Dr. Kitchlu Public Sen. Sec. School, Moga

Holidays Homework

Class – IX

Session- 2023-24

- *This is the time to relax in the cool comfort at home.*

- *Do some physical activity or exercises during morning or evening time.*

- *Spend some quality time with your parents and grandparents and learn something from them to enhance your knowledge.*

"Learning by doing is growing and succeeding"

- *Keeping this in mind we have planned some fun filled creative activities for you during the vacation.*

- *Try to work independently. However, take help & guidance from your parents wherever required.*

- *Make a time schedule to study for specific hours every day.*

Read the specifications given for each subject and complete the written work. Revise the work done in all the subjects.

Submit the holiday's homework on 6th July, 2023 at 9:00 A.M.

Instructions for Holidays H.W

1. Worksheets given in pdf format can be printed or drawn on notebooks.

2. Homework can be done on printed worksheets wherever space is available. A separate test note book may also be used for doing the work by making such worksheets at one's own.

3. All pages of <u>**Scrap Book**</u> must be filled as directed by the teacher.

4. Making of a chart paper.

   (a) Use the size of chart paper as instructed by the subject teacher. (Note: half size chart paper for III-IV full size chart paper from V onwards.

   (b) Use the Portrait/ Vertical side of the chart paper only.

   (c) Draw the margin on the chart paper.

   (d) Use full space of the chart paper for completing the task. Draw/Paste pictures of large size.

   (e) Use any medium of colours as instructed by the teacher.

   (f) Write all the details in correct spellings. Use big letters for writing.

   (g) Write your name, roll no, class, section at the bottom of right side.

<u>Colour of chart paper</u>

- Science   –   Yellow
- Social Studies   –   Pink
- Maths   –   White
- Hindi   –   Green
- Punjabi   –   Black
- English   –   Blue

Instructions for making a Model

1. Do thorough research on the chosen topic to gather relevant information.

2. Make a list of all the materials needed for a model. Then collect the required items, ensuring that are easily available, economical and safe to use.

3. Clearly define the objectives of the working model and its introduction.

4. Take necessary precautions especially dealing with electricity or sharp objects.

5. The base (either cardboard or thermocole) of the model should be covered with a chart paper or use plyboard (in case of heavy Model)

6. Labelling should be done and it must be clearly visible. (Pla-card/ charts can be used)

7. For both working and Non- working models, prepare a written report on chart regarding concepts and principles associated with the topic. Use reasonably big letters to write on chart paper.

8. The explanation of the model should be informative, Knowledgeable, effective and in English only.

9. You can assemble the different components of the model in the school if it is bigger in size.

1. *Do 3 – 7 reading comprehensions in BBC (page no.19 to 26).*

2. *Complete 3 – 6 story writings in BBC (Page 140 – 147)*

3. *Complete 2 – 5 diary entries on BBC (Page114 – 121)*

4. *Complete 1 – 5 sets of editings (Page 226, 227)*

5. *Charts and Models*

1. वर्ग पहेली
उचित उपसर्ग लगाकर वर्ग पूरा करें:-

ज	ल	_	_	_
क	र्म	_	_	_
को	म	ल	_	_
स	म	झ	_	_
ई	मा	न	_	_

2. निम्नलिखित शब्दों के मूल शब्द और प्रत्यय अलग करें:-

शब्द	मूल शब्द	प्रत्यय
1. मिलान		
2. मिलावट		
3. पहनावा		
4. निकास		
5. चिल्लाहट		
6. सपेरा		
7. फिरौती		
8. चालू		
9. डूबता		
10. ओढ़नी		

3. बचेंद्री पाल पहली भारतीय महिला है, जिसने एवरेस्ट पर कदम रखा है। ऐसी पाँच भारतीय महिलाओं के नाम बताएँ जिन्होंने अलग-अलग क्षेत्रों में अपना नाम दर्ज कराया हो। उनके चित्र के साथ उनके क्षेत्र का भी वर्णन करें।

4. नोटबंदी से परेशान दो लोगों के बीच की बातचीत को संवाद के रूप में लिखें।

5. उचित स्थानों पर अनुस्वार अनुनासिक लगाकर वर्तनी शुद्ध करें:-

अकुश, भाति, सतोष, जलियावालाबाग, सबध, अगीठी, मुह, सगीत, अधेरा, चाद , आनद, हसी, जिदगी, धुआ , पजाब, आगन, कगन , आख, चद्रमा , गाय , शकर, मा, साप, सचयन, उगली।

