

**Holiday Homework**  
**Class IX**

**Geography**

**Know Your Country India**

**A Project**

1. Acknowledgement(page-1)
2. Index(page-2)
3. India's Location (Longitudinal) (page-3)
4. India's physical features (with maps) (page-4,5,6)
  - Northern mountains
  - Northern plains
  - Peninsular plateau
  - Coastal plains
  - The Thar
  - Island groups
6. Importance of physical features (page-7)
7. Bibliography (page-8)

**B . Prepare a PPT**

*"Influence of each physical feature on Indian Economy."*

**History**

1. Write a short biography of any one of the revolutionary figures (philosopher) you have read about in French Revolution.
2. Write a letter to Stalin explaining your objections to collectivization. What do you think would be Stalin's response to such a farmer?
3. Watch DVD's of films depicting the condition of the Jews under the regime of Hitler(e.g The Schindler's list)
4. Make a table of important events with dates for 'The French Revolution' and 'The Russian Revolution'.

## **ENGLISH**

- 1) You are a member of 'Explorer' an adventure club Write a paragraph on one of your adventure experiences.
- 2) Read an account of the final stages of Amelia Earhart's life (Unit 2' Adventure ,Main Course Book)
- 3) Find out about her early life- the factors that inspired her to become an aviator and the difficulties she faced to become an aviator. Make a project on her life. ( It can also be in the form of a C.D)
- 4) Amit from Hyderabad has got admission to a college in Bengaluru. He has to share his room with another boy. When he arrives at the hostel , he learns that his roommate has gone home for a few days. Based on his observations of the room (Pg.18 , Unit 1– People ). Amit writes a letter to his friend Sumit, about his new roommate. ( Write the letter as Amit)
- 5) *Read the information given below. using the data create a biographical- sketch of ' The Nightingale of India' – Lata Mangeshkar.*

**Born:** 28 September 1929 in Indore, Madhya Pradesh, as the daughter of Dinanath Mangeshkar; started her career as a theatre artist

**First Song:** in a Marathi film 'Kiti Hasaal' (1942)

**Biggest Break:** Song 'Aayega Aanewaala' for the movie 'Mahal'

**Golden period of her life:** 1950s witnessed tremendous growth in her career. She rose to the top in the list of Bollywood singers. She worked with all the famous composers of that era, such as Shankar Jaikishan, S D Burman, Naushad, Hemant Kumar and Salil Chowdhury. Shankar Jaikishan were besotted by her voice and used her voice for playback singing in almost all the movies they composed music for. She is still enchanting listeners with her voice.

**Composed song in movie:** 'Sadhi Manse'

**Produced movie:** 'Lekin'

**Likes:** Cooking, Gardening

**Awards:** Filmfare Awards

National Awards (1972, 1975 and 1990)  
Padma Bhushan (1969)

1989—Dada Saheb Phalke Award and many more

Lifetime Achievement award at the Chevrolet Global Indian Music Awards (GIMA)

**Contribution to music:** Immense, is a worldwide celebrity

## **ECONOMICS-**

a) Conduct a survey of a hospital and find out the details given on Pg.24 of your book.

b) Survey at least 10 people and make a report of the following –

- Name
- Age
- Educational Qualification
- Service / Business
- Family Members
- Annual Income
- Work Experience
- Future Planning

All ten should be working at different levels starting from your maid, sweeper, etc.

## **Mathematics**

1. Express the rational number  $\frac{42}{100}$  in decimal form.

2. What is the value of  $\sqrt[3]{1000}$ ?

3. Simplify:

a.  $\left(\frac{81}{16}\right)^{-\frac{3}{4}} \times \left(\frac{25}{9}\right)^{-\frac{3}{2}}$

b.  $\left\{5\left(8^{\frac{1}{3}} + 27^{\frac{1}{3}}\right)^3\right\}^{\frac{1}{4}}$

4. Find four rational numbers between  $\frac{3}{7}$  and  $\frac{5}{7}$ .

5. Find the value of  $x$  if  $\frac{42}{100}\left(\frac{3}{4}\right)^3\left(\frac{4}{3}\right)^{-7} = \left(\frac{3}{4}\right)^{2x}$ .

