

**SHAMBHU DAYAL GLOBAL SCHOOL**  
**SUMMER HOLIDAY HOMEWORK**  
**INTEGRATED RESEARCH BASED PROJECT**  
**CLASS : 8**

**TOPIC: NATURAL CALAMITIES**

**Instructions:**

1. This homework is research based and integrated with all subjects.
2. All work must be done according to the given project.
3. Write your name, class, section and subject clearly on every sheet.
4. The main topic is related to Science, but all subjects are integrated in the project.
5. Use colourful headings, pictures and creative presentation wherever required.
6. Mention the source of your content clearly. If you used ChatGPT, Clipboard, books, websites or any other source, write it properly.
7. Maintain cleanliness and proper handwriting in your work.
8. Submit the homework on time.
9. This activity will be assessed according to the given rubrics, and the marks obtained in each subject will be added to the report card.

**“Learning through Creativity and Research”**

**Assessment Sheet**

<b>Criteria</b>	<b>Marks</b>	<b>Description</b>
Understanding of case study	10	Correct identification of facts, causes, and effects
Analytical thinking	10	Logical and thoughtful responses
Writing skill	10	Grammar, clarity, and sentence structure
Vocabulary and language use	10	Appropriate use of words
Presentation	10	Neatness, organization, and creativity

**SUBJECT: ENGLISH**

Do as per your roll number-

**Activity 1-(Roll no-1& 2) Diary of an Earthquake Survivor**

Write a diary entry describing feelings and experiences during an earthquake. (Word limit 200 to 300)

**Activity 2-(Roll no-3& 4) News Report on a Flood Disaster**

Prepare a newspaper article with headline, date, interviews, and safety measures. (Word limit 200 to 300)

**Activity 3-(Roll no-5& 6) Speech on Climate Change and Natural Disasters**

Write and present a speech about how climate change increases calamities. (Word limit 200 to 300)

**Activity 4-(Roll no-7& 8) Story Writing – The Day the Cyclone Came**

Create an imaginative story based on a cyclone experience. (Word limit 200 to 300)

**Activity 5-(Roll no-9& 10) Poster and Slogan Writing on Disaster Safety**

Design awareness posters with catchy slogans. Use A3 sheet.

**Activity 6-(Roll no-11& 12) Debate: “Humans or Nature – Who is Responsible for Natural Disasters?”**

Prepare arguments for both sides. (Word limit 200 to 300)

**Activity 7-(Roll no-13& 14) Poem on Nature’s Fury**

Compose a poem describing storms, floods, earthquakes, or volcanoes. Within 100 words

**Activity 8-(Roll no-15& 16) Letter Writing to the Government After a Disaster**

Write a formal letter requesting help and relief measures. (Word limit 100 to 200)

**Activity 9-(Roll no-17& 18) Travel Brochure for a Disaster-Prone Area**

Create an informative brochure mentioning precautions and safety tips. Use A4 sheet

**Activity 10-(Roll no-19 & 20) Interview a Rescue Worker**

Write a fictional interview with an NDRF officer, doctor, or volunteer. (Word limit 200 to 300)

**Activity 11-(Roll no-21& 22) Comic Strip on Disaster Preparedness**

Create dialogues and scenes showing how families stay safe during disasters. (Word limit 200 to 300)

**Activity 12-(Roll no-23 & 24) Article Writing – “How Technology Helps During Natural Calamities”**

Explain the role of satellites, warning systems, and rescue operations. (Word limit 200 to 300)

**Activity 13-(Roll no-25 & 26) Role Play: TV News Channel During a Tsunami**

Prepare anchor dialogues, reporter conversations, and eyewitness accounts. (Word limit 200 to 300)

**Activity 14-(Roll no-27& 28) Paragraph Writing on “A World Without Natural Disasters”**

Express imagination and opinions creatively. (Word limit 200 to 300)

**Activity 15-(Roll no-29 & 30) Report Writing on a Famous Natural Disaster**

Research and write about events like the Indian Ocean Tsunami, Kedarnath Floods, or Nepal Earthquake. (Word limit 200 to 300)

**SUBJECT: MATHEMATICS**

Theme: “**Math Behind Natural Calamities**”

**Task 1: Flood Water Storage Model**

**Topic: Cube Numbers**

During floods, water is stored in large cubical tanks.

