

CLASS IX HOLIDAY HOMEWORK (2022-23)

ENGLISH HOLIDAY HOMEWORK

Read any TWO poems by Robert Frost or William Wordsworth. Illustrate ANY ONE of them with pictures and write the summary of the other in your words.

OR

Read a short story of any author of your choice. Create a comic strip of the story you have read.

HINDI HOLIDAY HOMEWORK

1. महादेवी वर्मा के द्वारा लिखित किन्ही दो कहानियों से संबंधित चित्र सहित परियोजना (Project) बनाइए।
2. मेघालय या अरुणाचल प्रदेश के प्रसिद्ध पर्यटन स्थलों तथा उसकी प्राकृतिक सुंदरता के बारे में जानकारी एकत्रित कीजिए। उससे संबंधित चित्र सहित PowerPoint (PPT) तैयार कीजिए।

URDU HOLIDAY HOMEWORK

ہندوستان ایک گنگا جمنی تہذیب و الا ملک ہے اس کو چند تصاویر کی مدد سے دکھائیے۔ مختلف مذاہب کے لوگوں کو ایک دوسرے کی مدد اور تعاون کرتے ہوئے کچھ تصاویر تلاش کر کے ان کو بھی چسپاں کیجیئے۔

آخری مغل تاجدار بہادر شاہ ظفر کی زندگی کے بارے میں کچھ اہم معلومات فراہم کیجیئے اور مع تصاویر کے ایک پاور پائنٹ پریسینٹیشن تیار کیجئے اور کلاس نوٹ بک پر ارسال کیجیئے۔

اہم ہدایات:

اپنی اردو کو بہتر کرنے کے لیئے روزانہ کم از کم دو صفحات خوشخط لکھیئے اور ہر سبق کے مشکل الفاظ کا املا لکھیئے۔ بلند خوانی بھی کیجیئے۔

SOCIAL SCIENCE HOLIDAY HOMEWORK

GEOGRAPHY

Make a “Power Point Presentation” or “A Model” on Formation of Himalayas.

CIVICS

Make a Power Point Presentation on 'Democracy and Dictatorship '.

HISTORY

What moral lesson have you learnt of French Revolution? Explain by giving examples.

- a- Role of the People
- b- Role of the Philosophers and the Thinkers
- c- Role of Women in Transforming Society

OR

'Make a Power Point Presentation on The French Revolution '.

ECONOMICS

Make a PowerPoint Presentation on '*Plight of Indian Farmers*'.

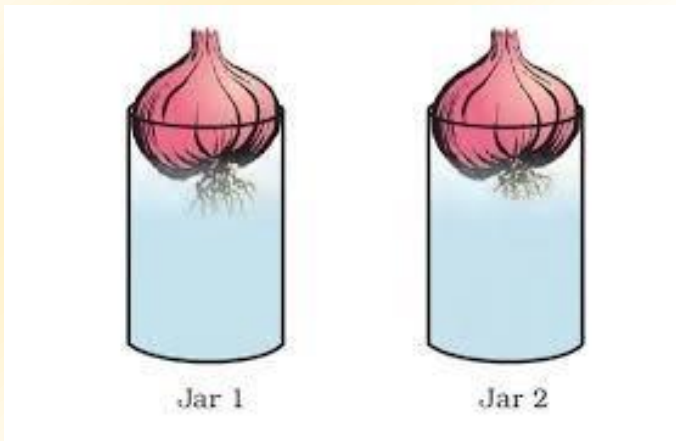
SCIENCE HOLIDAY HOMEWORK

BIOLOGY

Task-1:

Demonstration of growth of roots in onion to study meristematic tissue.

1. Takes two glass jars and fill them with water.
2. Now, take two onion bulbs and place one on each jar, as shown in Figure.



3. Observe the growth of roots in both the bulbs for a few days.
4. Measure the length of roots on day 1, 2 and 3. On day 4, cut the root tips of the onion bulb in jar 2 by about 1 cm.
5. After this, observe the growth of roots in both the jars and measure their lengths each day for five more days and record the observations in a table.

Click pictures of all your observations and attach it along with the table given below.

Observation Table:

Length in (cm)	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8
Jar 1								
Jar 2								

From the above observations, answer the following questions:

1. Which of the two onions has longer roots?
2. Do the roots continue growing even after the root tips have been removed?
3. Why would the roots stop growing in Jar 2?

