**ITBP PUBLIC SCHOOL**
**WINTER BREAK HOLIDAYS HOMEWORK**
**CLASS –VIII$^{TH}$**

**SCIENCE**

- Prepare a project based on chapter air and water pollution
- Revise your chapters for tests
- Complete your science worksheets in your notebook

**SOCIAL STUDIES**

- Learn chapter-5,8,9 (history)
- Read chapter-10 history and do the questions given in the class

**HINDI**

प्रतिवेदन-मौसम का सबसे ठंडा दिन,अभिभावक दिवस,मेरी पहली रेल यात्रा

पाँच पृष्ठ सुलेख

अनुच्छेद-बेटी पढाओ,बेटी बचाओ,स्वच्छ भारत,स्वस्थ भारत,पढेगा इंडिया बढेगा इंडिय,विद्यार्थी जीवन में खेलों का महत्तव,अब पछताए होत क्या जब चिडिया चुग गई खेत

**MATHS**

Practice worksheets of Ch-8,9 and 11 are attached below.

**ENGLISH**

Q1) Recently, you have read an article on the dangers of fast food, junk food and cold drinks. You are Samar/Sabita. Write a letter to the Editor on the on the topic 'dangers of fast food' to be publish in 'The Hindu' drawing the attention of District Heath Department.

Q2) Write a letter to the Editor of a newspaper expressing your views on the importance of saving water as you have seen people wasting water carelessly on one hand and on the other hand people fight for a single drop of water and farmers die because of drought. On the basis of the ideas reflected in MCB unit Environment and your own ideas write the letter.

Q3) Recently, you got an opportunity to meet some courageous girls, who, despite serious opposition from their families, continue their education. This has made you feel both proud and concern about these girls and you decide to an article for a newspaper on the topic 'the need to promote girl child education'.

Q4) You are the president of the Environment Club of your school. The club is organizing a three day trip to Jim Corbett Park. In about 50 words write a notice for the students of Std. VIII informing them about the trip. Also give other necessary details.

Q5) A well dressed gentleman came to meet your father but he was not at home. He did not give his name. All he said was that he and your father had studied together in college, and had not met for the last 15 years. He promised to come again tomorrow.
In about 100 words, give a description of this gentleman to your father to help him identify his old friend.

Prepare for the Annual Term Exam.

**Sanskrit**

१.इकारांत,उकारांत(पुं.) मुनि व साधु की तरह गिरि,हरि,कवि,शिशु,रिपु शब्दों के रूप लिखें व याद करें।

२.ऋकारांत(पुं.,स्त्री.)पितृ,मातृ की तरह कर्तृ,श्रोतृ,दुहितृ,ननान्दृ शब्दों के रूप लिखें।

३.पाठ-१९ सुभाषितानि (कोई एक सुभाषित A-4 सीट में सुंदर व रंगीन शब्दों में लिखें।)

**Computer**

- Practice all questions of IF..THEN..ELSE, Do While Loop and Do Loop While
- Read and Chapter 8 and 9.
- Make a list of doubts.

