(Holidays Homeworer)
Class - 8th

Science

1. **(Biology)** - Draw and Label the structure of a Plant Cell and an animal cell.

2. Describe the structure and function of Cytoplasm, mitochondria, Cell wall, Nucleolus, Nucleus, food vacuole.

3. Make a chat on plant tissues (types) and Animal tissue (types)

Physics - * Describe the structure and function of human ear.

* Write short notes On -
→ Law of Motion
→ Types of energy
→ Law of refection of light

Chemistry

* Identify and write the chemical formula of Common Compounds

* Write the elements list of Periodic table with their symbols, atomic numbers and mass. (# up to 30)

* Kannada

* ಕನ್ನಡ ವರ್ಣಮಾಲೆ ವಿಧಗಳೆನ್ನು ಬರೆಯಿಂ.

* ನಾಮಪದ ವಿಧಿಗಳೆನ್ನು ಬರೆಯಿಂ ಮೆತ್ತು ಉದಾಹರಣೆ ಬರೆ (೧೦)

* ಬಿಬೆಕ್ತಿ ಪ್ರತ್ಯಯ ವಿಧಗಳೆ ಮೆತ್ತು ಅಮೆನಳಿಗೆ ಉದಾಹರಣೆ ಬರೆ (5)

* ಕನ್ನಡ ಸಂಧಿಗಳ ವಿಧಗಳೆನ್ನು ಬರೆಯಿಂ ಉದಾಹರಣೆ ಸಹಿತ ಬರೆ

* ಗಾದೆಮಾತುಗಳೆನ್ನು ಬಿನಿಂಸಿ ಬರೆಯಿಂ (4 any)

* ಪ್ರಬಂಧ ರಚನೆ ① ಆಧುನಿಕ ತಂತ್ರಜ್ಞಾನ ಮೆತ್ತು
ಮೊಬೈಲ್‌ಸೆಳ್ ಪಾತ್ರ

② ಸೆಂಸೆ ಮಾಳನೆಕ್ಕೆ ಕಾರಣಗಳೆ ಮೆತ್ತು
ತೆಡಾರೆಗಳೆನ್ನು ಬರೆಯಿಂ.

* Hindi

* संज्ञा।

* सर्वनाम

* कारका

* क्रिया

* पद परिवर्तन —> एकवचरीक पग   2> बहुकिका पग

* प्रबध —> 1> जनसंख्या   2> पर्यावरण प्रदूषण

* परिवर्तन चिन्ह

Holyday Homework.
Class 8th.— Sub: English.

(1) parts of speech- write in detail
(a) Noun (b) pronoun (c) Verb (d) Adverb
(e) Adjective (f) Preposition (g) Conjunction
(h) Interjection. [Defination and Examples]

2- Sentences and its Kinds-
(Defination and Examples)
3- Tenses- [Basic information]
4- Opposite words- 50. words
5- Homophones - 30. words
6- Synonyms- 30 words.
7- Practise letter writing.
[Formal letter - 5]
8- Eassy- (a) ~~save~~ water is precious
(b) save forest - save life.
(c) ~~Rote~~ Role of social media.
(d) Importance of Newspaper.
9- write 3, 4, 5, 6, 7, - letter words- [Daily 5]

Maths

Comparing Quantities

1. if Rohit borrows Rs 4800 at 5% p.a. simple interest, then find the amount he has to return at the end of 2 years.

2. If 12% of a number is 9, then find the number.

3. Find the amount and the compound interest on Rs 5000 for 2 Years 6 Months at 10% per annum interest compound annually.

4. Find the compound interest of Rs 2000 for 1.5 Years at the rate of 4% per annum, the interest payable half yearly.

5. Find the compound interest on Rs 1000 for 9 months at the rate of 4% of per annum, the interest being paid quarterly.

6. At what rate p.a. compound interest will Rs. 625 amount to Rs 676 in 2 Years.

7. On how much principal will the compound interest amount to Rs 160 in 2 Years at 4% p.a.

8. The difference between the compound interest and the simple interest on a certain principal for 2 years at 4% p.a. is Rs 150. Find the principal.

