It's summertime when faces light up with a smile as holidays are about to begin.
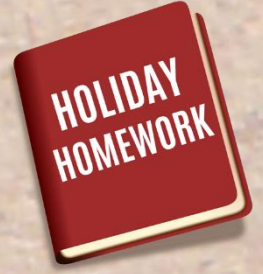It's time for the children to feel free, unbound, high-spirited but safe at home.

Summer break is a vacation time students eagerly await for. So, now is the time to unlock the days creatively making the most while at home. So, adopt a herb, a house plant or a flower, bake a cake, sing-along, paint and draw and compose your own song or take up your hobby as the school announces the summer vacation.

To ensure that the children have a constructive holiday, some holidays' homework & projects have been given which will keep the child active and observant. These projects can easily be done by the children and parents could assist only where required. You can download the Holidays' Homework from the school website for your convenience and in case of any clarification, you may contact the teacher concerned as it shall be a part of the internal assessment.

Stay safe, stay healthy!

You can download the Holidays' Homework from the school website for your convenience and in case of any clarification, you may contact the concerned teacher.

GENERAL INSTRUCTIONS

1. All the assignments have to be done in the respective subject notebook / A4 size sheet or as instructed by the teacher.
2. Work should be neat and tidy.

Assignment should be according to the given guidelines.

ENGLISH

Q.1 There is nothing like the unconditional love of a pet. They show you a sense of affection, give you a sense of purpose. Create a POSTER on an A4 size sheet on the do's and don'ts for your pet based on the reading of "A Triumph of Surgery "

Q.2 Prepare a brochure on an A4 size sheet inviting tourists to visit Rajasthan.

Q.3 As a part of your integrated project, under 'Ek Bharat ... Shreshth Bharat ' prepare a file (Nagaland/ Rajasthan) on the following topics:

1. Location, physical features, weather, climate, population, best time to visit
2. Historical Buildings & Monuments
3. Food and Cuisine
4. Festivals, Customs and Traditions
5. Flora and Fauna
6. Agriculture and Industries
7. Religious Places

हिंदी (HINDI)
(रचनात्मक एवं कला समेकित परियोजना कार्य)

❖ पाठ्यपुस्तक 'क्षितिज' के पाठ 1(सूरदास) तथा पाठ 11(नेताजी का चश्मा) परआधारित 10-10 बहुवैकल्पिक प्रश्न तैयार कर लिखिए।(गृहकार्य कॉपी में)

❖ 1)'राजस्थान पर्यटन विभाग' कीओर से पर्यटकों कोआकर्षित करते हुए 25-50 शब्दों

में एकआकर्षक विज्ञापन तैयार कीजिए।

2)'एक्सपर्ट' मोबाइल फ़ोन की बिक्री बढ़ाने हेतु एकआकर्षक विज्ञापन तैयार कीजिए। (गृहकार्य कॉपी में)

❖ 1)ग्रीष्मावकाश मेंआपनेअपने मित्रों के साथ मुंबई –भ्रमण की योजना बनाई हैऔरआप ठहरने के लिए होटल बुक करना चाहते हैं। 'सनराइज़' होटल में ए. सी. डीलक्स कमरे की बुकिंग के लिए ई–मेल लिखिए।

2)आपके विद्यालय में वार्षिक खेल-दिवस मनाया गया। इसकी जानकारी देते हुए स्कूल प्रबंधन समिति केअध्यक्ष को ई-मेल लिखिए। (गृहकार्य कॉपी में)

❖ राजस्थान व नागालैंड की संस्कृति, पर्व -त्योहारों, भाषा एवं साहित्य का सचित्र वर्णन कीजिए। (file बनाएँ)

❖ अपनी हिंदी भाषा मेंऔरअधिक सुधार लाने के लिए, लेखन कोआकर्षक व सुंदर बनाने के लिए, लेखनऔर वाचन कौशलों का विकास करने के लिए छुट्रियों में प्रतिदिन एक पृष्ठ हिंदी भाषा में लिखिएऔर एक पृष्ठ वाचन कीजिए। लेखन का यहअभ्यासअलग से कॉपी बनाकर कीजिए।

SANSKRIT

1. श्रीमद्भगवद्गीताया: निम्नलिखितान्श्लोकान् अर्थसहितं गृहकार्य संचिकायां लिखत स्मरत च-

