

**(iv) बातचीत में आदान-प्रदान होता है—**

(क) केवल विचारों का

(ख) केवल भाषा का

(ग) केवल व्यक्तित्व का

(घ) विचारों एवं व्यक्तित्व का

**(v) उपर्युक्त गद्यांश का उचित शीर्षक है**

(क) बातचीत की कला

(ख) शब्दों का चयन

(ग) साहित्यिक भाषा

(घ) व्यक्तित्व का प्रभाव

**2. निम्नलिखित में से किसी एक विषय पर A4 शीट पर शिक्षा सहित कहानी लिखिए |  
ब्द 100 से 200 तक)**

1. आज़ादी का सुख, संगठन की ताकत
2. जहाँ चाह वहाँ राह
3. भारत के किसी अंतरिक्ष मिशन पर कहानी लिखिए |
4. भारत सेना के किसी खुफिया आपरेशन पर कहानी लिखिए |
5. अपने लक्ष्य पर निशाना लगाओ
6. ईश्वरीय दया

		<p>3 निम्नलिखित शब्दों के तीन-तीन पर्यायवाची अपनी पुस्तिका में लिखिए  </p> <p>1. बिजली - 2. देश -  3. किनारा - 4. रात -  5. बादल - 6. सुगंध -  7. प्रकाश - 8. ईश्वर -  9. अमृत - 10. कपड़ा -</p> <p>प्र.4 निम्नलिखित शब्दों के विलोम शब्द अपनी पुस्तिका में लिखिए  </p> <p>1. पाप - 2. कृतज्ञ -  3. गमन - 4. सच्चा -  5. उपकार - 6. आस्तिक -  7. खरा - 8. सत्य-  9. शाश्वत - 10. वरिष्ठ -</p> <p>प्र.5 रॉयल टेलीविज़न' बनाने वाली कंपनी के लिए विज्ञापन अपनी उत्तर पुस्तिका में तैयार कीजिए।</p> <p style="text-align: center;">या</p> <p style="text-align: center;">‘उत्तर प्रदेश पर्यटन विभाग’ पर्यटकों के लिए कई आकर्षक योजनाएँ लाया है। उनके संबंध में एक विज्ञापन अपनी उत्तर पुस्तिका में तैयार कीजिए।</p>
3.	SCIENCE	<p><b>Do the given worksheet in your notebook</b></p> <p>1. What is the resistivity of a semiconductor?  a) More than that of insulators and conductors  b) Between that of insulators and conductors  c) Less than that of insulators and conductors  d) None of the above</p> <p>2. Which among the following is the most widely used semiconductor material?  a) Potassium b) Phosphorous  c) Silicon d) Arsenic</p>

3. The energy gap between the valence band and the conduction band in a semiconductor is

- a) 5 eV
- b) 10 eV
- c) 15 eV
- d) 1 eV

4. What is the sign of the temperature coefficient of resistance in a semiconductor?

- a) Negative
- b) Positive
- c) Zero
- d) None of the above

5. How many valence electrons are there in semiconductors?

- a) 2
- b) 3
- c) 4
- d) 6

6. What is the resistivity of pure germanium under the standard condition?

- a)  $6 \times 10^4 \Omega \text{ cm}$
- b)  $60 \Omega \text{ cm}$
- c)  $3 \times 10^{-3} \Omega \text{ cm}$
- d)  $6 \times 10^{-4} \Omega \text{ cm}$

7. Where does the strength of a semiconductor crystal come from?

- a) Forces between nuclei
- b) Force between protons
- c) Electrons-Pairs bonds
- d) None of the above

8. What is the charge on a n-type semiconductor?

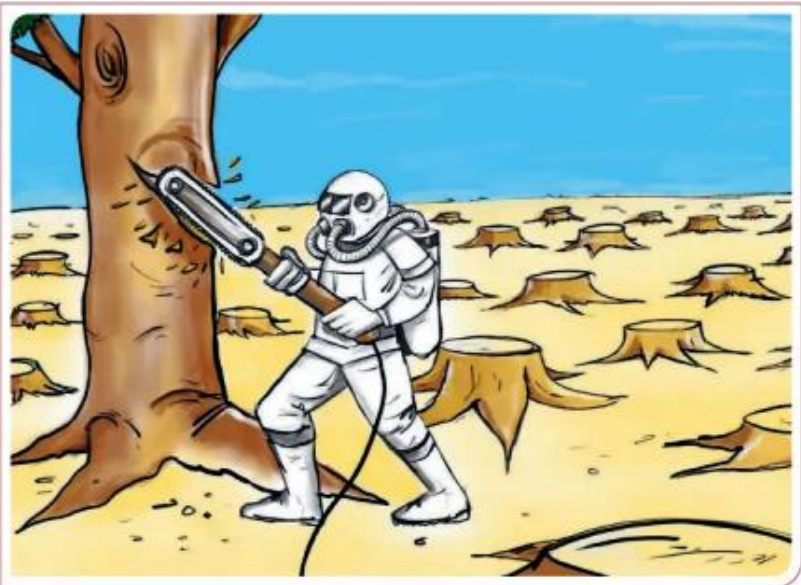
- a) Positively charged
- b) Electrically neutral
- c) Negatively charged
- d) None of the above