Activity: Suppose a rescue camp uses a cubical water tanks of side:

- 3 m , 5m, 7m

Find the volume of each tank using:

Students Should:

- Calculate the cube values
- Draw cubical tanks for all the measurements
- Compare which tank stores the maximum water
- Make a table of side length and volume

**Task 2: Cyclone Shelter Design**

**Topic: Square Numbers**

Cyclone shelters are built on square-shaped land plots.

Activity: Find the area of square shelters with side lengths:

- 12 m , 18 m , 25 m

Students Should:

- Calculate square values
- Draw a 3D shelter of any one
- Compare shelter capacities

**Task 3: Disaster Population Growth Study**

**Topic: Powers and Exponents**

Sometimes after natural disasters, the affected population increases rapidly.

Activity: A relief camp initially has 200 people. Every day, the number doubles.

Find the population after:

- 1 day
- 2 days
- 3 days
- 4 days
- 5 days

Use exponents:  $P = 200 \times 2^n$

Students Should:

- Do complete calculations and prepare a table
- Represent data in a bar graph .
- Explain how exponential growth works in emergencies
- Do all the work on a coloured A4 size sheet.

## SUBJECT: SCIENCE

### THEME: NATURAL CALAMITIES

1. One rainy evening, Aarav was watching the news with his family when he saw videos of floods, earthquakes, and cyclones affecting different parts of the world. He became curious and asked his teacher in school why such disasters happen and how they affect people and nature.

His teacher gave the class a research project on “Natural Calamities.” Aarav started collecting information from books, newspapers, documentaries, and the internet. During his research, he learned about earthquakes, floods, droughts, cyclones, and tsunamis. He also discovered how these disasters damage homes, forests, animals, and human life.

While working on the project, Aarav found many real-life examples of natural disasters in India and other countries. He became interested in understanding how people face challenges during such events and how governments and rescue teams work during emergencies.

This project helped Aarav explore the causes and effects of natural calamities and understand why awareness and preparedness are important for everyone.

#### **TASK 1 :Case Study: Indian Ocean Tsunami (2004):**

**(15 marks)**

The tsunami of 2004 was caused by a powerful underwater earthquake near Indonesia. Huge waves affected many countries including India, Sri Lanka, Thailand, and Indonesia.

Do the Research and prepare the outlining of the case study given above.

Also find:

- causes of this natural calamity
- effect on humans and environment
- impact of this natural calamity
- safety measure and preparedness
- role of the government and technology during natural calamities.

NOTE: You can prepare your project in A4 size file or in a separate notebook for this work.

#### **2. SEVERE DUST STORM, HEAVY RAIN AND LIGHTNING STORM**

**(15 marks)**

**TASK 2:** One of the most recent natural calamities in India was the **severe dust storm, heavy rain, and lightning storm in Uttar Pradesh and nearby northern states** in May 2026. The storm caused damage to houses, trees, crops, and electricity lines, and many people were affected. Research about this natural calamity that recently took place in Uttar Pradesh.



**Background Information:** Recently, Uttar Pradesh experienced a powerful dust storm along with heavy rain and lightning. Many houses were damaged, trees fell on roads, electricity poles collapsed, and several people were injured. Rescue teams and government officials helped affected families and cleared blocked roads.

**Imagine This Situation:** You are a young reporter visiting a village affected by the storm in Uttar Pradesh. You need to observe the damage, understand the problems faced by people, and suggest safety measures for the future.

**Research Questions:** (Do in scrapbook or in A4 size file)

NOTE: Give your answers in 3-5 lines.

1. What type of natural calamity affected Uttar Pradesh recently?
2. What were the main causes of the disaster?
3. Name any three damages caused by the storm.
4. How did rescue teams and the government help people?
5. What safety steps should people follow during storms and lightning?
6. Create a poster on the topic:

#### **“Stay Safe During Storms and Lightning”**

Include:

- Safety rules
- Emergency helpline ideas
- Drawings or slogans
- Write any **three ideas** to reduce damage during storms in villages and cities.

