

Winter Vacation Home Work Class-8th

MATHS WORKSHEET

SECTION - A

Q.1 Multiple choice questions:

(i) The common factors of the terms $2y$, $22xy$ is

(a) 2

(b) $2y$

(c) y

(d) xy

(ii) The addition of $ab-bc$, $bc-ca$, $ca-ab$ is

(a) $3ab+3bc+3ca$

(b) 0

(c) $ab+bc+ca$

(d) $ab-bc+ca$

(iii) In a right circular cylinder, the line segments joining the centre of circular faces is _____ to the base

(a) parallel

(b) rectangular

(c) circular

(d) perpendicular

(iv) The area of four walls of the room is

(a) $2(lb + bh + hl)$

(b) $2l(h + b)$

(c) $2(lb \times bh \times hl)$

(d) $2h(l + b)$

(v) The quantity that a container holds is called its

(a) surface area

(b) lateral surface area

(c) capacity

(d) volume

(vi) The Base in the expression 10^{24} is

(a) 1

(b) 10

(c) 0

(d) 24

(vii) The value of $1/3^{-2}$ is equal to

(a) 9

(b) 1

(c) -6

(d) $\frac{1}{3}$

(viii) 7×10^{-5} m is the standard form of which of the following

(a) 0.0007 m

(b) 0.000007 m

(c) 0.0000007 m

(d) 0.00007 m

(ix) If an increase in one quantity brings about a corresponding decrease in the other and vice versa, then the two quantities vary:

(a) directly

(b) inversely

(c) sometimes directly and sometimes inversely

(d) none of these

(x) A garrison of 300 men had provision of food for 50 days. A reinforcement of 200 men arrived. Find the number of days for which the food will last.

a. 30

b. 20

c. 40

d. None of these

SECTION - B

SHORT ANSWER QUESTIONS

Q.2 Subtract: $3x^2 - 5x + 7$ from $5x^2 - 7x + 9$.

Q.3 Simplify the following:

(i) $a^2(b^2 - c^2) + b^2(c^2 - a^2) + c^2(a^2 - b^2)$

(ii) $x^2(x - 3y^2) - xy(y^2 - 2xy) - x(y^3 - 5x^2)$

Q.4 Multiply $(6x^2 - 5x + 3)$ by $(3x^2 + 7x - 3)$

Q.5 A copper wire of length 44 cm is to be bent into a square and a circle. Which will have a larger area?

Q.6 The area of a rhombus is 16 cm^2 . If the length of one diagonal is 4 cm, find the length of the other diagonal.

Q.7 The volume of a box is 13400 cm^3 . The area of its base is 670 cm^2 . Find the height of the box.

Simplify $(\sqrt{5})^{-3}(\sqrt{2})^{-3}$.

Q.8

Q.9 A train is moving at a uniform speed of 100 km/h. How far will it travel in 20 minutes?

Q.10 The scale of a map is given as 1 : 50,000. Two villages are 5 cm apart on the map. Find the actual distance between them.

Q.11 Factorise the following polynomials.

(a) $6p(p - 3) + 1(p - 3)$

(b) $14(3y - 5z)^3 + 7(3y - 5z)^2$

SECTION - C

Expand $\left(\sqrt{ax} + \frac{\sqrt{by}}{5}\right)^2$.

Q.12

Q.13 Add: $8x^2 + 7xy - 6y^2$, $4x^2 - 3xy + 2y^2$ and $-4x^2 + xy - y^2$

Q.14 Multiply $x^2 + 2y$ by $x^3 - 2xy + y^3$ and find the value of the product for $x = 1$ and $y = -1$.

Q.15 Three metal cubes of sides 6 cm, 8 cm and 10 cm are melted and recast into a big cube. Find its total surface area.

Q.16 160 m^3 of water is to be used to irrigate a rectangular field whose area is 800 m^2 . What will be the height of the water level in the field?

Q.17 A closed metallic cylinder is 1.25 m high and it has a base whose radius is 35cm. If the sheet of the metal costs Rs. 80 per m^2 . Find the cost of the material used in the box. Find the capacity of the box in litres.

Q.18 15 men can build a wall in 42 hours, how many workers will be required for the same work in 30 hours?