Task-2:

Life could not exist without plants. Let us study about the life of a plant and explore how do they grow !!

Watch the video in the given link, [CLICK HERE.](#)

Grow your chana plant or rajma plant, observe its growth and document your observations pictorially and in writing.

1. Check the apical region of the plants and see how growth happens at the apex of shoot.
2. Check the sprouting leaves and branches from the nodal region of the stem/trunk of a plant.
3. Check out difference in the width of a tree trunk and branches.



Do not forget to click the picture of all your observations

You may present your observation in the following way, with apical, lateral, and intercalary meristem labelled.



You may also experiment with a plant of your choice

Present your work on a sheet of paper with information in folds, for the meristematic tissue (Apical, Lateral, and Intercalary).

An example:



Criteria of Evaluation:

1. Visual appeal (5 Marks)
2. Expression (5 Marks)
3. Neatness (5 Marks)
4. Content accuracy (5 Marks)
5. Creativity (5 Marks)
6. Originality (5 Marks)

CHEMISTRY

ACTIVITY 1:

BE THE BUDDING SCIENTISTS!

Design your own experiment and feel like a scientist.

Instructions: - Choose any topic from Chemistry and design an experiment using simple things around you to explain any law, principle, or phenomena around us.

Prepare a working model/an activity/ chart related to it.

Write the activity in your file, under the section: Activity name. Principle, Procedure, Observations, Safety measures and Inference.

Support your activity with diagrams and pictures.

Submit the work in the Project file.

ACTIVITY 2:

ART INTEGRATED:

Use the separation technique Chromatography for designing fabrics of different colours/patterns or for some other art integrated ideas of your own and bring the designed articles to the class.

PHYSICS

This Vacation explore the little scientist in you!!!

Projects to be done in Summer Holidays

1. Balloon Hovercraft

To construct a balloon Hovercraft, the essential items required include a CD/DVD, a bottle cap, a balloon, glue or tape, and a pair of scissors. Firstly, groove a small hole right in the middle of the bottle cap. The diameter of the hole should be approximately equal to the diameter of a regular plastic straw. Stick the bottle cap in the centre of the CD/DVD with the help of glue or tape. Inflate the balloon, pinch it from the opening side to hold the air inside, and fix it to the boundary of the bottle cap in such a way that the air present inside the balloon can escape through the hole in the bottle cap easily. This helps the user learn about various physics concepts such as Newton's second law of motion, air pressure, the force of friction, the analogy of a hovercraft, etc.



Balloon Hovercraft

2. Marble Roller Coaster

To make a marble roller coaster, you require a cardboard sheet, chart paper, glue or tape, and marbles. Make a roller coaster pattern full of curves and turns with the help of chart paper. Use the cardboard pieces to elevate the height accordingly. Decorate the set-up as per requirement. Make sure the elevation of the initial or start-up point is higher than the rest of the structure. Place the marble on the start point and roll it down the structure. This project would help you, understand the conversion of potential energy to kinetic energy, curvilinear motion, rectilinear motion, rolling friction, etc.

