



**SPRINGFIELD PUBLIC SCHOOL
HOLIDAYS HOMEWORK
CLASS – 10**

Dear Parent

The summer Vacation for all classes have commenced from Monday, the students are encouraged to spend significant time in regular studies, Holiday home work for your ward is being sent to you. I would encourage every child to develop healthy reading habits in order to be relevant and smart.

Regards

Instructions :-

- 1. All Homework assignments to be done in A4 size sheets.**
- 2. Homework should be presentable and hand written only.**

Subject:- Mathematics

Assignment - 1

Q1. Show that $3\sqrt{2}$ is irrational

Q2. Show that $5-\sqrt{3}$ is irrational

Q3. Express number as product of it's prime factor of 140

Q4. Find LCM and HCF of pairs of integers also verify that $LCM \times HCF =$ product of two numbers of 25 and 91

Q5. Use Euclid division algorithm to find HCF of 135 and 225

Q6. Show that any positive odd integers is of form $6q+1$ or $6q+3$ or $6q+5$ where q is some integers

Q7. Define Euclid Division lemma

Q8. Find zeros of polynomial of x^2-3 also verify relationship between zeros and Coefficients

Q9. Find quadratic polynomial with given numbers as sum and products of zeros are 1, 1

Q10. Divide $2x^2+3x+1$ by $x+2$

Q 11. Find quotient and remainder when polynomial $p(x)$ is divided by $g(x)$ where $p(x) = x^3-3x^2+5x-3$ and $g(x) = x^2-2$

Q 12. Find all zeros of $2x^4-3x^3-3x^2+6x-2$ if two of it's zeros are $\sqrt{2}$ and $-\sqrt{2}$

SOME IMPORTANT QUESTIONS

- i) Polynomial of degrees 1, 2 and 3 are called.....
- ii) How many number of zeros for quadratic and cubic polynomial
- iii) Find sum and product of zeros from ax^2+bx+c
- iv) State whether statements are true and false
 - a. Every irrational number is a real number.
 - b. Every real number is an irrational number.

Subject - Science

Biology Holidays Homework

1. Do the NCERT questions of chapter 1 in fair note book.
2. Practice all the diagrams related to chapter one in biology fair notebook
3. Prepare a power point representation on any one of the mentioned topic:-
 - i. Human excretory system.
 - ii. Human circulatory system
 - iii. Transportation in plants.

Note:- Try to add special effects and animations to your presentation

Chemistry Holidays Homework

1. Prepare Ch-1 for oral presentation.
2. Prepare a model from any chapter of chemistry.
3. Write NCERT questions in Chemistry notebook.
4. Complete project report of science

Physics holiday homework -

1. Chart/poster on any topic from NCERT physics chapters
2. Project report preparation and topic can be selected from NCERT chapters 14,15,16
- 3.10 CBSE question solution in physics notebook

Subject – English

Section-A Reading

Read the passage given below and answer the questions that follow:

I saw heaps of plastic (cups and foam plates) being burnt at the Trade Fair. Chemicals and toxins were released

in the air – you could smell the foul odour from a kilometre. The fire smouldered on for hours, releasing poisonous fumes slowly in the air.

Then I stopped in my tracks when I saw hot, boiling tea being poured into a plastic bag to be carried to a nearby construction site. They pour the tea into plastic cups and then casually threw away all the plastic! How convenient!

From a highway dhaba to a high tech conference like the prestigious IFFI, tea and coffee are usually served

in plastic cups. Gone are the china cups, glasses, and, of course the clay kullad. Plastic is in. Unknown to all,

it can be very costly - not only to our environment but also our health. Another culprit is that Dal Makhani

in a plastic bag or thermocol foam tub delivered at your doorstep from the local takeaway. Often we reheat

it in the plastic container in the microwave. Again, very convenient. But these cheap plastic containers are made for one time use only. Not for re-heating food in them. Light weight poor quality are especially vulnerable to chemicals leeching out when exposed to heat. Food high in

fat should never to reheated in plastic as the fat absorbs the chemicals. In the USA, foam food containers and plastic for food takeaways are being substituted by paper containers. Research coming from Japan

warns us that when heat and plastic combine, chemicals or toxins can be leached into the food. Dioxin is one such toxin that one has to be wary of. It is known to cause damage to the immune system, cause Diabetes and even Cancer. This Dioxin can never be flushed out of our system. It accumulates in our bodies. It gets stored in the fatty tissues and can play havoc.

So what is the safe alternative? Wax coated paper cups are safer although paper too contains chemicals and

of course safest is the good old fashioned chai in a glass tumbler, the plebian steel or the clay kullad. Food should be heated in steel or glass. It is best to use microwave safe crockery which is free of plastic or lead (contained in many pottery items).

Of course, plastic is a wonderful invention. It is practical and indispensable today. Hospitals and modern medicine rely on plastic syringes, intravenous sets, pipes, tubes, catheters. In surgery, shunts placed in arteries and hip and knee joints are replaced by hardened plastic parts.

Plastic has to be used intelligently and disposed off even more intelligently. Whether it is disposing off, hospital waste or garden garbage, we are callous and un-thinking. People find it hard to dispose this very bulky waste. Every garbage dump, gutter, drain, is choked with plastic. Even if every part of the country has a proper waste disposal system, the quantity of plastic waste will be unmanageable. Disposal has become a

huge issue. We have to have recycling units. One possible safe way to dispose off plastic bags is to shred it and mix (melt, not burn) it with tar and layer the roads that are being constantly built. Kilometres of roads criss-crossing the country can absorb the plastic waste.