6. Find the number  $0.\overset{5}{\overline{53}}$  in the form of  $\frac{p}{q}$ ;  $q \neq 0$

7. If  $x = 2 + \sqrt{3}$ , then find the value of  $\left(x - \frac{1}{x}\right)^3$ .

Find the simplified value of  $\frac{1}{5-2\sqrt{3}} + \frac{1}{5+2\sqrt{3}}$

8. Factorise the following quadratic expressions:
  - a.  $4\sqrt{3}x^2 + 5x - 2\sqrt{3}$
  - b.  $5(3x + y)^2 + 6(3x + y) - 8$
  - c.  $x^4 - 3x^2 + 2$
  - d.  $x^4 - 625$
9. Using remainder theorem, factorise the following:
  - a.  $p(x) = x^3 - 6x^2 + 11x - 6$ ;  $q(x) = (x - 1)$
  - b.  $f(x) = x^3 + 13x^2 + 32x + 20$ ;  $g(x) = (x + 2)$
  - c.  $p(x) = 9x^3 - 27x^2 - 100x + 300$ ;  $s(x) = (x - 3)$
  - d.  $p(x) = y^3 - 2y^2 - 21y - 42$ ;  $q(x) = (y + 2)$

### **Physics**

1. Derive the first equation of motion.
2. Derive the second equation of motion.
3. Derive the third equation of motion.
4. Draw displacement time graph for a body
  - a. At rest
  - b. In uniform linear motion.
5. Draw velocity time graph of a body moving with
  - a. Uniform acceleration
  - b. Uniform retardation
6. Distinguish between speed and velocity.
7. Define acceleration and give its SI unit.
8. What is the acceleration of a body moving with a uniform velocity?
9. Define uniform acceleration. Explain with an example.
10. A car travels a certain distance with a speed of 50 kmph and returns with a speed of 40 kmph. Calculate the average speed of the whole journey.

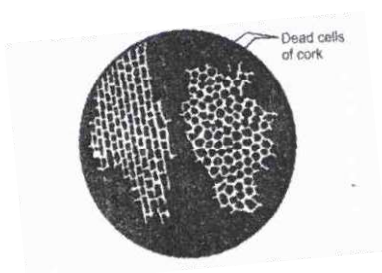
### **Chemistry**

1. What happens to the system in which the contained liquid evaporates at room temperature?
2. What is sublimation?
3. What is the S.I. unit for pressure?
4. What is matter?
5. Why does rate of evaporation of a liquid decreases with increase in humidity?
6. What is latent heat of fusion?
7. Name the term used to denote conversion of vapour to solid. Give example.
8. Through both boiling water and steam record a temperature of  $100^\circ\text{C}$  but still steam is said to have high energy. Comment.
9. Define melting point.

10. How is solid characterized?
11. Give one example each of diffusion and osmosis.
12. How do evaporation, diffusion and compression of gases behave in terms of changes of temperature?
13. Under what conditions, gases can be liquefied?
14. Which states of matter behave like fluids?
15. Which phenomenon is responsible for cooling of water kept in an earthen pot?
16. Arrange oil, water and sugar in the increasing order of forces of attraction between their particles.
17. What happens to the distance between the molecules of CNG when the cylinder of CNG is slowly used up?
18. Why is the arrangement of particles in solid state more ordered than in liquid state?
19. What is the relation between Celsius scale and Kelvin scale? Which is used as S.I. unit?
20. Why does the temperature of a substance remain constant during its melting point?

## **Biology**

1. The following diagram represents cork cells as seen by Robert Hooke. What two important things are missing that prove them dead.



2. Give four examples of unicellular organisms.
3. Why are plasma membrane called selectively permeable membrane?
4. What is diffusion? What important role it plays for living cells?
5. Define osmosis. In which solution a cell does not show net gain of water?
6. What are Chromosomes? Where and when they are visible in the cell?  
Why are they important?
7. What are the functions of Endoplasmic Reticulum?

8. Draw a neat labeled diagram of an animal cell.
9. Differentiate between rough and smooth ER. How is ER important for membrane biogenesis?
10. Name the organelles which show the anal written as under:
  - a. Transporting channels of the cell
  - b. Power house of the cell
  - c. Packaging and dispatching unit of the cell
  - d. Digestive bags of the cell
  - e. Storage sacs of the cell
  - f. Kitchen of the cell
  - g. Control room of the cell

HINDI-

1. लगभग 100 शब्दों का अनुच्छेद लिखिय -  
 क. करत - करत अभ्यास के जड़माते होत सुजान ।  
 ख. भाव्य और पुरुषार्थ ।  
 ग. विद्यार्थी और अनुशासन ।
2. व्याकरण पुस्तिका में बताये गये कार्य को निदेशानुसार पुस्तक तथा व्याकरण उत्तर पुस्तिका में कीजिये ।
  - अपाठित काव्यांश अभ्यास 1-5 पुस्तक में ।
  - अपाठित गद्यंश अभ्यास 1-5 पुस्तक में ।
  - वर्ग विच्छेद अभ्यास प्र. 2 1-15 पुस्तक में ।
  - पर्यायवाची, विलोम, अनेकाची शब्द तथा वाक्यांश के लिये एक शब्द - प्रत्येक अभ्यास 1-5 तक पुस्तक में करें ।

**Arts & Craft:-** Make a poster on themes related to Social Awareness .e.g.

Pollution control, Save Wildlife, Green India- Clean India, Save water Save fuel