

SOMERVILLE SCHOOL, VASUNDHARA ENCLAVE
CLASS IX
HOLIDAY HOMEWORK
SESSION 2025-26

S.NO.	SUBJECT	DETAILS
1.	ENGLISH	Art Integrated Activity & Worksheet
2.	HINDI	Art Integrated Activity & Worksheet
3.	SANSKRIT	Worksheet
4.	MATHEMATICS	Art Integrated Activity & Worksheet
5.	SCIENCE	Art Integrated Activity & Worksheet
6.	SOCIAL SCIENCE	Art Integrated Activity & CBSE Disaster Management Project
7.	ARTIFICIAL INTELLIGENCE	Art Integrated Activity

Instructions:

- Attempt the Holiday Homework on A4 sized sheets.
- Compile the homework of all the subjects in one file.
- Write the name of the subjects and question numbers carefully.
- Include a cover page.

A celebration of faith and devotion, the ritualistic dance of Chaam reveals itself as an important aspect of Sikkim's heritage.

In Step with Culture: Experience the Vibrant Chaam of Sikkim

Nestled within the breathtaking vistas of the Himalayas, the state of Sikkim is a land of verdant mist-laden peaks and cascading waterfalls. It is here that a unique festival of dance awaits your discovery. The vibrant tapestry of Chaam, a ritualistic dance and an epitome of Sikkimese culture, never fails to enthrall.

Held according to the Tibetan calendar, Chaam dances are one of the most colourful celebrations that take place in the courtyards of Buddhist monasteries as part of a bigger festival. Chaam dances have a long history, dating back to the time of Guru Padmasambhava, the founder of Tibetan Buddhism in Sikkim, who is supposed to have done this dance to expel a demon from this holy place. The Chaam dance festival attracts pilgrims from far and wide.

What sets this dance apart is the use of vibrant masks and colourful costumes through which performers embody different characters ranging from the divine to the devil. Their movements, a seamless symphony of grace and power, tell the tales of ancient legends and spiritual teachings, and have the power to transport onlookers into a realm where we speak with God.

Yak Chaam: Yaks are an intrinsic part of Himalayan life; to celebrate their contribution to our lives, performers wearing costumes and masks resembling the yak stampede through the courtyard and fill the space with an infectious energy. It is believed that honouring the yak brings good fortune and wards off evil from the land.

Chaam is a ritualistic masked dance that is held in monasteries.

Drag-dmar Chaam: Held in the Pemayangtse monastery in west Sikkim, the Drag-dmar chaam sees mask-dances performed on the first two days of a festival that marks the end of one year and the beginning of the Tibetan New Year. Lamas from the monastery dress up as Mahākāla and Guru Drag-dmar to engage in a mock battle that signifies victory of good over evil. On the last day, a giant embroidered Buddha-scroll (Thankga) is displayed at the monastery.

Kagyed Chaam: Kagyed is another type of chaam, performed by Buddhist monks and lamas to honour the divine and ward off evil. This festival, mostly held in December, is most popular in the monasteries of Lingdum (Ranka), old Rumtek, Enchey and Ralang, and attracts hundreds of believers who hope to be blessed by witnessing the masked dance. Observed with offering prayers followed by the ritualistic Lama Dance, this chaam is performed to impress the Kagyed deities.

ENGLISH

Art Integrated Project:

Creating beautiful masks is an integral part of the Sikkimese heritage. Make a tribal mask using waste materials found at home. Use ruled A4 sheets to write the following information:

- Significance of making masks
- Communities traditionally involved in mask making
- Materials, tools, and techniques used
- Importance of preserving traditional crafts

Worksheet:

1. You participated in a Folk Dance Competition and won the first prize. Write a letter in about 90-100 words to your grandparents telling them all about your experience. You are Kripa/Keshab Jain of Kanpur.
2. Find the antonyms of the following words from the article:
 - a) barren
 - b) disappoint
 - c) preceded
 - d) modern
 - e) repels
3. Change the following as instructed:
 - a) A celebration of faith and devotion, the ritualistic dance of Chaam reveals itself as an important aspect of Sikkim's heritage. (Future Continuous Tense)
 - b) Chaam dances are one of the most colourful celebrations. (Present Perfect Tense)
 - c) Their movements, a seamless symphony of grace and power, tell the tales of ancient legends. (Present Continuous Tense)
 - d) The Chaam dance festival attracts pilgrims from far and wide. (Present Perfect Continuous Tense)

