



# Holiday Homework



CLASS 9



ENGLISH

हिंदी

A

GENERAL KNOWLEDGE

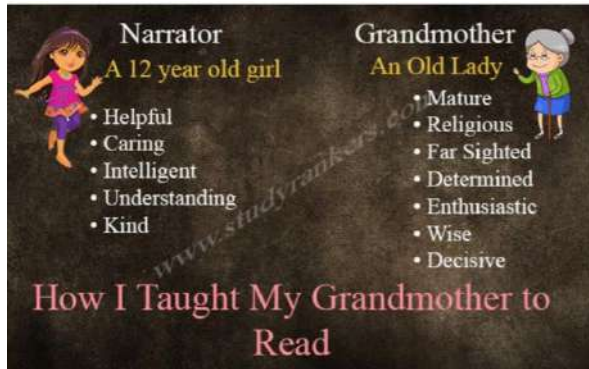
MATHS

ART & CREATIVITY

## ENGLISH:

Make a neat & clean picture of your favourite character from your literature book (any) on A3 sheet/ Drawing sheet. Write its character traits and important dialogues from the lesson.

Example: The following example is based on Poem- How I taught my Grandmother to read.



Make Mind Map of All the Literature Chapter covered in the class before Vacation in Practice Notebook.(please refer to pdf discussed in class.)

Read a novel of 150-250 Pages and make a **Book Trailer**



Book Trailer is a digital storytelling activity - after they finish reading a book. Students need to take the key idea from the book to create a short video that persuades people to check out a book they have read. (similar to movie trailer- here they will create trailer on a book)

Students are required to summarize, synthesize and analyze the book and put that analysis in their trailer.

Once the BBC – COMPACTA 9 is available

**Do Literature Modules - Eight, Nine & ten** – Attempt all the questions of the chapters covered in class in Practice Notebook.

## MATHEMATICS:

- Do all the assignments in your HW notebook.
- Activities of various topics to be done in practical file.

### ACTIVITIES:

1. To interpret geometrically the factors of a quadratic expression of the type  $x^2+bx+c$ .
2. To find out the relation between two vertically opposite angles, formed by the intersection of two straight lines at a point, using the method of tracing geometrical figures
3. To verify the mid-point theorem for a triangle, using the method of paper folding.

## Assignment

1. Write the degree of the polynomials:

i)  $(2x+4)^4$

ii)  $(t^3+3)(t^3+9)$

iii)  $(x^4-8)(x-7)$

2. Write the coefficients of  $x^4$  and  $x$  in  $4x^3-5x^4+2x^2+3$ .

3. Find the zeroes of  $f(z)=z^2-2z$

4. Find the product using suitable identities : $(4+5x)(4-5x)$ .

5. What is the value of  $k$  in polynomial  $x^2+8x+k$  , if  $-1$  is a zero of the polynomial?

6. Show that  $x+1$  and  $2x-3$  are factors of  $2x^3-9x^2+x+12$ .

7. If  $a^2+b^2+c^2 = 20$  and  $a+b+c = 0$  , find  $ab+bc+ca$ .

8. If  $9x^2+25y^2 = 181$  and  $xy = -6$  , find the value of  $3x+5y$ .

9. Evaluate using identities:

i)  $29^3-11^3$

ii)  $\frac{7.83 \times 7.83 - 1.17 \times 1.17}{6.66}$

10. Simplify:  $(x^2+y^2-z^2)^2 - (x^2-y^2+z^2)^2$

11. Find the value of  $(x - 1/x)$  if  $x^2+1/x^2 = 38$

12. Let  $P$  and  $Q$  be the remainders when the polynomials  $x^3+2x^2-5ax-7$  and  $x^3+ax^2-12x+6$  are divided by  $x+1$  and  $x-2$  respectively. If  $2P+Q = 6$  , find the value of  $a$ .

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

14. By remainder theorem , find the remainder when  $p(y)$  is divided by  $g(y)$

i)  $p(y) = 4y^3-12y^2+5y-4$  and  $g(y) = 2y-1$

ii)  $P(y) = y-4y-2y+6$  and  $g(y) = 1-\frac{3}{4}y$

15. Factorise:

i)  $a^3- 0.216$

ii)  $x^3-12x(x-4)-64$

iii)  $a^3- 1/a^3 - 2a + \frac{2}{a}$

16. Factorise:

i)  $x^3+13x^2+31x-45$

ii)  $4x^3+20x^2+33x+18$

17. Let  $R_1$  and  $R_2$  are the remainders when the polynomials  $f(x) = 4x^3+3x^2-12ax-5$  and  $g(x) = 2x^3+ax^2-6x-2$  are divided by  $(x-1)$  and  $(x-2)$  respectively. If  $3R_1+R_2-28 = 0$  , find the value of  $a$ .