**ITBP PUBLIC SCHOOL, DWARKA**

**CLASS VIII**

**SUBJECT MATHEMATICS**

**Work Sheet of Chapter – 8 ( Comparing Quantities)**

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1. Out of a salary of Rs 75000, I kept 1/3 as savings. Out of the remaining money, I spend 25 % on food and 40 % on house rent. How much do I spend on food and house rent?
2. Rina gets 94 marks in her exams. These are 47% of the total marks. Find the maximum number of marks.
3. A tank can hold 50 liters of water. At present, it is only 30 % full. How many liters of water shall I pit in the tank, so that it is 50 % full?
4. Find the following:- (1) MP =Rs 1000, Discount 10%, SP=?
   (2) SP =Rs 80, Discount 10%, MP =? (3) MP=Rs 625, SP=Rs 562.50, Discount%=?
5. Sachin bought a pair of Reebok shoes at a sale of 25%. If the amount he paid was Rs 2000, find the marked price.
6. If the Principal is Rs50000 and 8% is the rate of interest per annum compound annually
   (a) Find the interest earned in First year (b) What is the principal for $2^{nd}$ Year
   (c)What is the interest earned in second year
7. There are 442 boy students in class X in all the section in Saint Xavier school. If 25% of the students are girls, find the total number of students in class X?
8. You buy a house for Rs 400,0000 and pay a tax of 8%. How much is tax?
9. **Find the following:** (I) 50 % of 14 (ii) 30 % of Rs. 750 (iii) 16.5 % of 4000 kg (iv) 0.8 % of 8 km (v) 12 % of 360 m (vi) 0.8 % of 250 g (vii) 3/4 % of Rs. 780
10. The population of a city increased from 60000 to 62500. What is the increase percent?
11. An alloy of iron and zinc contains 40 % of iron and the rest is zinc. Find the weight of the zinc in 3 kg of the alloy?
12. The population of a small locality in Gurgaon was 1000 in 2014 and became 1500 in 2015. By what percent did the population increases?
13. Calculate the amount and C.I on 3200 at 5% per year for 2 years.
14. S.I on a certain sum of money for 2 years at 6 1⁄2 % p.a is 5200.What will be the C.I on that sum at same rate and for the same period?
15. George deposited 24000 with Indian oil Co. for 9 months. The company credits the interest quarterly in his account at 10% p.a What int. did he get?
16. By selling 300 bananas a man lost the S.P of 25bananas.Find his loss%. Had he purchased them for 390, what would have been the S.P of 1 banana?
17. I purchased a hair-dryer for 5400 including 8% VAT. Find the price before VAT was added.
18. Summi borrowed Rs.20000 from her friend Nikita at 12% per annum simple Interest. She lent it to Nikita at the same rate but compounded annually. Find her gain after 2 years.
19. Sam deposited Rs.32000 in a bank, where the interest is credited quarterly. If the rate of interest be 5% per annum, what amount will he receive after 6 months?
20. The value of a machine depreciates at 12.5% per annum. it was purchased 3 yrs ago. If its present value is Rs.13720, Find the original value of machine.

**ITBP PUBLIC SCHOOL, DWARKA**

**CLASS VIII**

**SUBJECT MATHEMATICS**

**Work Sheet of Chapter – 9 (Algebraic Expressions and Identities)**

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1. Identify the terms, their coefficients for each of the following expressions.

   (i) $xyz^2 + 3xy$ (ii) $1 - x - 2x^2$ (iii) $4p^2q^2 – 4p^2q^2r^2 + r^2$

2. Classify the following polynomials as monomials, binomials, trinomials. Which polynomials do not fit in any of these three categories?

   (i) $x^2 + y^2$ (ii) 1000-x (iii) $x + x^2 + x^3 + x^4 + x^5$

   (iv) 8 - y +-5x *(v) $2y – 3y^2$*

3. Add the following.

   (i) ab – bc+ ac, bc – ca+ ab, ca – ab-2bc (ii) p – q + pq, q – r + qr, r – p + pr , p+q+r

   (iii) $2p^2q^2 – 3pq + 4$, $5 + 7pq – 3p^2q^2$ ,$4p^2q^2 + 10pq$ (iv) $a^2 + b^2$, $b^2 + c^2$, $c^2 + a^2$, 2ab + 2bc + 2ac

4. (i) Subtract *$8a – 7ab + 3b - 20$* from *$20a – 9ab + 5b – 20$*

   (ii) Subtract *$3pq + 5qr – 7pr+1$* from *$-4pq +2qr – 2pr + 5pqr+1$*

   (iii) Subtract *$4p^2q – 4pq - 5pq^2 – 8p + 7q – 18$* from *$18 – 3p – 11q + 5pq – 2pq^2 + 5p^2$*q

5. Find the product of the following expression

   (a) 11, 7x (b) – 4x, y (c) – 4p, pq, pr (d) $4p^3$, – 3p, $p^2$

6. Use a suitable identity to get each of the following products.

   a) (p - 11) (p + 11) b) (2a-1/2)(2a-1/2) c) [ (p/8)+(3q/4)] [ (p/8)+(3q/4)]

   d) (3a + 9b) (3a + 9b) e) $(a – 9)^2$ f) $5(xy - 3z)^2$

   g) $36[(3p/2\}) + (2q/3)]^2$ h) $(x – 0.5y)^2$ i) $(2xy - 5y)^2$

7. Use the identity $(x + a) (x + b) = x^2 + (a + b) x + ab$ to find the following products.

   (i) (p + 10) (p + 11) (ii) (4x + 9) (4x + 12) (iii) (9x - 5) (9x – 1) (iv) $(2a^2+ 9) (2a^2+ 5)$