Q.19 The cost of 5 metres of cloth is ₹ 210. Tabulate the cost of 2, 4, 10 and 13 metres of cloth of the same type.

Q.20 Factorise the given expressions and divide that as indicated.

(a) $39n^3(50n^2 - 98) \div 26n^2(5n - 7)$

(b) $44(p^4 - 5p^3 - 24p^2) \div 11p(p - 8)$

SECTION - D

Case study questions:

Q.21 A gardener has a trapezium-shaped plot of land with parallel sides 25m and 15m, and the perpendicular distance between them is 10m.

1. Calculate the total area of the garden plot.
2. If the gardener wants to put a fence along the non-parallel sides, and these sides are 12m and 8m, what's the total fencing needed?

Q.22 Rahul went to the market and purchased a beautiful box for jewellery. The external dimensions of a closed box are 80 cm by 56 cm by 40 cm. The wood is 2.5 cm thick all around. On basis of this information given in passage answer following questions.

Find the capacity of the box.

English Worksheet

1. Change into Passive Voice

- a. The gardener waters the plants every morning.
- b. She wrote a story.
- c. The mechanic is repairing the car.
- d. They have painted the house.
- e. The teacher will announce the results.
- f. Someone stole my bicycle.
- g. We must follow the rules.
- h. The children are decorating the classroom.
- i. The children play football in the ground every day.
- j. She has completed her homework.
- k. The principal will inaugurate the new library tomorrow.
- l. They are delivering the letters right now.
- m. Someone stole my wallet yesterday.
- n. The chef is preparing a special dish.
- o. They should follow the school rules.
- p. People speak English all over the world.

2. Write a letter to your friend telling him/her about your Annual Sports/Function.

3. Revise Unit 5, Unit 6, Unit 7, and Unit 8.

WINTER VACATION WORKSHEET

SECTION A: MULTIPLE CHOICE QUESTIONS

1. The term Dikus was used by tribals for:
(a) Forest produce (b) Outsiders and moneylenders (c) Tribal chiefs (d) British soldiers only
2. The Revolt of 1857 began from:
(a) Delhi (b) Kanpur (c) Meerut (d) Lucknow
3. Which movement is associated with breaking the Salt Law?
(a) Non-Cooperation (b) Civil Disobedience (c) Swadeshi (d) Khilafat
4. Which of the following is a renewable resource?
(a) Coal (b) Petroleum (c) Wind (d) Natural gas
5. The highest court of India is the:
(a) District Court (b) High Court (c) Supreme Court (d) Lok Adalat
6. Safe drinking water is an example of:
(a) Private service (b) Public facility (c) Natural resource (d) Judicial service

SECTION B: FILL IN THE BLANKS

1. Birsa Munda's movement was known as the _____.
2. The British annexation policy was called the _____.
3. Wood's Despatch was introduced in the year _____.
4. Black soil is most suitable for growing _____.
5. Petroleum is also known as _____ gold.
6. People with education and skills form a country's _____ resources.

SECTION C: TRUE / FALSE

1. Tribals depended only on settled agriculture.
2. The Revolt of 1857 ended British rule in India.
3. Education improves the quality of human resources.

4. Minerals can be easily renewed once exhausted.
5. Judiciary is independent of the executive.
6. Public facilities aim at public welfare.

SECTION D: MATCH THE FOLLOWING

Column A Column B

- | | |
|----------------|-----------------------|
| 1. Birsa Munda | a. Supreme Court |
| 2. Dandi | b. Tribal leader |
| 3. Judiciary | c. Salt March |
| 4. Coal | d. Fossil fuel |
| 5. FIR | e. Police complaint |
| 6. Black soil | f. Cotton cultivation |

SECTION E: VERY SHORT ANSWER QUESTION

1. Who were known as Dikus?
2. Name any one leader of the Revolt of 1857.
3. What is meant by renewable resources?
4. What does FIR stand for?
5. Name one public facility provided by the government.
6. Why is education important for human resource development?

SECTION F: MAP WORK

1. On the outline map of India, locate, label and neatly mark the following. Use appropriate symbols and write names clearly.