## Competency-Based Questions: (Do in scrapbook or in A4 size file.)

NOTE: Give your answers in 3-5 lines.

1. Why do you think weather warnings are important before storms?
2. If electricity poles fall during a storm, what problems can people face?
3. How can students help their families during natural calamities?
4. Why should trees near roads and houses be checked before the rainy season?
5. What lessons can we learn from this disaster?

## WILDFIRE IN JAISALMER (20 marks)

**TASK 3:** Another recent disaster was a **major wildfire in Jaisalmer, Rajasthan**, where thousands of acres of forest land were burned due to strong winds and extreme heat.

### Major Wildfire in Jaisalmer, Rajasthan (2026)

#### Background Information

A major wildfire recently broke out near Nachna town in Jaisalmer, Rajasthan. Due to strong winds and extreme heat, the fire spread quickly and burned thousands of acres of forest land. Trees, plants, wildlife habitats, and small roadside shops were badly affected. Firefighters, police teams, army personnel, and local villagers worked together to control the fire.

Imagine you are an environmental researcher visiting Jaisalmer after the wildfire. Your job is to study:

- The causes of the fire.
- Damage caused to nature and people.
- Safety measures to prevent such disasters in the future.

#### Research Questions: (Do in scrapbook copy or A4 size file)

NOTE: Give your answers in 3-5 lines

1. What type of natural calamity occurred in Jaisalmer?
2. What were the main reasons behind the wildfire?
3. Name any three things damaged because of the fire.
4. How did firefighters and rescue teams help control the disaster?
5. Why are forests important for animals and humans?
6. Prepare a poster on the topic:

#### “Save Forests, Stop Wildfires”

Include:

- Safety rules
- Importance of forests
- Slogans and drawings

Find out and write:

- Three ways to prevent forest fires
- Three effects of wildfires on wildlife and the environment

#### Competency-Based Questions (Do in scrapbook or A4 size file)

NOTE: Give your answers in 3-5 lines.

1. Why do wildfires spread faster during hot and windy weather?
2. How can cutting trees increase the danger of forest fires?
3. What problems can animals face during wildfires?
4. Why is teamwork important during natural disasters?
5. What can students do to protect forests and nature?

## SUBJECT- HINDI

### शोध एवं क्विज़ गतिविधि

निम्नलिखित प्रश्नों के उत्तर खोजिए:

1. पानी के अंदर आने वाले भूकंप से कौन-सी प्राकृतिक आपदा आती है?



2. बिजली चमकने के समय सुरक्षा के दो नियम लिखिए।

3. पेड़ लगाना क्यों महत्वपूर्ण है?

### आपदा स्क्रैपबुक गतिविधि

विभिन्न प्राकृतिक आपदाओं के चित्र एकत्र कीजिए, जैसे:

बाढ़, चक्रवात, भूकंप, सूखा, सुनामी

उन्हें स्क्रैपबुक में चिपकाइए और

- ✓ आपदा का नाम
- ✓ कारण
- ✓ प्रभाव
- ✓ सुरक्षा उपाय

अपनी स्क्रैपबुक को बॉर्डर, स्टिकर और कैप्शन से सजाइए।

### ✍ रचनात्मक लेखन कार्य

शब्दों में एक लघु कहानी लिखिए:

“एक दिन जब बाढ़ ने मेरी ज़िंदगी बदल दी”

अथवा

“भूकंप से बचाव”

✂ कहानी को उपयुक्त शीर्षक दीजिए और एक रंगीन चित्र बनाइए।

🎨 पोस्टर निर्माण प्रतियोगिता: निम्न विषयों में से किसी एक पर रंगीन पोस्टर बनाइए:

🌍 “पृथ्वी बचाओ, जीवन बचाओ”

⚠ “आपदा आने से पहले तैयार रहें”

🌱 “प्रदूषण रोकें, आपदाएँ रोकें”

✂ पोस्टर में उपयोग करें:

- नारे
- चित्र
- रंग
- रचनात्मक विचार

🎮 गेम-आधारित क्विज़ ऐप - “आपदा योद्धा”

“आपदा योद्धा” नाम से एक क्विज़ गेम बनाइए:

📱 Scratch

📄 Google Forms

इसमें ऐसे प्रश्न जोड़िए:

❓ “बाढ़ आने पर क्या करना चाहिए?”

