

GENERAL INSTRUCTIONS :

- All the projects involving data research, presentations, book reviews etc. should be done in A4 size coloured sheet.
- Models (if any) should be made separately.
- Students will bring the holiday homework and models as per the instructions given to them by their subject teachers, once the school reopens in the month of July.

DELHI PUBLIC SCHOOL, FARIDABAD

Holiday Homework (2016-2017)

Class X

English

A. Did you know that your kitchen spice rack is a medicine chest too?

Pick out any 5 spices of your choice and find out about: -

- Where they are grown
- Their annual production
- Their description
- Ailments they cure

Submit these details neatly written / typed along with pictures

B Design a poster on a tourist place of your choice (in India)

Your poster should have:

- A picture
- Details about tourist attractions, special features / historical importance.
- A catchy slogan.

Maths

Q.1 Watch the movie 'The man who new infinity'. Write about the movie in brief and also mention the values you learned from it.

Q.2 Hunt for interesting Maths videos on

- i. Funny Maths
- ii. Vedic Maths
- iii. Shortcut methods for calculations
- iv. Any topic related to class curriculum.

Write a brief of any one, along with its link which you liked the most.

Q.3 Divisibility tests for 7, 13, 17 and 19; do you know them? They are easy and follow a pattern. Look for them and verify them with some examples. Pen down atleast two examples for each

Q.4 Observe the results given below:

$$1 + 2 + 3 + \dots + n = \frac{n(n+1)}{2}$$

$$1^2 + 2^2 + 3^2 + \dots + n^2 = \frac{n(n+1)(2n+1)}{6}$$

$$1^3 + 2^3 + 3^3 + \dots + n^3 = \frac{n^2(n+1)^2}{4}$$

Use them to solve;

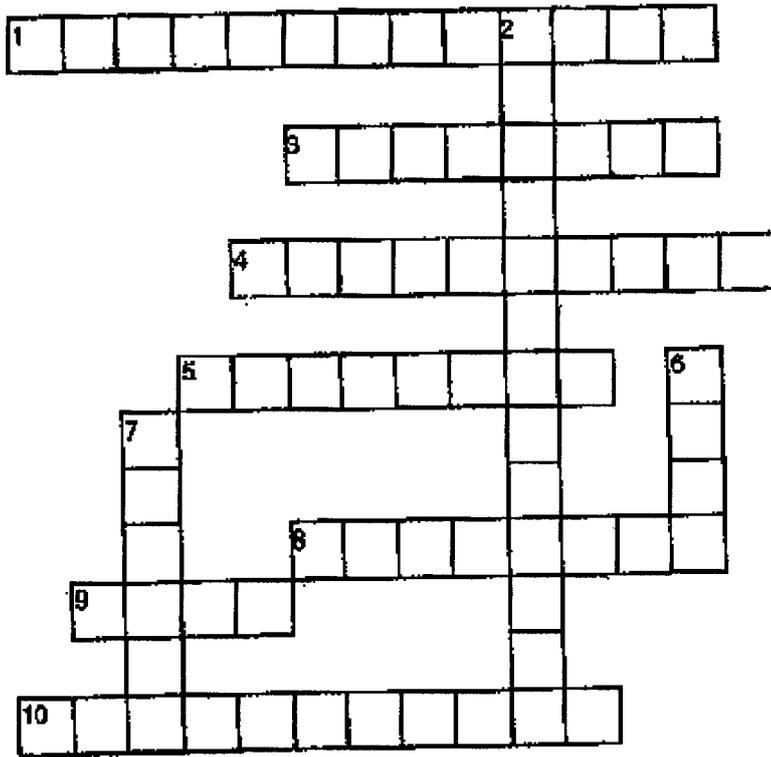
- (i) $1^3 + 2^3 + \dots + 20^3$
- (ii) $17^2 + 18^2 + \dots + 50^2$
- (iii) $1^3 + 2^3 + 3^3 + \dots + (n+2)^3$
- (iv) $24 + 25 + 26 + \dots + 98$
- (v) $1^2 + 2^2 + 3^2 + \dots + (n-3)^2$

Q.5 Have you heard of 'Surds'?

- (i) Are they same as irrational numbers?
- (ii) Are all surds irrational numbers?
- (iii) Are all irrational numbers surds?

Justify with examples.

Q.6



ACROSS

1. Expressing a given polynomial as a product of two or more factors is called _____.
3. A symbol which takes various values is known as a _____.
4. An _____ is defined as a combination of constants, variables and coefficients using four fundamental mathematical operations (+, -, ÷, ×).
5. A statement of equality of two algebraic expressions involving a variable is called a _____.
8. A symbol having a fixed numerical value is called a _____.
9. A mathematical sentence which contains a variable such that it may be true or false depending on the values of the variable, is called an _____ sentence.
10. In the product of a variable and a constant, each is called the _____ of the other.