द्वितीय: अध्याय: - श्लोकसंख्या - 20,22,23,47,62,63,71

तृतीय: अध्याय: - 21,37

चतुर्थ: अध्याय: - 38,39

2.उच्चै:,श्व:,ह्रा:,अद्य,अत्र,कुत्र,कदा,शनै:,कदापि,इतस्ततः, इदानीम्,बहि:,अपि, च,मा इत्यादिअव्ययानां वाक्यप्रयोगं कृत्वा द्वे-द्वे वाक्ये लिखत।

3.ग्रीष्मावकाशस्य सदुपयोगविषये द्वयो: मित्रयो: परस्परवार्तालापं संवादरूपे लिखत।

4.संस्कृत-कला-समेकित-परियोजना-कार्यम्-

राजस्थान-नागालैंडयो:कलावैशिष्ट्याधारित सचित्रपरिचयलेखनम् (न्यूनतम-अष्टपृष्ठात्मकं,A4 पृष्ठेषु फ़ाइलरूपे)

निम्नलिखितबिन्दव: सम्मिलिताःस्यु: -

1. मुख्यपृष्ठ:

2. स्व-परिचय:,परियोजनापरिचय:,विषय-अध्यापकस्य नाम

3. कृतज्ञता-ज्ञापनम्

4. नागालैंडराज्यस्य सामान्यपरिचय:

5. नागालैंडस्य कलानां परिचय:

6. राजस्थानस्य सामान्यपरिचय:

7. राजस्थानस्य कलानां परिचय:

8. धन्यवाद:

FRENCH

Q1 Écrivezunelettre à un amifrançaisendécrivant les similarités entre le systèmeéducatifenInde et celui de France.

Q2 Décrivezvotre vie quotidienne pendant les vacances.

MATHS

Solve the following questions in the HW copy:

Q.1 Find the smallest number divisible by numbers 2 to 9 (both inclusive).

Q.2 Find the greatest number of 6 digits exactly divisible by 24, 15 and 36.

Q.3 A trader with a basket of eggs finds that if he sells 3 eggs at a time, there is only 1 egg left. If he sells 4 eggs at a time, there is 1 egg left. However if the trader sells 7 eggs at a time, there is no egg left. If the capacity of the basket is 100 eggs, how many eggs are there in the basket? Explain with reason.

Q.4 Show that there is no positive integer p for which $\sqrt{p+1} + \sqrt{p+3}$ is rational.

Q.5 If α and β are the zeroes of a quadratic polynomial such that α + β=24 and α – β=8, find the quadratic polynomial having α and β as its zeroes. Also verify the relationship between the zeroes and the coefficients of the polynomial.

Q.6 Find the value of k, if the squared difference of zeroes of the polynomial $x^2 + kx + 45$ Is 144.

Q.7 p(x) = $x^2 - 2x + 3$ has zeroes α and β, find the polynomial whose zeroes are

$\frac{\alpha-1}{\alpha+1}$ and $\frac{\beta-1}{\beta+1}$

Q.8 If α, β and γ are the zeroes of the polynomial $x^3 + px^2 + qx + 2$ such that $\alpha\beta + 1 = 0$,

      Find the value of 2p+q+5.

Q.9 Solve the following systems of equations by graphical method:

    (i) x +2y-3=0   (ii) 3x+y=1   (iii) x+2y-6=0

        4x+3y=2   2y=2-6x   x+2y-4=0

Q.10 Do the following activities in the Maths Lab Manual.

    (i) Activity 2- Quadratic Polynomial.

    (ii) Activity 3- Pair of linear equations in two variables.

SCIENCE

Note: Holiday Homework to be done in HW note book.

Physics

Q-1 Explain Maxwell's theory of electromagnetic waves and plank's Quantum theory to explain the nature of light.

Q-2 Object O stands on the central axis of a spherical mirror. For this situation, each problem in Table gives object distance p (centimeters), the type of mirror, and then the distance (centimeters, without proper sign) between the focal point and the mirror.
Find:
    (a) the radius of curvature r (including sign),
    (b) the image distance i, and
    (c) the lateral magnification m.
Also, determine whether the image is (d) real (R) or virtual (V), (e) inverted (I) from object O or non-inverted (NI), and (f) on the same side of the mirror as O or on the opposite side.

	p	Mirror	(a) r	(b) i	(c) m	(d) R/V	(e) I/NI	(f) Side
9	+18	Concave, 12						
10	+15	Concave, 10						
11	+8.0	Convex, 10						
12	+24	Concave, 36						
13	+12	Concave, 18						
14	+22	Convex, 35						
15	+10	Convex, 8.0						
16	+17	Convex, 14						

Q-3 Object O stands on the central axis of a spherical or plane mirror. For this situation, each problem in Table refers to (a) the type of mirror, (b) the focal distance f, (c) the radius of curvature r, (d) the object distance p, (e) the image distance i, and (f) the lateral magnification m. (All distances are in centimeters.) It also refers to whether (g) the image is real (R) or virtual (V), (h) inverted (I) or non-inverted (NI) from O, and (i) on the same side of the mirror as object O or on the opposite side. Fill in the missing information. Where only a sign is missing, answer with the sign.