8. Simplify the following

   (i) $(x^2– y^2)^2 + 4x^2y^2$ (ii) $(p + q)^2 – (p – q)^2 + p^2q^2$ (iii) $(2m – 8n)^2+ (2m + 8n)^2$

   (iv) $(4m + 5n)^2 + (5m + 4n)^2 + (4m + 5n) (4m - 5n)$ (v) $(.5p – 1.5q)^2 – (.5p – 1.5q)^2 + p^2q^2$

9. Using identities, evaluate.

   a) $91^2$ b) *$89^2$* c) $999^2$ d) $1.2^2$

   e) 397 x 403 (f) $61^2– 59^2$ g) $11.1^2– 9.9^2$ g) 9.7 x 9.8

10. Find the value of x if $8x=35^2 - 27^2$
11. If p +q =13 and pq =22, then $p^2 + q^2$
12. Find the value of: $x^2 – 1/5$ at x= -1.
13. What is the value of $x^2 + y^2 – 10$ at x = 0 and y = 0?
14. Simplify (a + b + c)(a + b - c).
15. Simplify x(2x – 1) + 5 and find its value at x = -2.

**ITBP PUBLIC SCHOOL, DWARKA**

**CLASS VIII**

**SUBJECT MATHEMATICS**

**Work Sheet of Chapter – 11 (Mensuration)**

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1. If the circumference of a circular sheet is 176 m, find its diameter and area.
2. The area of a circle is 616 $cm^2$. Find its diameter and circumference.
3. The diameter of a wheel is 70 cm. How many times the wheel will revolve in order to cover a distance of 110 m?
4. A thin wire is in the form of an equilateral triangle of side 11 cm. Find the area of a circle whose circumference is equal to the length of the wire.
5. Find the area of a trapezium whose parallel sides are 38.7 cm and 22.3 cm, and the distance between them is 18 cm.
6. The area of a trapezium is 1586 $cm^2$ and the distance between its parallel sides is 26 cm. If one of the parallel sides is 84 cm, find the other side.
7. Mitesh wants to buy a trapezium shaped field. Its side along the river is parallel to and twice the side along the road. If the area of this field is 10500 $m^2$ and the perpendicular distance between the two parallel sides is 100 m, find the length of the side along the river.
8. There are two cuboidal whose dimensions are given below. Which box requires the higher amount of material to make? Cuboid A: L=23, B=30, H=40; Cuboid B: L=30, B=12, H=44
9. Find the side of a cube whose surface area is 2400 $cm^2$.
10. Ahmed is painting the walls and ceiling of a cuboidal hall with length, breadth and height of 25 m, 12 m and 8 m respectively. From each can of paint 200 $m^2$ of area is painted. How many cans of paint will she need to paint the room?
11. A open cylindrical tank of radius 14 m and height 3 m is made from a sheet of metal. How much sheet of metal is required?
12. A road roller takes 750 complete revolutions to move once over to level a road. Find the area of the road if the diameter of a road roller is 84 cm and length is 1 m.
13. How many times do the volume and surface area of a cube increase if its edges get tripled.
14. A cuboid is of dimensions 60 cm × 54 cm × 30 cm. How many small cubes with side 12 cm can be placed in the given cuboid?
15. A water tank is in the form of cuboid whose length is 1.5 m , height is 2 m and Breath is 7 m. Find the quantity of water in litres that can be stored in the tank?
16. Water is pouring into a cuboidal reservoir at the rate of 60 liters per minute. If the volume of reservoir is 108 $m^3$, find the number of hours it will take to fill the reservoir.I
17. If radius of cylinder is tripled and height remains same
    (i) how many times will its surface area increase?
    (ii) how many times will its volume increase?
18. The lateral surface area of a hollow cylinder is 4224 $cm^2$. It is cut along its height and formed a rectangular sheet of width 33 cm. Find the perimeter of rectangular sheet?