✅ सही उत्तर देने पर अंक मिलें।

🎯 इस गेम को अपने मित्रों के साथ साझा करें और उन्हें आपदा सुरक्षा के बारे में मज़ेदार तरीके से सीखने में मदद करें।

### विषय - संस्कृत

केस स्टडी- 1

वसुधैव कुटुम्बकम्

अर्थ - सम्पूर्ण पृथ्वी एक परिवार है। हमें सभी प्राणियों के साथ प्रेम, सहयोग एवं सद्भाव रखना चाहिए।

अध्ययन प्रसंग -

एकस्मिन् ग्रामे विविधधर्मसम्पन्नाः जनाः निवसन्ति। तेषां मध्ये प्रेम, सहयोगः, सौहार्दं च अस्ति। ते उत्सवेषु परस्परं सहाय्यं कुर्वन्ति। सर्वे जनाः मन्यन्ते यत् सम्पूर्णा वसुधा एकं कुटुम्बम् अस्ति।

**प्रश्नाः**

- ड- ग्रामे के निवसन्ति?
- ड- तेषां मध्ये किं अस्ति?
- ड- ते कदा सहाय्यं कुर्वन्ति?
- ड- “वसुधैव कुटुम्बकम्” इत्यस्य अर्थः कः?
- ड- अस्मात् प्रसंगात् किं शिक्षाम् लभामहे?

### केस स्टडी - 2

**नरात् श्रेष्ठा नारी**

अर्थ - नारी समाज की आधारशिला है। वह माता, शिक्षिका, प्रेरणा और शक्ति का स्वरूप है।

**अध्ययन प्रसंग**

सीता नाम छात्रा प्रतिदिन विद्यालयं गच्छति। सा अध्ययनं करोति, मातरं साहाय्यं करोति, लघुभगिन्याः पाठं अपि बोधयति। सा सर्वेषां प्रेरणास्ति।

**प्रश्नाः**

- ड- छात्रायाः नाम किम्?
- ड- सा कुत्र गच्छति?
- ड- सा कस्याः साहाय्यं करोति?
- ड- सा किमर्थं प्रेरणास्ति?
- ड- “नरात् श्रेष्ठा नारी” इति कथं सिद्ध्यति?

**भाग - 3 : रचनात्मक गतिविधियाँ**

**गतिविधि 1 - चित्रांकन**

“वसुधैव कुटुम्बकम्” विषय पर सुंदर चित्र बनाइए ।

**अथवा**

“नारी शक्ति” - शिक्षिका, वैज्ञानिक, डॉक्टर, सैनिक के रूप में नारी, में से किसी एक विषय पर चित्र बनाइए ।

**गतिविधि 2 - पोस्टर निर्माण**

**संस्कृत में स्लोगन लिखिए:**

- 3- वसुधैव कुटुम्बकम्।
- 3- यत्र नार्यस्तु पूज्यन्ते तत्र रमन्ते देवताः।
- 3- नारी शक्तिः राष्ट्रस्य शक्तिः।

**गतिविधि 3 - संवाद लेखन**

वसुधैव कुटुम्बकम् अथवा नारी महिमा पर संवाद लिखिए ।

**भाग - 4 : मेरा विचार (स्वयं लिखें)**

**निम्न प्रश्नों के उत्तर 4-5 वाक्यों में लिखिए:**

- 3- “वसुधैव कुटुम्बकम्” से हमें क्या शिक्षा मिलती है?
- 3- नारी को श्रेष्ठ क्यों कहा गया है?
- 3- आपकी माता या शिक्षिका आपके जीवन में कैसे प्रेरणा देती हैं?