1. **Meerut** – place where the Revolt of 1857 began
2. **Jhansi** – centre of the Revolt led by Rani Lakshmbai
3. **Dandi (Gujarat)** – associated with the Salt March
4. **Jharkhand** – region linked with the Birsa Munda movement

2. On the Outline map of India:

Mark regions rich in:

- 1.Coal (Jharkhand, Chhattisgarh, WB)
2. Iron ore (Odisha, Chhattisgarh)
3. Petroleum (Gujarat, Assam)

3. On the Outline political map of India:

Mark states with:

- 1.high population density
2. low population density

4.On the outline world map, mark and label the major industrial regions for the following:

Steel Industry

- 1.China
2. India
3. Japan

Oil & Gas Industry

- 1.Saudi Arabia
- 2.UAE
- 3.USA
4. Russia

SECTION G: VOCABULARY / GLOSSARY

Learn and Write the meanings of the following terms:

1. Dikus
2. Ulgulan
3. Renewable resource
4. Judiciary
5. OFIR

6. Public facilities
7. Agrarian
8. Monsoon
9. Constitution
10. Revenue
11. Urbanization
12. Judiciary
13. Migration
14. Pilgrimage
15. Industrialization
16. Ecosystem
17. Democracy
18. Republic
19. Federation
20. Inflation
21. Colony
22. Tributary
23. Sovereignty
24. Capitalism
25. Renewable Resource
26. Communalism
27. Indigenous
28. Census
29. Parliament
30. Monarchy
31. Canal
32. Plateau

- 33. Trade Union
 - 34. Secularism
 - 35. Deforestation
 - 36. Civil Rights
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SCIENCE:

- Revise chapters:
 - 1) Reproduction in animals
 - 2) Force and pressure
 - 3) Chemical effects of current
 - 4) Some natural phenomenon
- Practice diagrams wherever required.
- Solve the worksheet given below:

WORKSHEET

CHAPTER: REPRODUCTION IN ANIMALS

MCQ TYPE QUESTIONS:

1. The process by which organisms produce their own kind is called
 - a) Respiration.
 - b) Reproduction
 - c) Excretion.
 - d) Nutrition
2. Which of the following is an asexual mode of reproduction?
 - a) Fusion of gametes
 - b) Budding
 - c) Fertilization.
 - d) Pollination
3. Hydra reproduces asexually by
 - a) Binary fission.
 - b) Fragmentation
 - c) Budding.
 - d) Regeneration

4. Which animal shows external fertilization?

a) Dog. b) Human

c) Frog. d) Cow

5. Animals that give birth to young ones are called

a) Oviparous. b) Viviparous

c) Herbivores. d) Carnivores

6. Animals that lay eggs are called

a) Viviparous. b) Mammals

c) Oviparous. d) Vertebrates

7. Which part of the female reproductive system releases the egg?

a) Uterus. b) Ovary

c) Vagina d) Oviduct

8. The single-celled formed after fertilization is called

a) Embryo. b) Foetus

c) Zygote. d) Ovum

9. The male reproductive cell in animals is called

a) Ovum. b) Zygote

c) Sperm. d) Embryo

10. Sperm and egg fuse to form

a) zygote. b) foetus

c) embryo. d) semen

FILL IN THE BLANKS

1. In frog the egg hatch to produce _____

2. Human start becoming sexually mature at the age of _____
3. The mixture of fluids and sperm is called _____
4. In human being fertilization is _____
5. The embryo later develops into a _____.
6. Amoeba reproduces by _____ fission.
7. In humans, the egg is released from the _____.
8. The two types of reproduction are _____ and _____.
9. The male gamete is produced in the _____.
10. In humans, the embryo is embedded in the wall of the _____.

SHORT ANSWER QUESTIONS

1. Name male and female gametes.
2. What is zygote.
3. What is the process of fusion of sperm and ovum called.
4. What type of a sexual reproduction is found in hydra.
5. Name the sperm producing organ in human beings.
6. Name two viviparous animals.
7. Where does fertilization occur in humans?
8. Define puberty
9. What is menstruation
10. Why is reproduction important for us.

LONG ANSWER QUESTIONS

1. With the help of diagram explain how amoeba reproduce asexually.
2. What is fertilization differentiate between external and internal fertilization with examples.