HINDI

कला समेकित गतिविधि

- (i) ऊपर दिए गए अनुच्छेद(ENGLISH ARTICLE) में सिक्किम के पारंपरिक लोकनृत्यों के बारे में जानकारी दी गई है। उसी के आधार पर सिक्किम के लोकनृत्यों का महत्व, उनकी विशेषताएँ व पोशाक के बारे में दो मित्रों के बीच हुई बातचीत को संवाद के रूप में 80-100 शब्दों में लिखिए।
- (ii) सिक्किम के पारंपरिक लोकनृत्यों से संबंधित चित्र लगाइए तथा 'लोकनृत्यों के महत्व' को दर्शाते हुए दो स्वरचित स्लोगन लिखिए।

कार्यपत्रिका

- (1) 'दुख का अधिकार' कहानी को ध्यानपूर्वक पढ़कर उसका सार 50-60 शब्दों में लिखिए।
- (2) अपनी पाठ्यपुस्तक के पढ़ाए गए पाठों में से 10-10 उपसर्ग व प्रत्यय वाले शब्द छाँटिए तथा उनमें से उपसर्ग, प्रत्यय व मूलशब्द अलग-अलग करके लिखिए।
- (3) अनुस्वार व अनुनासिक की सहायता से बने 5-5 शब्द लिखकर उनका वाक्य में प्रयोग कीजिए।

SANSKRIT

कक्षा - नवमी

ग्रीष्मावकाश कार्यपत्रिका

***कार्यपत्रिका का प्रिंट लेकर उसी पर उत्तर लिखें।**

प्रश्न १ मञ्जूषायाः सहायतया संवादं पठित्वा रिक्तस्थानानि पूरयत -

मञ्जूषा - मित्रैः, दर्शनीयम्, गमिष्यामः, जयपुरं, कार्यक्रमः

विनोदः – अंकित ! श्वः भवान् कुत्र गमिष्यति ?

अंकितः – अहं (i)गमिष्यामि ।

विनोदः – तत्र किमपि कार्यं वर्तते ? अथवा भ्रमणार्थम् एव गच्छति ?

अंकितः – कार्यं नास्ति, अहं तु (ii) सह भ्रमणार्थं गच्छामि।

विनोदः – जयपुरे कुत्र-कुत्र भ्रमणस्य (iii) अस्ति?

अंकितः – वयं तत्र आमेर-दुर्ग, जयगढ़दुर्ग, गोविन्ददेव-मन्दिरं च दक्ष्यामः ।

विनोदः – तत्र नाहरगढ़-दुर्गमपि पश्यतु । तदपि (iv) अस्ति ।

अंकितः – यदि समयः अवशिष्टः भविष्यति तर्हि निश्चयेन तत्र गमिष्यामः ।

विनोदः – बाढ़ मित्र ! नमस्ते ! इदानीम् अहं गच्छामि। सोमवासरे आवां पुनः मिलिष्यावः। तदा (v) वार्तालापं करिष्यावः।

उत्तराणि -

१)

२)

३)

४)

५)

प्रश्न २ निर्देशानुसारम् उत्तरत-

- (i) अयं वर्णः पवर्गे नास्ति।
(अ) ब् (ब) भ् (स) ट् (द) फ्
- (ii) अस्य उच्चारणस्थानम् 'तालुः' नास्ति।
(अ) ख् (ब) छ् (स) ज् (द) य्
- (iii) उचितं वर्णं चित्वा वर्णवियोजने रिक्तस्थानपूर्तिं कुरुत।
प्रतिष्ठा = प् + र् + अ् + त् + इ + _____ + ट् + आ
(अ) श् (ब) अ (स) ष् (द) इ
- (iv) उचितं वर्णसंयोजनम् चिनुत।
उ + ज् + ज् + व् + अ + ल् + अ + म् =
(अ) उज्ज्वलम् (ब) उज्ज्वलम् (स) उज्जावालम् (द) ऊज्ज्वलम्

प्रश्न ३-

अधोदत्तं पद्यांशं पठित्वा प्रश्नान् उत्तरत।

गौरवं प्राप्यते दानात् न तु वित्तस्य सञ्चयात्।
स्थितिरुच्चैः पयोदानां पयोधीनामधः स्थितिः ॥

I. एकपदेन उत्तरत।

- (i) गौरवं कस्मात् प्राप्यते?
(ii) केषां स्थितिः उच्चैः भवति?

II. पूर्णवाक्येन उत्तरत।

केषां स्थितिः अधः भवति?