अनुस्वार	अनुनासिक

Subject – Punjabi

1) ਪੰਜਾਬ ਦੇ ਕਿਸੇ ਧਾਰਮਿਕ ਸਥਾਨ ਦੀ ਫੋਟੋ ਲਗਾ ਕੇ ਉਸ ਬਾਰੇ ਕਾਰਜ ਸੌਂਪਣੀ ਤਿਆਰ ਕਰੋ।

2) ਸ਼ਬਦਾਂ ਦੀ ਖੇਡ (ਮੁਹਾਵਰੇ)

   ਹੇਠਾਂ ਕੁਝ ਮੁਹਾਵਰਿਆਂ ਦੇ ਅਰਥ ਦੱਸੇ ਗਏ ਹਨ, ਉਹਨਾਂ ਲਈ ਢੁਕਵਾਂ ਮੁਹਾਵਰਾ ਚੁਣ ਕੇ ਲਿਖੋ।

ਅੱਖਾਂ	ਇੱਟ	ਅੱਖ	ਕਰਨੀ	ਈਦ	ਅਕਲ	ਕੁੱਤੇ	ਨੱਚਣੇ
ਹੋਣਾ	ਕੰਨ	ਪਰਦਾ	ਦਾ	ਪੈਰ	ਕਰਨੀ	ਛਿੱਲ	ਉਸਤਾਦੀ
ਵੇਖਣਾ	ਨਾਲ	ਲਾਹੁਣੀ	ਦੇ	ਇੱਕ	ਢਿੱਡ	'ਤੇ	ਹੱਥ
ਵਿੱਚ	ਮਾਰਨੇ	ਚੂਹੇ	ਫ਼ਰਕ	ਘਿਓ	ਤਾਰਾ	ਉਨੀ	ਦੀਵੇ
ਇੱਕੀ	ਲੱਗਣੀ	ਅੰਗੂਠਾ	ਬਾਲਣੇ	ਸਾਹ	ਵੈਰ	ਔਖੇ	ਵਿਖਾਉਣਾ
ਛਿੱਲ	ਖਾਣਾ	ਲਾਹੁਣੀ	ਚੰਨ	ਭਰਨੇ	ਪੈਣਾ	ਸਿਰ	ਲੈਣਾ

   1) ਬਹੁਤ ਪਿਆਰਾ

   2) ਨੀਂਦ ਆ ਜਾਣੀ

   3) ਮੌਤ ਮਾਰੀ ਜਾਣੀ

   4) ਦੁਸ਼ਮਣੀ ਹੋਣੀ

   5) ਸਭ ਨੂੰ ਬਰਾਬਰ ਸਮਝਣਾ

   6) ਬਹੁਤ ਦੇਰ ਬਾਅਦ ਮਿਲਣਾ

   7) ਕੋਸ਼ਿਸ਼ ਕਰਨੀ

   8) ਚੁਗਲੀ ਕਰਨੀ

   9) ਚਲਾਕੀ ਕਰਨੀ

   10) ਬਹੁਤ ਥੋੜ੍ਹਾ ਅੰਤਰ

   11) ਬਹੁਤ ਭੁੱਖ ਲੱਗਣੀ

   12) ਖ਼ੁਸ਼ੀਆਂ ਮਨਾਉਣਾ

   13) ਤੰਗ ਕਰਨਾ

3) ਵਿਸਾਖੀ ਤੇ ਕਾਰਜ ਸੌਂਪਣੀ ਤਿਆਰ ਕਰੋ।

   ਭੂਮਿਕਾ, ਇਤਿਹਾਸ, ਕਿਸਾਨਾਂ ਨਾਲ ਸੰਬੰਧ, ਖਾਲਸਾ ਪੰਥ ਦੀ ਸਥਾਪਨਾ

4) ਤੁਹਾਡੇ ਸਕੂਲ ਵਿੱਚ ਨਵੀਂ ਲਾਇਬ੍ਰੇਰੀ ਬਣੀ ਹੈ। ਆਪਣੇ ਦੋਸਤ ਨੂੰ ਲਾਇਬ੍ਰੇਰੀ ਦੀਆਂ ਵਿਸ਼ੇਸ਼ਤਾਵਾਂ ਦੱਸਦੇ ਹੋਏ ਪੱਤਰ ਲਿਖੋ।

5) ਤੁਸੀਂ ਪੰਜਾਬ ਦਾ ਮਾਡਲ ਪਿੰਡ ਵੇਖਿਆ ਹੈ, ਉਸ ਪਿੰਡ ਬਾਰੇ ਜਾਣਕਾਰੀ ਇਕੱਠੀ ਕਰਕੇ ਆਪਣੇ ਸ਼ਬਦਾਂ ਵਿੱਚ ਲਿਖੋ।