9. Standard unit of _____ is newton.

10. Construction workers use _____ force when they carry bricks.

SHORT ANSWER QUESTIONS

1. What is force.

2. Name the force which act from a distance and affect only object made of iron.

3. Name the force that hold the planet revolving in their orbit around the sun.

4. Name the factor by which the state of motion of body can be described.

5. If a force of force 4 Newton is applied over an area of 2m^2 . What will be the pressure produced.

6. Why is it difficult to cut fruits with blunt knife.

7. Give few effects of force .

8. What are non-contact forces? Name any two.

9. Why do camels have broad feet?

10. Name the force responsible for falling of objects towards Earth.

CHAPTER: CHEMICAL EFFECTS OF CURRENT

MCQ

1. Which of the following liquids is a good conductor of electricity?

A. Distilled water.

B. Tap water

C. Vegetable oil.

D. Kerosene

2. Distilled water does not conduct electricity because it:

A. Contains salt

B. Has no free ions

C. Is acidic.

D. Is a base

3. The chemical effect of electric current is observed when current is passed through:

- A. Metal wire. B. Plastic rod
C. Conducting liquid. D. Wooden stick

4. Electroplating is used to:

- A. Increase weight of object. B. Reduce corrosion
C. Improve appearance D. Both B and C

5. Which metal is commonly used for electroplating iron to prevent rusting?

- A. Copper. B. Zinc
C. Aluminium. D. Silver

6. The process of depositing a layer of metal on another metal using electricity is called:

- A. Galvanisation B. Electrolysis
C. Electroplating. D. Conduction

7. Which electrode is connected to the positive terminal of a battery in electroplating?

- A. Cathode B. Anode
C. Switch. D. Bulb

8. Why is chromium used for electroplating?

- A. It is cheap. B. It rusts easily
C. It gives shiny appearance and resists corrosion
D. It is soft

9. Which of the following substances allows electric current to pass through it?

- a) Plastic b) Rubber
c) Copper wire d) Wood

10. Which gas is released at the cathode during electrolysis of water?

- a) Oxygen. b) Hydrogen

- c) Nitrogen. d) Carbon dioxide

FILL IN THE BLANKS

1. Liquids that allow electric current to pass through them are called _____.
2. When electric current is passed through a conducting solution, bubbles of gas may appear on the _____.
3. The passage of electric current through a liquid causes _____
4. The process of depositing a layer of metal on another object using electric current is called _____.
5. During electroplating, the object to be plated is connected to the _____ terminal of the battery.

SHORT ANSWER QUESTIONS

1. Name two liquids that conduct electricity.
2. Why does distilled water not conduct electricity?
3. What is electroplating?
4. Define electrolyte.
5. Why is electroplating done on iron objects?
6. Why are electrical wires coated with plastic or rubber?

CHAPTER: SOME NATURAL PHENOMENON

MCQ

1. The device used to detect electric charge is called:
a) Ammeter. b) Voltmeter
c) Electroscope d) Galvanometer
2. Which of the following is caused by transfer of electric charge?
a) Earthquake. b) Lightning

c) Tsunami. d) Cyclone

3. Which type of charge is developed on a plastic comb when rubbed with dry hair?

a) Positive. b) Negative

c) Neutral. d) Both positive and negative

4. Earthquake waves are recorded by an instrument called:

a) Barometer. b) Seismograph

c) Electroscope d) thermometer

5. Which of the following helps to protect buildings from lightning?

a) Fuse. b) Insulator

c) Lightning conductor. d) Switch

FILL IN THE BLANKS

1. Like charges _____ each other, while unlike charges _____ each other.

2. Lightning is a form of _____

3. The shaking of the Earth is called an _____

4. A lightning conductor provides a safe path for electric charge to flow into the _____

5. An electroscope is used to detect the presence of _____

SHORT ANSWER QUESTIONS

1. What is static electricity?

2. Name the instrument used to detect electric charge.

3. What happens when two like charges are brought close to each other.

4. Name the instrument used to record earthquakes.

5. What are seismic waves?

6. Which scale is used to measure the intensity of earthquakes?

LONG ANSWER QUESTIONS

1. Explain how lightning is harmful. Mention safety measures to be followed during lighting.
2. Explain the safety measures to be followed during an earthquake (i) at home, and (ii) outdoors
3. Explain why it is advised to avoid using mobile phones and electrical appliances during thunderstorm.