Schools too can show the way. Not only should they inform and educate the school children but have good practices. Children can be encouraged to collect plastic bags which can be stuffed into gymnastic mattresses. Thousands of plastic bags will be used in this exercise. I am sure people can come up with many

such ideas once they make up their minds.

On the basis of your understanding of the passage, answer the given questions

- (i) What made the author stop in his tracks?
- (ii) Why should cheap plastic containers be used only one time?
- (iii) What are the ill effects of consuming Dioxin?
- (iv) What is the safest way to dispose off plastic?
- (v) How can one educate kids about safe disposal of plastic?

(vi) It gets stored in the fatty tissues and can play havoc. Replace the underlined word without changing the meaning of the sentence.

2. Read the following excerpt from a case study titled Impacts of Festivities on Ecology.

5. Festivals are synonymous with celebration, ceremony and joy. However, festivals bring to fore the flip side of celebrations – pollution – air, water, soil and noise. This led to the need of assessing the awareness level among people about ecological pollution during festivals. So, a study was conducted by scholars of an esteemed university in India. This study was titled Awareness Towards Impact of Festivals on Ecology.

10. There were two main objectives of the study. The first one was to assess the awareness level among people about ecological protection during festivities.

Exploring solutions to bring awareness about celebrating festivals without harming ecology was the second objective. The method used to collect data was a simple questionnaire containing 6 questions, shared with 50 respondents across four selected districts of a state in the southern region of India.

15. The research began by understanding the socio-economic conditions of the respondents before sharing the questionnaire. Once the responses were received, the data collected was tabulated (Table 1), for analysis.

Table-1: Awareness level among respondents

QUESTIONS	YES %	NO %	CAN'T SAY%
1. Do you feel that bursting crackers is a must during festivities?	46	54	0
2. Do you think most people abuse environmental resources during celebration of festivals?	72	28	0
3. Do you think that celebrations & festivities result in uniting people?	64	32	4
4. Do you enjoy bursting crackers for amusement?	68	32	0

5. Do you feel pressured to burst crackers during festivals as an expectation of your social status?	82	12	6
6. Are you aware of waste segregation & disposal guidelines for better ecology?	56	40	4

20. The study recommended the imposition of strict rules and regulations as

opposed to a total ban on all festive activities which have a drastic impact on our environment. The researchers believed that such measures would help in

harnessing some ill-effects that add to the growing pollution and suggested further studies be taken up across the country to assess awareness about ecological degradation.

25. The observations made in the study pointed to the environmental groups and eco-clubs fighting a losing battle due to city traffic issues, disposal of plastics, garbage dumping and all sorts of ecological degradation. The researchers stressed that the need of the hour is increasing awareness among people to reduce ecological pollution which can be facilitated by celebrating all festivals in an eco-friendly manner.

On the basis of your understanding of the passage, answer the given questions .

- a) Why do the researchers call pollution the 'flip side' of festivals?
- b) Comment on the significance of the second objective of the study with reference to lines 7-12.
- c) Justify the researchers' recommendation for limiting the drastic impact of festival pollution on the environment with reference to lines 16-21.
- d) Why do the researchers feel that environmental groups and eco-clubs are fighting a losing battle in the given scenario?
- e) Even though a larger number of people say 'no' to bursting crackers than those who say 'yes', festival pollution persists. How does evidence from table 1 support this statement?
- f) What purpose does the 'Can't Say' column serve in the questionnaire (table1)?

Section- B

Grammar

3. The following paragraph has not been edited. There is one error in each line. Write the error and the correction in your answer-book against the correct blank number.

Error Correction

The passengers were waiting at the
Platform when five policemen rushing (a) _____

Into different compartments of the

(b) _____

Train. After sometimes one of them

(c) _____

Comes out with two young men.

(d) _____

Literature

Q4.. Write NCERT based questions and answers of Ch-Nelson Mandela - A long walk to freedom in English notebook.

Q5. Write the poetic devices of the poem 'Dust of snow and 'Fire and ice'

Writing

6.You are Arun or Anita, New light colony, Guwahati . The park in your colony has not been maintained properly for quite some time. Write a letter in100- 120 words to the Chief Officer Horticulture department complaining about it. You may use the following points

*boundary wall broken

* flower beds but no flowers

*no proper cutting of hedges

Subject – Social Science

#Make a complete project on

The following topics

- 1) Consumer Awareness
- 2) Social Issues
- 3) Sustainable Development

Read Is- 1 The Rise of Nationalism in Europe.

Find new vocabulary words and maintain a diary of

Subject – Hindi

ग्रीष्म-अवकाश

गृह-कार्य

1) निम्नलिखित विषयों में से किसी एक विषय पर अपने शब्दों में कविता लिखो ।

उदाहरण के लिए आपको कविता की कुछ पंक्तियाँ दी गई हैं:

क) "एक किसान"

एक फसल

जितनी फूटती है

पृथ्वी के गर्भ से

उससे कहीं ज्यादा

फूटती है यह

एक किसान के अंतर्मन से...

अथवा

ख) "कोरोना और ज़िन्दगी"

इतनी साफ सड़क पर

ये कोहरा कैसा है

रोशनी में भी इंसान नज़र नहीं आते

ये अंधेरा कैसा है...

2) "गर्मी में ठंडक का एहसास कराने आ गए पंखें" विषय पर एक प्रभावी विज्ञापन तैयार करें।

3) पढ़ाए गए पाठ्यक्रम को अच्छे से याद करें व लिखित अभ्यास करें।

आपकी छुटियाँ आनंददायक हों, सब स्वस्थ रहें।