   ਨੋਟ: ਦਿੱਤਾ ਗਿਆ ਸਾਰਾ ਕਾਰਜ ਟੈਸਟ ਕਾਪੀ ਵਿੱਚ ਲਿਖੋ।

Subject – Mathematics

1. Represent $\sqrt{13}$ on Number line.

2. Find a & b for $\frac{5+2\sqrt{3}}{7+4\sqrt{3}}$= a-b$\sqrt{3}$

3. Multiply $6\sqrt{5}$ by $2\sqrt{5}$

4. Divide $4\sqrt{12}$ by $4\sqrt{3}$

5. Prove that

$$\frac{a^{-1}}{a^{-1}+b^{-1}} + \frac{a^{-1}}{a^{-1}-b^{-1}} = \frac{2b^2}{b^2-a^2}$$

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

7. If x= $\frac{1}{2-\sqrt{3}}$ find the value of x^3-2x^2-7x+5

8. Show that $(x^{a-b})^{a+b} \cdot (x^{b-c})^{b+c} \cdot (x^{c-a})^{c+a}$=1

9. Prove that $\frac{2^{30}+2^{29}+2^{28}}{2^{31}+2^{30}-2^{29}} = \frac{7}{10}$

10. Prove that $\frac{1}{1+x^{a-b}} + \frac{1}{1+x^{b-a}}$ =1

11. Show that $\sqrt{a^{-1}b}\ \sqrt{b^{-1}c}\ \sqrt{c^{-1}a}$ =1

12. Solve $\frac{(25)^{3/2} \times (243)^{2/5}}{(16)^{5/4} \times (8)^{4/3}}$

13. Find the value of $\frac{1}{2}\sqrt{486} - \sqrt{\frac{27}{2}}$

14. Simplify: $\frac{9^{1/3} \times 27^{-1/2}}{3^{1/6} \times 3^{-2/3}}$

15. Simplify: $(1^3+2^3+3^3)^{1/2}$

16. Simplify: $\frac{186\times186\times186+14\times14\times14}{186\times186-186\times14+14\times14}$

17. Factorise a^3+3a^2b+3ab^2+b^3-8

18. Factorise: $64x^3$+125y^3

19. Factorise: $8x^3$-(2x-y)^3

20. Factorise: $(x+1)^3-(x-1)^3$

21. Factorise: $(x-\frac{2}{3}y)^3 - (x+\frac{2}{3})^3$

22. If $a+b+c= 12$, $a^2+b^2+c^2=90$ then find $a^3+b^3+c^3-3abc$

23. Factorise: $8x^3-125y^3+180xy^3+216$

24. Find the positive square root of $2a^2+2\sqrt{6}ab+3b^2$

25. Evaluate 103×97

26. Evaluate $185\times 185-115\times115$

27. Factorise: $4x^2+4xy+y^2$

28. Expand: $(3a+4b+5c)^2$

29. Factorise: $\frac{25}{4}x^2-\frac{y^2}{9}$

30. Expand: $(-\frac{1}{2}a-\frac{1}{2}b +1)^2$

Note:- Do Maths Lab activities on Maths Lab Mannual as assigned by the teacher.

Subject – Science

1. *Theme project – Bio Geochemical Cycle*

   - *The project should include 8 – 10 pages (Use Assignment sheets)*
   - *Paste the relevant pictures or you can draw the cycle also.*
   - *Handwriting should be neat and clean.*
   - *Project should cover the following sub topics*
     - *Introduction to Bio Geochemical cycle*
     - *Carbon cycle*
     - *Nitrogen cycle*
     - *Oxygen cycle*
     - *Water cycle*
     - *Phosphorus cycle*
     - *Sulphur cycle*

   Write their description, imbalance and importance of these cycles.

2. *Complete your practical files with the following practicals.*

I. *Biology*

- Preparation of stained temporary mount of:
  a) Onion peel
  b) Human cheek cells and to record observations and draw their labelled diagrams.
- Identification of parenchyma, collenchyma and sclerenchyma tissues in plants, striped, smooth and cardiac muscles, fibres and nerve cell in animals from prepared slides. Draw their labelled diagrams.

II. Chemistry

- Preparation of:
  a) A true solution of common salt, sugar and alum.
  b) A suspension of soil, chalk powder and fine sand in water.
  c) A colloidal solution of starch in water and egg albumen / milk in water and distinguish between them on the basis of
    a. Transparency
    b. Filtration criterion
    c. Stability
- Perform the following reactions and classify them as chemical or physical changes.
  a) Iron with copper sulphate solution in water
  b) Burning of magnesium ribbon in air
  c) Zinc with dilute hydrochloric acid
  d) Heating of copper sulphate crystals
  e) Sodium sulphate with barium chloride in the form of their solution in water.