Algebraic Expressions and Identities

1. Using identities, evaluate

   a) 47×48 b) 105×97 c) 103^2

2. Find the product of the following

   a) $(x + 3)(x + 5)$ b) $(5x - 7)(5x + 2)$ c) $(81x^2 - 64y^2)$ d) $(x^4 - y^4)$

3. Using the suitable algebraic identity, find   a) $51^2 - 49^2$ b) $(1.02)^2 - (0.98)^2$

4. Show that: $(4pq + 3q)^2 - (4pq - 3q)^2 = 48pq^2$

5. Show that: $(a - b)(a + b) + (b - c)(b + c) + (c - a)(c + a) = 0$

Mensuration

1. Find the height of a cuboid whose base area is 360 cm² and volume is 1800 cm³?
2. Diameter of cylinder A is 7 cm, and the height is 14 cm. Diameter of cylinder B is 14 cm and height is 7 cm. Without doing any calculations can you suggest whose volume is greater? Verify it by finding the volume of both the cylinders. Check whether the cylinder with greater volume also has greater surface area?
3. A road roller takes 1500 complete revolutions to move once over to level a road. Find the area of the road if the diameter of a road roller is 168 cm and length is 2 m.
4. If the base area and volume of cuboid are 12 cm sq. and 36 cm cube then what is its height ?
5. What is the total surface area of cube whose volume is 1 cu. cm ?
6. A closed cylindrical tank of radius 14 m and height 6 m is made from a sheet of metal. How much sheet of metal is required?
7. The lateral surface area of a hollow cylinder is 8448 cm².It is cut along its height and formed a rectangular sheet of width 66 cm. Find the perimeter of rectangular sheet?
8. A rectangular paper of width 28 cm is rolled along its width and a cylinder of radius 40 cm is formed. Find the volume of the cylinder.

Exponents & Power

1. Find x, if $\left(-\frac{2}{3}\right)^x = \left(-\frac{32}{243}\right)$
2. The perimeter of a Δ is $5 - 3x + 7x^2$ and two of its sides are $2x^2 + 3x - 2$ and $3x^2 - x + 3$. Find the third side of the Δ.
3. Evaluate –
   i) $\left(\frac{1}{129}\right)^{\frac{2}{3}} \times (129)^{\frac{1}{3}} \times (129)^{\frac{4}{3}}$
   ii) $(27)^{\frac{2}{3}} \div (81)^{\frac{1}{2}}$
   iii) $(7^2 + 24^2)^{\frac{1}{2}} \times (125)^{\frac{1}{3}}$
4. Simplify $\left(x^{\frac{2}{3}} + x^{\frac{1}{3}}\right) \div \left(x^{\frac{1}{3}} + 1\right)$
5. Simplify $(9)^{\frac{3}{2}} \times (8)^{\frac{2}{3}}$
6. Evaluate $(5^2 + 12^2)^{\frac{1}{2}}$
7. Simplify $2x^{\frac{1}{4}} \times 2x^{\frac{3}{5}}$
8. $(27)^{\frac{2}{3}} \times (125)^{\frac{4}{3}}$

Equation In one variable

1. Find x, if
   (i) $\frac{x+4}{2x-7} = \frac{4}{3}$

   (ii) $\frac{x-(7-8x)}{9x-(3+4x)} = \frac{2}{3}$

   (iii) $\frac{x+a}{x-a} = \frac{a-b}{a+b}$

   (iv) $\frac{3x}{2x-5} = \frac{12}{5}$

   (v) $\frac{2(3x-1)-(2x+1)}{7x-2} = \frac{1}{2}$

MATHS

Q.1 Divide the sum of $\frac{8}{3}$ and $\frac{4}{7}$ by the product of $-\frac{3}{7}$ and $\frac{14}{9}$.

Q.2 By what rational number should $\frac{7}{12}$ be multiplied to get the product as $\frac{5}{14}$?

Q.3 Verify the commutative property of addition for the following pairs of rational numbers : (i) $\frac{8}{9}$ and $\frac{3}{5}$
(ii) $\frac{3}{4}$ and $\frac{1}{3}$

Q.4 Ramesh cut a $21\frac{1}{4}$ m long rope into pieces of $4\frac{1}{4}$ m length each. How many pieces of the rope did he get?