18. Factorise: a)  $25x^2+16y^2+4z^2-40xy+16yz-20xz$ .

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

## SCIENCE:

- Read about at least five scientists and their contribution in chemistry and write at least 50 words on each scientist.

- Revise all the chapter done in class and complete your notebook.
- Do all the given worksheet in your notebook.

#### Worksheet 1

##### **Multiple choice type questions:**

Q.1 Which of the following phenomena always results in the cooling effect?

- (a) Condensation (b) Evaporation (c) Sublimation (d) All the above

Q.2 Which of the following causes the temperature of a substance to remain constant while it is undergoing a change in its state?

- (a) Latent heat (b) Lattice energy (c) Loss of heat (d) None of these.

Q.3 Which of the following statement is not true regarding the characteristic of matter?

- (a) Particles of a matter are randomly moving in all directions.  
(b) Kinetic energy of the particles increases with a rise in temperature.  
(c) Kinetic energy of the particles of all matters remains the same at a particular temperature.  
(d) Particles of matter diffuse into each other on their own.

Q.4 During summer, water kept in an earthen pot becomes cool because of the phenomenon of-

- (a) Diffusion (b) transpiration (c) osmosis (d) evaporation

Q.5 The liquid which has the highest rate of evaporation is-

- (a) Petrol (b) Nail paint remover (c) Water (d) Alcohol.

**Very short answer type questions:**

Q.6 What is dry ice?

Q.7 what is full form of CNG and LPG?

Q.8 What is latent heat?

Q.9 Why light is not considered as a matter?

Q.10 Convert the following thermometer readings into Kelvin:

- (a)  $-100^{\circ}\text{C}$  (b)  $200^{\circ}\text{C}$

**Short answer type questions:**

Q.11 Define the term sublimation? Write the names of any two substances which sublime.

Q.12 Give reason:

- (a) Gases exert pressure on the walls of the container.  
(b) Evaporation causes cooling.

Q.13 Why it is advised to put wet clothes strips on the forehead of a person suffering from high fever?

**Long answer type questions:**

Q.14 Differentiate between evaporation and vaporization.

Q.15 Which phenomenon occurs during the following changes?

- (i) Formation of clouds, (ii) Drying of wet clothes,  
(iii) Wax melts in the sun, (iv) Size of naphthalene balls decreases.

Q.16 Give reason:

- (a) Ice floats on water.  
(b) We sweat more on humid days.  
(c) A balloon kept in sunlight burst after sometime.

Worksheet 2

1. Chromosomes are formed of? (1)

- a) DNA only
- b) Protein only
- c) DNA and protein
- d) RNA only

**ANSWER -**

2. Stored form of carbohydrates in plant generally is : (1)

- a) Vitamins
- b) Glycogens
- c) Amino acids
- d) Starch

**ANSWER -**

3. Within the cell the site of respiration is : (1)

- a) Ribosomes
- b) Golgi apparatus
- c) Mitochondria
- d) Endoplasmic reticulum

**ANSWER -**

4. Organisms lacking nucleus and membrane bound organelles are : (1)

- a) Diploids
- b) Prokaryotes
- c) Haploids
- d) Eukaryotes

**ANSWER -**

5. Which of the following organelles does not have membrane ? (1)

- a) Ribosome
- b) Nucleus
- c) Chloroplast
- d) Mitochondria

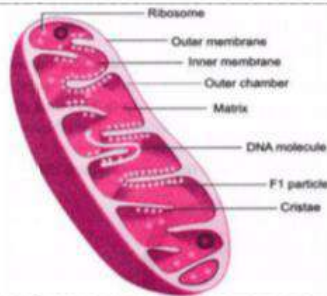
**ANSWER -**

6. Network of endoplasmic reticulum is found in : (1)

- a) Nucleus
- b) Cytoplasm
- c) Chromosomes
- d) Nucleolus

**ANSWER -**

7. Based on following diagram and your knowledge, answer the following questions -



I. Name the cell organelles shown in the figure? (1)

**ANSWER -**

II. The given cell organelle is also known as the " Power house of the cell". Why ? (2)

**ANSWER -**

8. In brief state what happens when (1x3)

I. The plasma membrane of a cell breaks down ?

**ANSWER -**

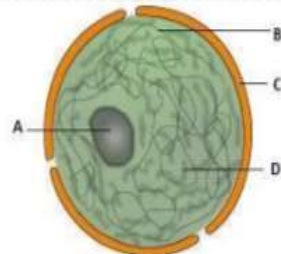
II. A Red Blood Cell is kept in concentrated saline solution ?