	(a) Type	(b) f	(c) r	(d) p	(e) i	(f) m	(g) R/V	(h) I/NI	(i) Side
17	Concave	20		+10					
18				+24		0.50		I	
19			−40		−10				
20				+40		−0.70			
21		+20		+30					
22		20				+0.10			
23		30				+0.20			
24				+60		−0.50			
25				+30		0.40		I	
26		20		+60					Same
27		−30			−15				
28				+10		+1.0			
29	Convex		40		4.0				

Chemistry

1. Make a Pictionary of 20 new words related to chemistry from chapters 1,2,3 and 4 (NCERT) and also paste pictures related to it.
2. Find out at least 10 different chemical reactions which you observe in your daily life. Write down their balanced chemical equations and categorize them according to the type of reaction.
3. Prepare a table showing the names and chemical composition of any 5 commonly used medicines.

Biology

1. Draw a neat and labelled diagram of human digestive system and explain how proteins are digested and absorbed in the body.
2. Give a schematic representation of circulation of blood in the human heart and body.
3. Draw a neat and labelled diagram of a nephron and explain its functioning.

SOCIAL SCIENCE

Instructions:

- Compile both the projects (1 & 2) in one file.
- It should be handwritten.
- Paste pictures and mention the relevant data also.

1) PROJECT WORK

Every student has to compulsorily undertake any one project on the following topics:

- **Consumer Awareness**

    OR

- **Social Issues**

    OR

- **Sustainable Development**

2) PROJECT WORK

Prepare a file for comparative analysis of Rajasthan and Nagaland on the following points.

1. Folk Dances
2. Occupations
3. Famous Temples
4. Traditional Folk Arts

3. PROJECT WORK

Prepare a project in file on Globalization keeping following topics in mind:

1. History of Globalization from 1815-1914.
2. Role of technology in Globalization and how it leads to economic crisis.

Parameters of assessment will be based on content accuracy, presentation, creative and collaborative skills, research study.

INFORMATION TECHNOLOGY

- Design the school magazine using styles and templates of your choice. Paste the printouts of magazine title and first page in your IT practical file.

- Create a table of contents for a document of your choice where headings are in green color while page numbers are in blue color. Paste the printout of the same in the IT practical file.

ARTIFICIAL INTELLIGENCE

➢ Make a chart of different types of Intelligence in AI Practical File.
➢ Identify and classify the applications based on Computer Vision and Natural Language processing (NLP) from the following:

Speech Recognition, Biometric, Voice Assistants, Autonomous Cars, Surveillance, Chatbot, Google Home, Face Recognition, Google Translate, Fingerprint Recognition, CT Scan in hospitals, MRI, Facebook, Twitter, Emoji Scavenger Hunt Game.

DATA SCIENCE

Q1. Calculate the following from the data given below in your practical file:

1. Mean

2. Median

3. Mean Absolute Deviation

4. Variance

5. Standard Deviation

i. Price: 46,69,32,60,52,41

ii. Values: 9, 2, 5, 4, 12, 7, 8, 11, 9, 3, 7, 4, 12, 5, 4, 10, 9, 6, 9, 4

Q2. Make a list of all those certificate which are important and write them in your practical file. In your parents' mobile phone make a secure folder, scan all the important certificates and save them on this secure folder. Write the steps you performed for saving your data on mobile phone.

Drawing & Painting

Make one poster on **"Independence Day"** (size - full imperial sheet).

Craft

Make a rangoli pattern, using decorative material like mirrors, beads etc.

Vocal music

Write biography of Lata Mangeshkar and paste her picture in your music copy.

Instrumental Music (Harmonium/Flute and Guitar)

- Write biography of Hari Prasad Chaurasia and Sachin Jambekar.

- Write sargam notation of C scale.

DANCE

- Write a paragraph on importance of dance classes in school.