

ST. COLUMBUS SCHOOL
DAYALBAGH, FBD.
HOLIDAY HOMEWORK FOR WINTER BREAK (2023-24)
CLASS –IX

Dear Parent,

Greetings!!

Holiday is the time that all students eagerly wait for. We all make plans to enjoy, relax and to empower ourselves during these days.

This winter vacation, the holiday homework is designed as a medium for you all to achieve the motto of “Fun and Learn”.

We have made this winter break homework only activity-based. We are looking forward to the children coming back with smiling and joyous faces .

All of us at St. Columbus School wish happy and enjoyable holidays and Happy New Year to one and all.

Regards

Columbian Family



SOME ADVICE FROM TEACHERS' SIDE

Dear Students

❖ Complete your holiday homework neatly, take the help of your parents if needed.

❖ Originality of work will be appreciated.

❖ To get aware of the surroundings, watch different informative channels in the presence of your parents.

❖ Do exercises regularly or indulge in indoor activities.

❖ Parents are requested to only guide their children while doing the homework.

❖ Visit and explore educational sites. Like –www.funbrain.com,
<http://www.abcmouse.com>

❖ Eat only healthy food, drink fresh juices and lots of water to remain hydrated.



SUBJECT – ENGLISH

1. Read the passage carefully and answer the questions:

English is a West Germanic Language that was first spoken in the early medieval England. It has now acquired the status of being the 3rd most widely Spoken Language in the world.

Therefore, the need to be proficient in the language is becoming necessary for every one who has a dream.

How can one gain proficiency in any language? Most certainly by following the LSRW technique, i.e. listening, speaking, reading and writing. Engage with people who are conversant with the language and assimilate what you hear, one at a time. Do not let adversities dampen your progress. “Rome was not built in a day”. Develop your speaking skills gradually. To acquire mastery in the language, one needs to venture on to next step which is extensive reading.

Moving from simple to complex, according to personal preferences. This will help you learn more words and their meanings. Once your vocabulary is developed, experiment with your writing skills. Soon you will find yourself confident, comfortable and fluent with using the language.

Answer the following questions briefly:

- (i) Pen down two specialities of the English language?
- (ii) How can we acquire proficiency in a language?
- (iii) Explain “Rome was not built in a day”.
- (iv) How can one build up one’s vocabulary?
- (v) What is the strategy to be used to develop reading skills?
- (vi) Find the synonym of – of the middle ages, (in Para 1)

2. Answer the questions in about 40-50 words each.

- a. How does the author describe Kathmandu’s busiest streets?
- b. Behrman has a dream. What is it? Does it come true?
- c. Why was Santosh Yadav not content with a traditional way of life? What path did she choose and why?
- d. What has lifted Maria Sharapova to the top of the world?
- e. What is the meaning of bleeding bark? What makes it bleed?

3. Read the following sentences and change them into reported speech.

- a. Malik said to her, “Has Sara invited you to dinner?”
- b. The teacher said to Rena, “Did you break the window pane?”
- c. They said to her, “Whose house are you purchasing?”
- d. “What are you doing here?” asked John.
- e. The teacher said, “The Sepoy Mutiny took place in 1857.”
- f. Ira said, “I saw an elephant in the zoo.”

4. Read the extract given below and answer the questions that follow:

A slumber did my spirit seal

I had no human fears.

She seemed a thing that could not feel

The touch of earthly years.

- What was the 'human fear' he did not have?
- Why did he not have this fear?
- How does the poet imagine her to be, after death?
- Explain "the touch of earthly years".

5. Construct a readable story from the given outlines, in about 150-200 words.

A distressed king—all people were lazy in his kingdom—plans to teach a lesson—puts a big stone in the middle of a busy road—merchant passes by—officer driving his carriage passes by—a young soldier, riding his horse, did the same—people cursed the stone and blamed the government for not removing it—it still lay at the same place even after a week—one morning, a foreigner came and removed the stone—under the stone was a huge iron box, on which was written—inside the box was a bag full of money—everybody was ashamed

6. You participated in the Annual Function at your school. Describe the event in 100-120 words.

SUBJECT – HINDI

प्र० 1-स्वच्छता के संबंध में दो मित्रों के मध्य संवाद लेखन कीजिए।

प्र० 2-बुरी संगति का हमारे जीवन पर प्रभाव' विषय पर एक लघु कथा लिखिए।

प्र० 3-अपने जन्मदिवस पर भेजे गए उपहार के लिए कृतज्ञता व्यक्त करते हुए अपने मामाजी को पत्र लिखिए।

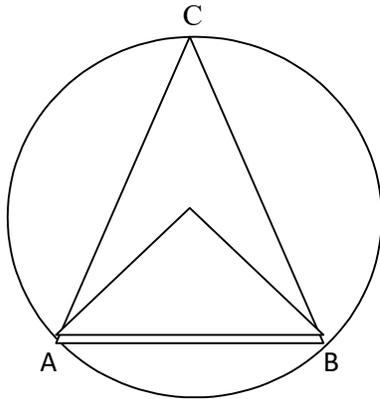
प्र० 4-समाज में महिलाओं को उचित गरिमा दिलाने हेतु आप कौन-कौन से प्रयास कर सकते हैं?