**ANSWER -**

III. Golgi apparatus is removed from the cell ?

**ANSWER -**

9. Based on diagram and your knowledge, answer the following questions -



Structure of Nucleus

I. Label the parts A, B, C and D.

(2)

**ANSWER -**

II. Mention one function of A ?

(1)

**ANSWER -**

9. Answer the following questions -

I. Define the following terms -

(3)

a) Plasmolysis

**ANSWER -**

b) Endocytosis

**ANSWER -**

c) Membrane biogenesis

**ANSWER -**

II. State one feature that is similar and one feature that is dissimilar with respect to mitochondria and plastids.

(2)

**ANSWER -**



### **Worksheet (Is Matter Around Us Pure?)**

1. What is the general name of the materials which contain at least two pure substances and show the properties of the constituents?
2. Which of the following is a mixture?  
Salt, Air, Water, Alum, Sugar
3. Classify the following into elements and compounds:  
a.  $H_2O$       b. He      c.  $Cl_2$       d. CO      e. Co
4. Name the property:
  - (a) Which allows metals to be hammered into thin sheets.
  - (b) Which enables metals to be drawn into wires.
5. Which of the following are 'pure substances'?  
Ice, Milk, Iron, Hydrochloric acid, Calcium oxide, Mercury, Brick, Wood, Air
6. What is the other name for impure substances? Give two examples of impure substances.
7. State three reasons why you think air is a mixture and water is a compound.
8. Explain why, hydrogen and oxygen are considered elements whereas water is not considered an element.
9. Compare the properties of metals and non- metals with respect to  
(i) malleability (ii) ductility, and (iii) electrical conductivity
10. Choose the solutions from among the following mixtures:  
Soil, Sea-water, Air, Coal, Soda-water
11. Give two reasons for supposing that water is a compound and not a mixture.
12. List five characteristics by which compounds can be distinguished from mixtures.
13. (a) Differentiate between homogeneous and heterogeneous mixtures.  
(b) Classify the following materials as homogeneous mixtures and heterogeneous mixtures.  
Soda-water, Wood, Air, Soil, Vinegar, Alcohol and water mixture, Petrol and water mixture, Chalk and water mixture, Sugar and water mixture, Copper sulphate solution.

## SOCIAL SCIENCE:

1. Prepare "My own Atlas" on the following topics:

(i) PHYSICAL MAP 1

(a) Tropic of Cancer (Also locate the states on tropic of cancer) (b) Standard Meridian

(c) Latitudinal extent and Longitudinal extent

(d) Southernmost point of India

(e) Northernmost point of India

(f) Easternmost point

(g) Westernmost point

(ii) PHYSICAL MAP 2

(a) Neighbouring Countries (b) Islands

(iii) POLITICAL MAP 1

(a) States with capitals

(b) Union Territories

(iv) POLITICAL MAP 2

(a) States sharing international boundaries

2. Locate and label the following on the physical map of France from the chapter „The French Revolution“ from History:

Bordeaux, Nantes, Paris, Alsace, Normandy, Marseilles, Switzerland.



3. Prepare picture book on different types of natural vegetation found in India, detailing its features, types of trees found, wild life and regions. (use only one or two photos for one type forests.

4. Interpret the cartoon on page 30 and page 35 of Civics text book. Draw or paste the pictures in your civics notebook.

5. Revise ch-1 of history and chapter 2 of economics.

# Share ways to keep yourself healthy and hygienic with atleast 10 people.

## HINDI:

नोट : सभी प्रश्नों के उत्तर व्याकरण कॉपी में दें।

प्र 1 अनुक्रमांक 1 से 9 दुःख का अधिकार पाठ पर पी.पी.टी बनाएँ, अनुक्रमांक 10 से 18 एवरेस्ट मेरी शिखर यात्रा पाठ पर पी.पी.टी बनाएँ, अनुक्रमांक 19 से 26 गिल्लू पाठ पर पी.पी.टी बनाएँ।

प्र 2 क निम्नलिखित शब्दों से उपसर्ग अलग कीजिए :