III. उचितम् उत्तरं चित्वा लिखत।

- (i) 'वित्तम्' इति पदस्य पर्यायपदम् किम्?
(अ) धनम् (ब) सम्पत्
(स) विद्या (द) निधनम्
- (ii) 'अधः' इति पदस्य विलोमपदम् किम्?
(अ) नीचैः (ब) उच्चैः (स) अथः (द) अद्य

प्रश्न ४ -प्रत्यय संयोजनं /विभाजनं क्रियताम्-

- १) बालिका रोदितुम् आरभत् ।
२) ते वि+हस+ल्यप् गृहम् अगच्छन् ।
३) रामः दुग्धं पा+क्त्वा क्रीडनाय गच्छति ।
४) माता फलानि निक्षिप्य अगच्छत् ।

प्रश्न ५ कथापूर्ति कुरुत-

अभिमन्युः निजबलेन सह) i) अगच्छत्। सः एकाकी एव चक्रव्यूहस्य प्रवेशद्वारं) ii) सफलोऽभवत्, तस्य कोऽपि योद्धा अन्तः प्रवेष्टुं न समर्थः। साहसी बालकः) :iii) एव षट् प्रवेशद्वाराणि त्रोटयित्वा चक्रव्यूहस्य अन्तः प्राविशत् सप्तमे प्रवेशद्वारे तस्य सप्तमहारथिभिः सह घोरं युद्धं जातम्।) iv) अतुल्या बाणवृष्टिं दृष्ट्वा सर्वे) v) मिलित्वा तस्योपरि युगपदेव) vi) अकुर्वन्। एकतः एकाकी बालकः आसीत् अपरतः) vii) सप्त महारथिनः। कुत्र गता) viii)? चिरकालं) ix) युद्धं कुर्वन् अन्ततः सः वीरः वीरगतिं प्राप्तः। धन्योऽयं वीरबालकः। धन्या चेयं वीरभूमिः यत्र एतादृशाः वीराः बारम्बार) x) ।

मञ्जूषा – युद्धभूमिम्। युद्धकलानिष्णाताः। जायन्ते। महारथिनः। एकाकी। युद्धमर्यादा। यावत्। वीरबालकस्य। आक्रमणम्। भेदने।

MATHEMATICS

Art Integrated Project: Depict the following information about SIKKIM in the form of a Pie chart.

Most commonly spoken languages in Sikkim.

- List some commonly spoken languages by different tribes of Sikkim.
- Collect the data (in percentage form) and present it in the tabular form.
- Represent the same in the form of a pie chart with a title, using different colours.

WORKSHEET:

Q1. Prove that $\frac{1}{3-\sqrt{8}} - \frac{1}{\sqrt{8}-\sqrt{7}} + \frac{1}{\sqrt{7}-\sqrt{6}} - \frac{1}{\sqrt{6}-\sqrt{5}} + \frac{1}{\sqrt{5}-2} = 5$

Q2. Factorize $(x - 2y)^3 + (2y - 3z)^3 + (3z - x)^3$

Q3. Represent geometrically $\sqrt{9.5}$ on number line.

Q4. If the polynomials $(kx^3 + 3x^2 - 13)$ and $(5x^3 - 8x + k)$ leave the same remainders when divided by $x + 1$, then find the value of k .

Q5. If $x = 3 + 2\sqrt{2}$, Check whether $x + \frac{1}{x}$ is rational or irrational.

Q6. If $x = 2 + \sqrt{3}$, find $\left(x + \frac{1}{x}\right)^3$.

Q7. Find a and b if $\frac{4+\sqrt{5}}{4-\sqrt{5}} + \frac{4-\sqrt{5}}{4+\sqrt{5}} = a + b\sqrt{5}$

Q8. Find the value of

$$(x - a)^3 + (x - b)^3 + (x - c)^3 - 3(x - a)(x - b)(x - c) \text{ when } a + b + c = 3x$$

Q9. If $P(x) = 5x^2 - 4x + 5$, find $P(0) - P(1) + P(-2)$.

Q10. Factorise: a) $(a - 2b)^3 - 512b^3$

b) $2\sqrt{2}a^3 + 8b^3 - 27c^3 + 18\sqrt{2}abc$.

c) $4\sqrt{3}x^2 + 5x - 2\sqrt{3}$

SOCIAL SCIENCE

Create a labeled drawing of the attire worn during the Chaam dance in Sikkim. Through your illustration and labels, explain how the clothing is suited to Sikkim's landscape and climatic conditions.

You can also use pieces of cloth or origami sheets to show the costume.

DISASTER MANAGEMENT PROJECT

1) Any one of the following topics will be allotted to the students:

Natural Disasters-Floods, Earthquake, Landslide, Tsunami and Cyclones.