9. In an n-type Silicon, which of the following statement is true?

- a) Electrons are majority carriers and trivalent atoms are the dopants.
- b) Electrons are minority carriers and pentavalent atoms are the dopants.
- c) Holes are minority carriers and pentavalent atoms are the dopants.
- d) Holes are majority carriers and trivalent atoms are the dopants.

10. In an unbiased p-n junction, holes diffuse to the n-region from the p-region because

- (a) free electrons in the n-region attract them.
- (b) they move across the junction by the potential difference.
- (c) hole concentration in the p-region is more as compared to the n-region.
- (d) All of the above.

		<p>11. What type of impurity is added to obtain n-type semiconductor?</p> <p>12. Under what condition does a junction diode work as an open switch?</p> <p>13. Why is a semiconductor damaged by a strong current?</p> <p>14. What do you mean by depletion region and potential barrier in junction diode?</p> <p>15. What do you mean by hole in a circuit? Write its two characteristics.</p> <p>16. Give the ratio of number of holes and the number of conduction electrons in an intrinsic semiconductor.</p> <p>17. How does the energy gap of an intrinsic semiconductor vary, when doped with a trivalent impurity?</p> <p>18. Draw a p-n junction with reverse bias. Which biasing will make the resistance of a p-n-junction high?</p> <p>19. The base of a transistor is lightly doped. Explain why?</p> <p>20. Distinguish between conductors, insulators and semiconductors on the basis of energy band diagrams.</p> <p>21. Draw the symbol for Zener diode. Zener diodes have higher dopant densities as compared to ordinary p-n junction diodes. How does it affect the</p> <ol style="list-style-type: none"> <li>width of the depletion layer?</li> <li>junction field?</li> </ol> <p>22. Why does the resistivity of semiconductors go down with temperature?</p> <p>23. What are some important properties of semiconductors?</p> <p>24. What are some devices that use semiconductors?</p> <p>25. Describe the difference between donor and acceptor impurities.</p>
5	English	<p><b>1. Write a story in your Grammar copy on the given image in 300-400 words.</b></p> 



2. Make a power point presentation on the topic “Sustainable goals to save the Earth” with 10-15 slides.
- 3- Write a descriptive paragraph on the topic “Your Choice Makes Difference” in 200-300 words. (Write in Grammar copy).

**WORKSHEET OF TENSES:(DO IN GRAMMAR COPY)**

Q1. Write the type of tense in following sentences:

- 1.The dog is barking at the postman.
- 2.She has been working on the project for a week.
- 3.They will be leaving for Delhi on Monday.
- 4.I had been living in the city for five years before I moved to the countryside.
- 5.If I had known you were coming, I would have made a cake.
- 6.He used to go for a walk every morning.
- 7.He goes to the gym every day.
- 8.He went for a walk yesterday.
- 9.He will go for a walk tomorrow.
- 10.I have eaten my lunch.

Q2. Change the tense:

- 1.The dog is barking at the postman. (Simple Present)
- 2.She has been working on the project for a week. (Present Perfect)
- 3.They will be leaving for Delhi on Monday. (Simple Future)
- 4.I had been living in the city for five years before I moved to the countryside. (Past Perfect)
- 5.If I had known you were coming, I would have made a cake. (Simple Past)
- 6.He used to go for a walk every morning. (Past Continuous)
- 7.He would go for a walk every morning. (Simple Past)

8.He went for a walk yesterday. (Simple Future)

9.He will go for a walk tomorrow. (Simple Present)

10.I ate my lunch along with my friends. (Simple Future)

Q3.Fill in the blanks with correct form of verb:

1.The train \_\_\_ at 10:00 AM.

2.I \_\_\_ studying for two hours.

3.They \_\_\_ here in a few minutes.

4.I had been \_\_\_ in the city for five years before I moved to the countryside.

5.If I \_\_\_ you were coming, I would have made a cake.

6.He \_\_\_ go for a walk every morning.

7.He \_\_\_ for a walk every morning.

8.He \_\_\_ for a walk yesterday.

9.He \_\_\_ for a walk tomorrow.

10.He \_\_\_ go for a walk later.

**Q.Write an email to your friend Divya Chaudhari telling her about your school trip to Corbett Park, Dehradun.(In Grammar copy about 50 –80 words)**

**Q.Last week you were caught in a sudden shower of rain. Write an email to your friend describing the experience.(In Grammar copy about 50-80 words)**