उत्थान , दुर्गम , परास्त , उदघाटन, बेकार , अनुमान , अभिमान, अकारण, प्रत्युत्तर, निर्बल।

ख निम्नलिखित शब्दों से प्रत्यय अलग कीजिए :

मुस्कुराहट , सजावट , चमकीला , कमाऊ , अनुकरणीय , सामाजिक , आर्थिक, मौलिक

प्र 3 क निम्नलिखित उपसर्गों का प्रयोग कर दो दो नए शब्द बनाइए

कु , सु , प्रति , निर् , परि , दुर् , अप , अति

ख निम्नलिखित प्रत्ययों का प्रयोग कर दो दो नए शब्द बनाइए ?

आ , आई, आहट , आउ , इन, ईन , इक

प्र 4 क निम्नलिखित शब्दों में उचित स्थान पर अनुस्वार अनुनासिक चिह्न लगाइए

अधेरा , अगीठी , कगन , काति , चचल, झडा, मुह , शख , हसमुख, पकज

ख निम्नलिखित शब्दों में उचित स्थान पर नुक्ता लगाइए

वरफ, तेज , जरा , बाजार, तरफ, हजार, जिंदा , अंदाज , फजीहत , फौलाद, जमीदार

ग निम्नलिखित वाक्यों में उचित स्थान पर विराम चिह्न लगाइए :

1 दो दो डॉक्टर हरदम सिरहाने बैठे रहते थे

2 तुमने इतनी बड़ी जोखिम क्यों ली वसेंद्री

प्र 5 कोई 5 चित्र व्याकरण कॉपी में चिपकाइए व 25 से 30 शब्दों में उनका वर्णन कीजिए।

प्र 6 व्याकरण पुस्तक (व्याकरण परिचय) में दिए गए कोई 5 संवाद लिखें

प्र 7 व्याकरण पुस्तक (व्याकरण परिचय) में दिए गए कोई 5 अनौपचारिक पत्र लिखें

प्र 8 कक्षा में कराए गए प्रश्नों को याद करें।

प्र 9 व्याकरण पुस्तक (व्याकरण परिचय) में दिए गए 5 अपठित गद्यांश व उनके प्रश्नोत्तर भी लिखें।

## MUSIC:

You have to complete one of the following either A OR B

A) Make a Video singing a Patriotic Song / Inspirational Song

### **Instructions-**

- A Dignified Song must be chosen.
- The Song Chosen must be well prepared and rehearsed.
- The Video must be prepared with your best dressing; you may choose dress according to the theme of the song.
- You have to Tell Your Name, Class & School in the video.
- Shoot the video in well lit Conditions, without Background Noise.

OR

B) Make a Power Point Presentation from one the following topics:

- Music and Religion
- Music and Cinema
- Music and Electronic Media
- Devotional aspects in Music
- Inter – relationship of Arts (Music- Dance or Theatre or Visual Arts)

**Instructions-**

The PPT must have minimum 12 Slides (Excluding Cover Page & Thank you)

**COMPUTERS:**

**Note:- Following Assignments to be done in Practical file.**

1. Create a poster for “Global warming “ in MS-Word with the following features.

- i) Fontface
- ii) Fontsize
- iii) Fontcolor
- iv) Header & Footer
- v) Images

2. Create a list of 10 students by inserting a table in Ms-Word with the following fields:-

- i) Sr No.
- ii) Student Name
- iii) Fathers Name
- iv) City

3. Create an article on ”Covid -19” using maximum feature of MS-Word.

4. Create a presentation (7- 8 slides) on any one of the following topics.

- i) Air Pollution
- ii) Traffic Rules
- iii) Water Conservation

Note:- Take the print of all slides.

**ART INTEGRATION:**

1. कोरोनामहामारीको आधारबनाकरदोहारचनाकीजिए।(कोईदो )

2. हरियाणा प्रदेश की संस्कृतिको आधार बनाकर एक कवितारचना कीजिए।
3. कक्षा के दौरान स्वरचित कविताओं व सुविचारों का एक collage बनाइए।

**HOLIDAY HOMEWORK SUBMISSION SCHEDULE:**

SUBJECTS	DATE OF SUBMISSION
ENGLISH	7 July 2021
MATHEMATICS	9 July 2021
SCIENCE	11 July 2021
HINDI	13 July 2021
SOCIAL SCIENCE	15 July 2021
MUSIC	16 July 2021
COMPUTER	17 July 2021
ART INTEGRATION	18 July 2021