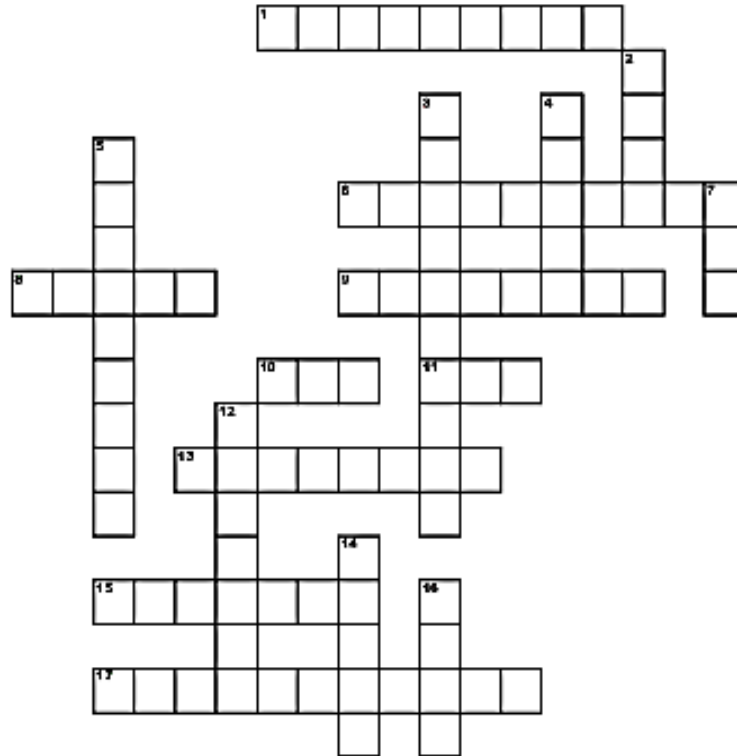


Marble Roller Coaster

MATH HOLIDAY HOMEWORK

Q1: Solve the crossword puzzle:

Number System



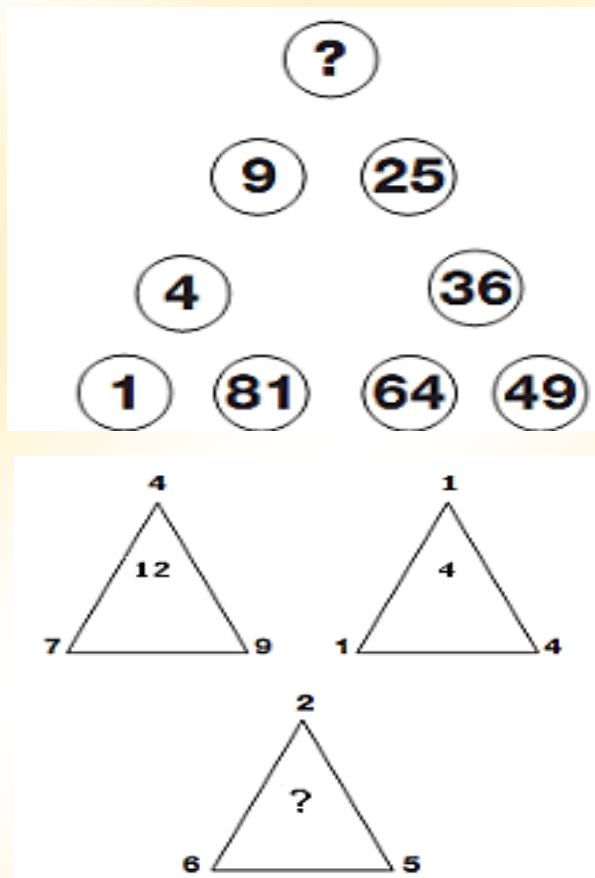
Across

1. all natural numbers having more than two distinct factors
6. the sum or difference of a rational and irrational number is
8. all counting numbers together with zero are
9. a whole number that can be positive, negative or zero
10. short form of highest common factor
11. the sum of even and odd is always
13. the number of the form P/q
15. any two consecutive numbers will always be
17. the numbers which can be represented on number line

Down

2. the product of two even is always
3. a number which cannot be written in form P/q
4. if a number has two distinct factors namely 1 and itself then it is called
5. a series of well defined steps
7. short form of least common multiple
12. all counting numbers are
14. a proven statement which is used to prove another statement
16. a number that is divisible by 2

Q2: Find the missing number along with the explanation.



Q3. X is an odd number. Take an alphabet away from X and it becomes even. Which is that number?

Q4. You are given 3 positive numbers. You can add these numbers and multiply them together. The result you get will be the same. Which are the numbers?

Q5. What is the maximum possible number of times you can subtract number 5 from number 25?

Q6. I am a three-digit number. My second digit is 4 times bigger than the third digit. My first digit is 3 less than my second digit. Who am I?

Q7. You are given a telephone and asked to multiply all the numbers on the device's number pad. What will be the answer?

Q8. Seven boys met each other at a party. Each of them shakes hands only once with each of the other boys. What is the total number of handshakes that took place?

PROJECT WORK (Choose anyone)

Prepare a PowerPoint presentation or a model on the following topics

- (a) Applications of Mathematics in Sports (you may pick up one or two sports and discuss it).
- (b) Applications of Mathematics in Science.

- (c) Applications of Mathematics in Social Science.
- (d) Applications of Mathematics in Art and Architecture)
- (e) Applications of Mathematics in Agriculture.

THINGS TO REMEMBER (by Heart) BEFORE COMING TO SCHOOL

1. Tables up to 20
2. Squares up to 25
3. Cubes up to 10