प्र० 5- आप अपना व अपने परिवार का परिचय एक (फैमिली ट्री) चित्र सहित बनाकर दर्शाइए। (A4 साइज़ शीट)

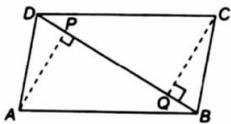
प्र० 6-आगामी परीक्षा हेतु पाठ्यक्रम की पुनरावृत्ति कीजिए।

SUBJECT – MATHS

1. Find the value of “a”, if $x+4$ is a factor of the polynomial x^2+3x+a .
2. If a point C lies between two points A and B such that $AC = BC$, then prove that $AC = \frac{1}{2} AB$, Explain by drawing the figure
3. Find the total surface area of a hemisphere of radius 10cm. (Use $\pi = 3.14$)
- Calculate the height of a cone whose slant height is 25 cm and curved surface area is 550cm^2 .
4. Find the area of a triangle whose sides are 13m, 13m and 14m.
5. Find the area of an isosceles triangle whose base is 15cm and one of its equal sides is 12cm.
6. In figure, O is the centre of a circle and $\angle OBA = 60^\circ$ Find $\angle ACB$



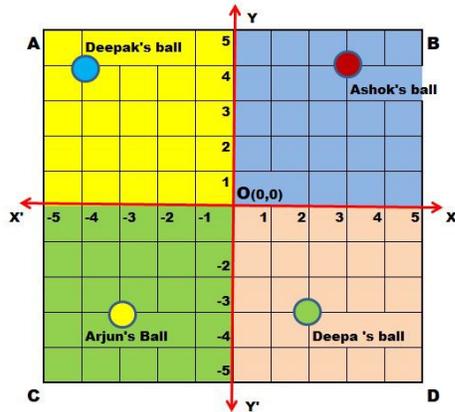
7. ABCD is a parallelogram and AP and CQ are perpendiculars from vertices A and C on diagonal BD (see figure). Show that (i) $\triangle APB \cong \triangle CQD$ (ii) $AP = CQ$



8. Find a and b so that the polynomial $x^3 - 10x^2 + ax + b$ is exactly divisible by the polynomials $(x - 1)$ and $(x - 2)$
9. Factorise $6x^2 + 5x - 6$
10. An isosceles triangle has perimeter 30cm and each of equal sides is 12cm. Find the area of a triangle.
11. If $a = 3 - 5\sqrt{2}$, then find the value of $a^2 + 1/a^2$

12. If $\frac{5+\sqrt{11}}{3-\sqrt{11}} = a + b\sqrt{11}$, Find the value of “a” and “b”

13. Read the Source/Text given below and answer any four questions:



There is a square park ABCD in the middle of Saket colony in Delhi. Four children Deepak, Ashok, Arjun and Deepa went to play with their balls. The colour of the ball of Ashok, Deepak, Arjun and Deepa are red, blue, yellow and green respectively. All four children roll their ball from centre point O in the direction of XOY, X'OY, X'OY' and XOY'. Their balls stopped as shown in the above image.

Answer the following questions:

1. What are the coordinates of the ball of Ashok?
2. What are the coordinates of the ball of Deepa?
3. What the line XOX' is called?
4. What the point O (0,0) is called?
5. What is the ordinate of the ball of Arjun?

14. Read the passage given below and answer any four questions:

Once four friends Rahul, Arun, Ajay and Vijay went for a picnic at a hill station. Due to peak season, they did not get a proper hotel in the city. The weather was fine so they decided to make a conical tent at a park. They were carrying 300 m² cloth with them. As shown in the figure they made the tent with height 10 m and diameter 14 m. The remaining cloth was used for the floor.



1. How much Cloth was used for the floor?
2. What was the volume of the tent?
3. What was the area of the floor?
4. What was the total surface area of the tent?
5. What was the latent height of the tent?

15. Complete the lab activity file.

1. Sides & angles of a triangle.
2. Mid point theorem
3. The angle subtended by an arc of a circle at its center is twice the angle it subtends anywhere on the circle's circumference.
4. Angle in semicircle, major segment and minor segment.
5. Opposite angles of a cyclic quadrilateral.

SUBJECT – SCIENCE

1. Why it is advisable to tie any luggage kept on the roof of a bus with a rope?
2. A truck starts from rest and rolls down a hill with a constant acceleration. It travels a distance of 4000m in 20 s. Find the force acting on it if its mass is 7 metric tonnes. (1 metric tonne= 1000 kg)
3. A car and a motorbike both are running with the same speed. Which of the two has greater momentum and why ?
4. Define mass and mass number.
5. An element has an atomic number 12. And atomic mass number 24. Draw a diagram showing the distribution of electrons in the orbits .
6. Which type of cell division is required for growth and repair of body and which type is involved in formation of gamete?
7. Write the features of cardiac muscles. Also Write the functions of areola tissue.
8. What are the constituents of xylem and phloem tissue ?
9. What is sustainable agriculture?
10. What factors are responsible for losses in agricultural produces how they can be controlled and presented?
11. Complete the practical files;
Physic: (I) Verification of the Laws of reflection of sound.
(ii) Determination of the density of solid (denser than water) by using a spring balance and a measuring cylinder.
Chemistry:
(I) Verification of the law of conservation of mass in a chemical reaction.
(ii) Perform the following reactions and classify them as physical or chemical changes:
 - a) Iron with copper sulphate solution in water
 - b) Burning of magnesium ribbon in air
 - c) Zinc with dilute sulphuric acid
 - d) Heating of copper sulphate crystals
 - e) Sodium sulphate with barium chloride in the form of their solutions in water

SUBJECT – PHYSICAL EDUCATION

1. Complete Practical file.
2. Practice two Standing ,Two Sitting and Two Laying Asanas at home.

*** Revise syllabus for Periodic Test-III**