Q.5 A,B,C,D and E went to a restaurant for dinner. A paid $\frac{1}{2}$ of the bill, B paid $\frac{1}{5}$ of the bill and rest of the bill was shared equally by C,D,E. What fraction of the bill was paid by each?

Q.6 Find the multiplicative inverse of $\frac{2}{11}x - \frac{5}{7}$.

Q.7 Find the additive inverse of $\frac{10}{12}$

Q.8 Solve the following equations and check the solutions:
(i) $5- 3(5x+2) = 4(7-3x)+1$ (ii) $\frac{6x+1}{3}+1 = \frac{x-3}{6}$

Q.9 The sum of two numbers is 90 and the greater number exceeds thrice the smaller by 14. Find the numbers.

Q.10 Find two consecutive even integers such that two-fifth of the smaller exceeds two-eleventh of the larger by 4.
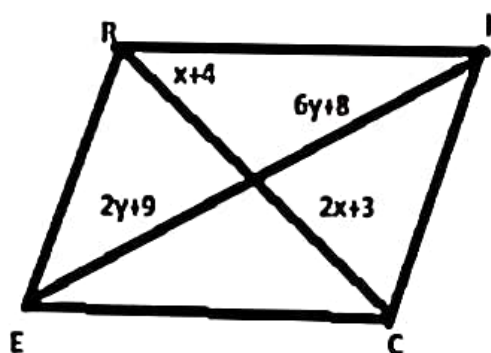
Q.11 The denominator of a fraction exceeds its numerator by 4. If the numerator and denominator are both increased by 3, the new fraction becomes $\frac{4}{5}$. Find the original fraction.

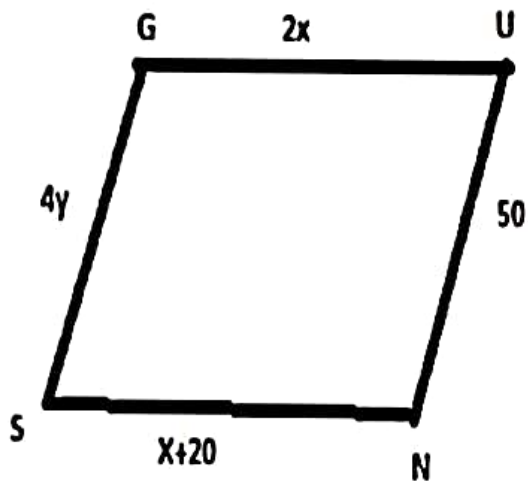Q.12 When four consecutive integers are added, the sum is 46. Find the integers.

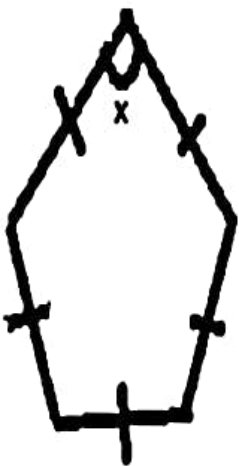Q.13 HIKE is a parallelogram , Find x and y
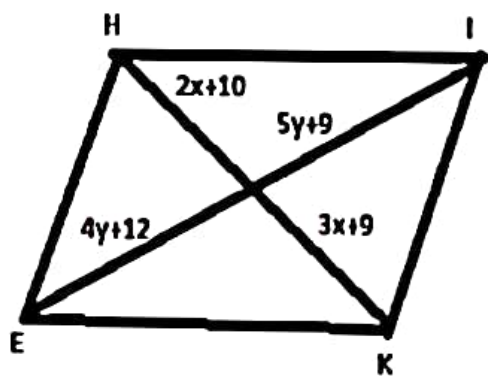
Q.14 RICE is a rhombus . Find x and y

Q.15 GUNS is a parallelogram. Find the measures of x and y

Q.16Find the measure x

Q.17 Find the sum of measures of all the interior angles of a polygon with the number of sides: (i) 8 (ii) 12
Q.18Find the number of sides of a regular polygon if each of its interior angle   (i) 90^0 (ii) 165^0
Q.19If the angle of a pentagon are in the ratio 7:8:11:13:15. Find the angles.