कक्षा 8 : हिंदी गृहकार्य

□ सप्ताह 1 : संज्ञा, सर्वनाम और लिंग

✍ अभ्यास – 1 (संज्ञा)

1. निम्न वाक्यों में संज्ञा शब्द पहचानिए और उनके भेद लिखिए – (क) भारत विविधताओं से भरा देश है। (ख) ईमानदारी मनुष्य का सर्वोत्तम गुण है। (ग) हिमालय भारत की शान है।
2. भाववाचक संज्ञा के पाँच उदाहरण लिखिए।

✍ अभ्यास – 2 (सर्वनाम)

3. निम्न वाक्यों में प्रयुक्त सर्वनाम का भेद लिखिए – (क) जो मेहनत करता है, वही सफल होता है। (ख) कोई भी काम छोटा नहीं होता।
4. 'स्व', 'अपना', 'एक-दूसरे' – इन सर्वनामों से वाक्य बनाइए।

✍ अभ्यास – 3 (लिंग)

5. निम्न शब्दों के स्त्रीलिंग / पुल्लिंग लिखिए – राजा, नायक, सेवक, देव

□ सप्ताह 2 : वचन, कारक और काल

✍ अभ्यास – 4 (वचन)

1. निम्न वाक्यों को बहुवचन में बदलिए – (क) छात्र पाठ पढ़ रहा है। (ख) लड़की गीत गा रही है।
2. पाँच ऐसे शब्द लिखिए जिनका वचन नहीं बदलता।

✍ अभ्यास – 5 (कारक)

3. निम्न वाक्यों में कारक और कारक-चिह्न पहचानिए – (क) राम ने रावण को मारा। (ख) शिक्षक ने छात्र को पुरस्कार दिया।

4. प्रत्येक कारक-चिह्न (ने, को, से, में, पर) से एक-एक वाक्य बनाइए।

✍ अभ्यास – 6 (काल)

5. निम्न वाक्यों को भूतकाल में बदलिए – (क) मैं विद्यालय जाता हूँ। (ख) वह पुस्तक पढ़ता है।

□ सप्ताह 3 : विशेषण, क्रिया और अव्यय

✍ अभ्यास – 7 (विशेषण)

1. निम्न वाक्यों में विशेषण और विशेष्य अलग-अलग लिखिए – (क) मेहनती छात्र सफल होते हैं। (ख) मीठा फल स्वास्थ्य के लिए अच्छा है।

2. संख्यावाचक विशेषण के पाँच उदाहरण लिखिए।

✍ अभ्यास – 8 (क्रिया)

3. अकर्मक और सकर्मक क्रिया में अंतर उदाहरण सहित लिखिए।

4. निम्न क्रियाओं से वाक्य बनाइए – सीखना, समझना, लिखना

✍ अभ्यास – 9 (अव्यय)

5. निम्न अव्ययों से वाक्य बनाइए – ही, भी, तो, तक, ही नहीं बल्कि

□ सप्ताह 4 : वाक्य, विराम-चिह्न और अशुद्धि-शोधन

✍ अभ्यास – 10 (वाक्य-भेद)

1. विधानवाचक, प्रश्नवाचक और आज्ञावाचक वाक्य के दो-दो उदाहरण लिखिए।

2. सरल वाक्य को संयुक्त वाक्य में बदलिए – (क) वह परिश्रमी है। वह सफल होगा।

✍ अभ्यास – 11 (विराम-चिह्न)

3. उचित विराम-चिह्न लगाइए – (क) क्या तुमने अपना कार्य पूरा कर लिया (ख) अरे यह कितना सुंदर दृश्य है

✍️ अभ्यास – 12 (अशुद्धि-शोधन)

4. निम्न वाक्यों को शुद्ध कीजिए – (क) वह मुझसे नाराज है। (ख) हमें अपने माता पिता का आदर करना चाहिए।

□ अतिरिक्त कार्य (Optional)

प्रतिदिन किसी समाचार पत्र से 5 नए शब्द लिखकर उनके अर्थ लिखिए

किसी कहानी या पाठ से 5 विशेषण और 5 क्रिया शब्द छाँटिए।

— शुभकामनाएँ —

IT

Revise Lesson no 5,6,7 and 8 for Final Exam

Practical : The Practicals have to be performed for Python and MS Access, and their screenshots must be sent to me on WhatsApp number.