DOWN

2. Any term of an equation may be taken to the other side with the sign changed. This process is called _____.
6. The solution of an equation is also called the _____ of the equation.
7. An equation which contains only one variable of degree 1 is called a _____ linear equation.

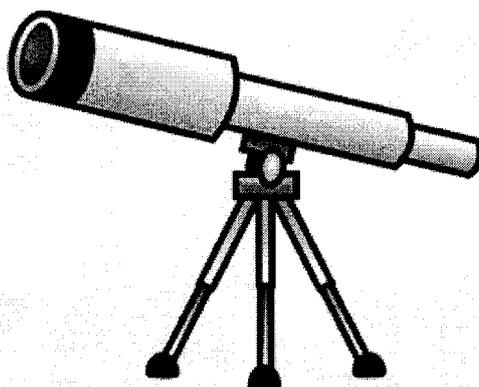
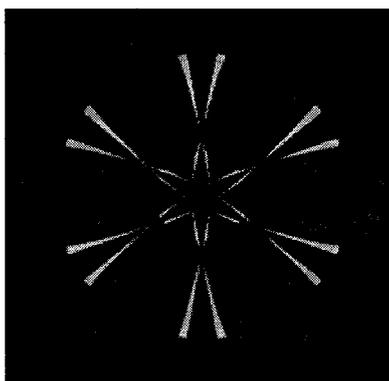
Physics

Light is form of energy that creates a sensation of vision in our eyes. Two important phenomena which are based on rectilinear propagation of light and which enable us to see things around us and observe various phenomena are reflection and refraction.

Reflection is bouncing back of light in same medium while refraction is bending of light when it passes from one medium to another. Reflection and Refraction together enable us to visualize spectacular effects & phenomena in nature like rainbow, twinkling of stars, flickering of objects across bon-fire.

Task: Make a working model based on reflection or refraction of light like periscope, telescope or any other creative object. A model or a chart may also be made illustrating optical illusions. The following link may be referred to for various optical illusions:

<https://www.brainbashers.com/opticalillusions.asp>



Chemistry

- Q.1 Find the pH value of the following samples using pH paper and paste it in activity file as the format given below.

	PH value	PH Strip	Acid/Base
a. Eno salt			
b. Tomato juice			
c. Tea			
d. Coffee			
e. Lemon juice			
f. Soft drink			
g. Soap			
h. Detergent			

हिन्दी

1. डायरी - यह गद्य की एक विधा है। इसमें दैनिक जीवन में होने वाली घटनाओं, अनुभवों को वर्णित किया जाता है। आप भी अपने दैनिक जीवन से संबंधित घटनाओं अथवा अनुभवों को लेकर किन्हीं पाँच दिनों की डायरी लिखें।
2. मीठी वाणी / बोली संबंधी व ईश्वर प्रेम संबंधी दोहों का संकलन (कम से कम पाँच दोहे) करें व अपनी हिन्दी. एफ. सी. में सुन्दर ढंग से लिखें।

Social Studies

History

The students will conduct a survey of a city/town on the basis of the following points discussed in the class

Research to include the following parameters_

- Transport
- Cleanliness
- Entertainment
- Economic activity
- Occupations
- Clothes
- Landscape

Geography

1. A detailed report on the Delhi Metro (With Route Map) (6 pages)

Under following heads:

Commencement	Expenditure
Network	Proposed network
Route Length	Completion
Facilities	
Any other feature	

Project Report on A - 4 sheets, handwritten of not more than 6 pages (12 sides). It can include pictures, newspaper clippings, statistics along with maps & graphs.

संस्कृत

पाठ - 1-5 में प्रथम सत्रीय समास, सन्धि तथा प्रत्ययों से सम्बन्धित शब्दों की सूची बनाएँ।

संस्कृत साहित्य के इतिहास की जानकारी प्राप्त करें तथा प्रमुख वैदिक मंत्रों का सस्वर स्मरण करें।

French

1. Faites une présentation sur le système éducatif de France et d'Inde.
2. Faites une presentation sur le pronom Relatif et le pronom personnel.
3. Faites une affiche pou la France. civilisation françaisè.
4. Faites l'histoire d'un dessin animé.

LIFE SKILLS

Teach a child or an adult who is illiterate, and help them to learn the following :

‘EACH ONE TEACH ONE” Project -

- teach him or her to write own name and sign own name
- counting from 1 to 31
- days of the week
- names of the months.
- teach them day/ date/ month/ year

This will help them to understand dates and use their signatures when required.

- Last day- present your student with an ice cream of your choice to celebrate the learning and take a selfie with your student together with the sheet where your student has written his/ her name and date)