**भाग - 5 : विशेष कार्य -**

अपनी माता, बहन, शिक्षिका या किसी प्रेरणादायक महिला का चित्र चिपकाकर संस्कृत में पाँच वाक्य लिखिए।

## SUBJECT- SOCIAL SCIENCE

### **TASK 1 – NATURAL CALAMITIES, PEOPLE & GOVERNMENT (25 Marks)**

#### **Activity: Understanding the Social Impact of Natural Calamities**

- Students must prepare the project in a separate file using colourful pages, neatly labelled, headings, creative presentation, colourful graphs/charts, pictures, maps and proper decoration to enhance the overall appearance of the work.

#### **Part A – Case Study**

Choose any one major disaster from India:

- 2013 Uttarakhand floods
- 2004 Indian Ocean earthquake and tsunami
- 1993 Latur earthquake
- Cyclone Amphan

#### **Research and explain:**

1. Causes of the disaster
2. Areas affected
3. Impact on people and property
4. Government rescue and relief measures
5. Role of local people and NGOs during the disaster
6. Lessons learned from the disaster

#### **Poster Making:**

Create a poster on:

**“Disaster Preparedness Saves Lives”**

### **TASK 2 – COMMUNITY SURVEY, DATA ANALYSIS & REPORT WRITING (25 Marks)**

#### **Activity: Disaster Awareness Survey**

Conduct a survey of **10 people** in your locality/community.

#### **Ask the following questions:**

S.No	Questions
1	Are natural disasters increasing in recent years?
2	Do you know basic disaster safety measures?
3	Should schools conduct disaster management drills?
4	Do human activities increase natural disasters?
5	Should the government invest more in disaster management?

#### **Task:**

1. Record responses in table form.
2. Calculate:
  - a. Total responses
  - b. Percentages
  - c. Most common opinions
3. Write 5 observations from the survey.
4. Write a report on: **“How Natural Calamities Affect Society and Economy”**

#### **Include:**

- Impact on human life
- Migration and homelessness
- Economic losses
- Need for disaster preparedness
- Role of citizens and government

## SUBJECT - FRENCH

### **Question 1 – Ma ville préférée en France / My Favourite City in France**

**(10 Marks)**

Choisissez une ville célèbre de France comme Paris, Nice ou Lyon. / Choose a famous city of France like Paris, Nice, or Lyon.

Écrivez:

- Le nom de la ville. / The name of the city.
- Un monument célèbre. / One famous monument.
- Une chose que les gens aiment dans cette ville. / One thing people like in this city.

Exemple :

Paris est la capitale de la France./ Paris is the capital of France.

La Tour Eiffel est célèbre./ The Eiffel Tower is famous.

### **Question 2 – Les aliments français / French Food**

**(10 Marks)**

Faites une petite recherche sur la nourriture française./ Do a small research on French food.

Écrivez les noms de :

- Plats français. / French dishes.
- Fromage français. / French cheese.
- Boisson française. / French drink.

Exemple :

J'aime les crêpes./ I like crêpes.

Le Camembert est un fromage français./ Camembert is a French cheese.

### **Question 3 – Ma journée / My Daily Routine**

**(10 Marks)**

Parlez de votre journée comme Léa./ Talk about your day like Léa.

Écrivez :

- À quelle heure vous vous réveillez?/ What time you wake up?
- Ce que vous mangez le matin? / What you eat in the morning?
- Ce que vous faites après l'école? / What you do after school?

### **Question 4 – Les sports et les loisirs / Sports and Hobbies**

**(10 Marks)**

Faites une recherche sur un sport populaire en France./ Do a research on one popular sport in France.

Écrivez :

- Le nom du sport. / The name of the sport.
- Pourquoi les gens aiment ce sport? / Why people like this sport.
- Si vous aimez ce sport ou non. / If you like this sport or not.

### **Question 5 – Les marchés en France / Markets in France**

**(10 Marks)**

Les marchés sont très populaires en France/ Markets are very popular in France.

Faites une petite recherche et écrivez / Do a small research and write:

- Ce que les gens achètent au marché. / What people buy in the market.
- Les fruits ou légumes célèbres. / Famous fruits or vegetables.
- Pourquoi les marchés sont importants. / Why markets are important.