Man induced Disasters-Chemical, Forest Fire Epidemic.

(ii) Case study and mitigation strategies to be included.

(iii) Assume yourself to be a Disaster Manager. Keeping in mind the disaster for a particular area, mention how you will contribute and participate to reduce the impact of a disaster and educate people to prepare themselves to cope up with it.

(iv) **Students** must refer to the book prescribed by NCERT (Together towards a safer India-II)

CBSE guidelines for the preparation of project

1. The total length of the project report must not be more than 15 written pages of foolscap size (A-4 size).
2. The project report must be handwritten, and credit will be awarded to original drawings, illustrations and creative use of materials
3. The students should continuously discuss the doubts with the teacher and prepare a draft before finalizing the report.
4. The project report must be presented in a neatly bound simple folder.
5. The project report must be developed and presented in the given order:
 - **Cover page** showing project title, student information, school and year, list of contents with page numbers
 - **Acknowledgements** (acknowledging the institution, offices and libraries visited and people who have helped).

- **Project Overview:** Purpose, Aim, Methodology and Experiences while doing the project. Chapters with relevant headings.
- **Summary and conclusions based on the findings.**
- Planning and activities to be done during the project. Give a calendar of activities, if activities are undertaken.
- **Bibliography:** should have the Title, pages referred, author, publisher, year of publication and if a website has been referred to, the name of the website with the specific website link which has been used, should be mentioned.
- All the photographs and sketches should be labelled and acknowledged.
- **Teacher's Evaluation Report Proforma to be attached at the end of the project.**

SCIENCE

BIOLOGY

Project: Design a pamphlet on yak conservation, depicting its significance in Sikkim's culture and socio-economic stability.

Worksheet:

1. List the benefits of yak husbandry.
2. Illustrate the significance of yaks in organic farming in Sikkim.
3. Why is the yak population declining? What steps are being taken in Sikkim to conserve yaks?

PHYSICS

1. Vishnu swims in a 90m long pool. He covers 180 m in one minute by swimming from one end to the other and back along the same straight path. Find the average speed and average velocity of Vishnu.
2. A train 100m long moving on a straight level track passes a pole in 5s. Find:
 - (a) the speed of the train
 - (b) the time it will take to cross a bridge 500m long.
3. On a 120 km track, a train travels the first 30 km at a uniform speed of 30 km/hr. How fast must the train travel the next 90 km so as to average 60 km/hr for the entire trip?
4. A train starting from rest attains a velocity of 72 km/h in 5 minutes. Assuming that the acceleration is uniform, find:
 - (i) the acceleration and
 - (ii) the distance travelled by the train for attaining this velocity.
5. A bus was moving with a speed of 54 km/h. On applying brakes, it stopped in 8 seconds. Calculate the acceleration and the distance travelled before stopping.

6. The brakes applied to a car produce an acceleration of 6 m/s^2 in the opposite direction to the motion. If the car takes 2 seconds to stop after the application of brakes, calculate the distance it travels during this time.

CHEMISTRY

1. **Following questions consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:**

- (a) Both A and R are true and R is the correct explanation of A.
- (b) Both A and R are true but R is not the correct explanation of A.
- (c) A is true but R is false.
- (d) A is false but R is true.
- i) **Assertion:** Camphor disappears without leaving any solid.
Reason: Camphor undergoes sublimation.
- ii) **Assertion:** Ice floats on the surface of water.
Reason: The density of both ice and water is the same.
- iii) **Assertion (A):** Boiling is a bulk phenomenon.
Reason (R): It takes place at room temperature.
- iv) **Assertion (A):** On heating dry ice changes to gaseous carbon dioxide but ice changes liquid state.
Reason (R): Dry ice undergoes sublimation but ice undergoes fusion.
- v) Which of the following statements about pure substances is correct?
 - A) Pure substance can be separated by physical process into its chemical constituents.
 - B) Pure substances contain only one kind of particle.
 - C) Pure substances may be compounds or mixtures.
 - D) Pure substances may be elements, compounds or mixtures.
- vi) The latent heat of vaporisation is the amount of heat energy that is required to change
 - A) 10kg of a liquid into gas at its boiling point.
 - B) 100g of a liquid into gas at atmospheric pressure at its boiling point.
 - C) 1000g of a gas into liquid at atmospheric pressure.
 - D) 1kg of a liquid into gas at atmospheric pressure at its boiling point.

2. Draw a flow diagram depicting interconversion of three states of matter.

ARTIFICIAL INTELLIGENCE

Using any AI photo editing tool, create a collage on the traditional dances of Sikkim including the masked dance.