III. Physics

"WORKSHEET BASED ON MOTION "

A. Fill in the blanks

1. The curved speed time graph represents _____ accelerated motion.

2. Motion of moon around earth is an example of _____ motion.

3. Speed is a _____ quantity while velocity is a _____ quantity.

4. The motion of a free falling body is an example of _____ motion.

5. The slope of speed time graph represents _____

B. Write down the difference between

1. Scalar quantity and vector quantity

2. Distance and Displacement

3. Speed and Velocity

4.   Uniform linear motion and uniform circular motion.

C.   *Solve the Numerical : -*

1.   The velocity changes from 45m/s to 60m/s in three seconds. What is its acceleration?

2.   A train is travelling at a speed of 60km/h. Brakes are applied so as to produce a uniform acceleration of -0.5m/s². Find how far the train will go before it is brought to rest.

3.   John runs for 10 min at a uniform speed 9 km/h. At what speed should he run for the next 20 min, so that the average speed comes 12 km/h.

4.   A ball is thrown upwards and it goes to the height 100m and comes down

        a.   What is the net displacement?

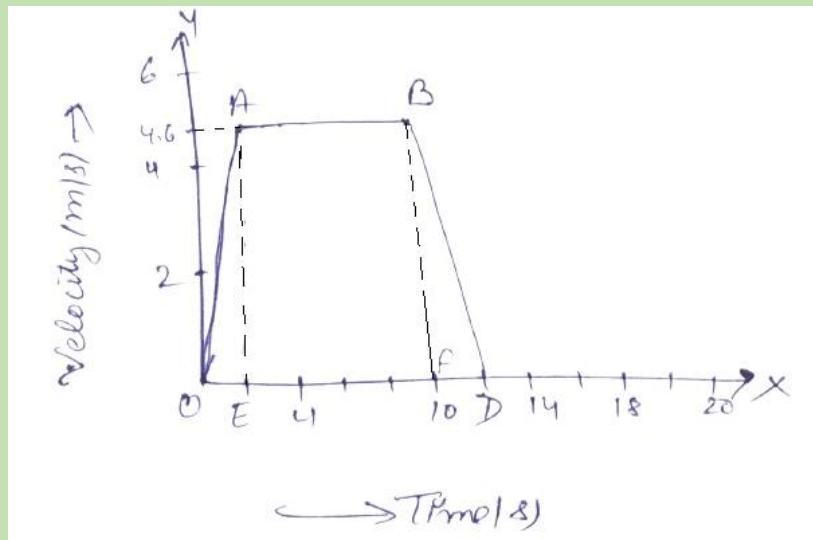   b.   What is the net distance?

5.   The velocity – time graph is given below. (i) What is the acceleration: -

        a.   During the first two seconds.

        b.   Between 2ⁿᵈ and 10ᵗʰ second

        c.   During the last two seconds.

Subject – Social Studies

Complete the project on 'Tsunami'

Guidelines for the above project:

- *Project should be handwritten on assignment sheets.*
- *Project should be of 15 pages*
- *On cover page write class, Roll No., Topic, Name of student*

- Page 1 – Acknowledgement
- Page 2 – Content
- Page 3 – Introduction
- Page 4 – 13 Explanation
- Page 14 – Summary
- Page 15 – Bibliography

- Find out the features of federalism. Compare these features with India & any one neighbouring country. Submit your findings on assignment sheets.
- Find the height of different mountains in Himalyas. [Height & location]. Do it on assignment sheets only.
- Compare the per capita income of India & its neighbouring countries. Collect data and highlight its key findings.

Subject – Physical Education

Mainstreaming (Health and Physical Education)   Topic – Athletic Events

Note : Draw the sector of shot put, discus throw, Javelin throw and Hammer throw and write one page of introduction for each event.

Topic – Games   1.   Basket Ball   2.   Hand ball   3.   Kho – Kho

Note : Draw the grounds of given games and write one page of introduction and rules for given games.

Subject – Art and Craft

- Prepare your activity/ model given by the art teachers with the help of videos.
- Topics are already allotted in the class.
- Follow the steps given in the video.
- Prepare the given project beautifully and for any query contact art teachers.
- Best Materials will be selected for exhibition.

Subject – Art Integrated Project

Topic – Elements and compounds   No. of days – 15   Dates – June11, to June 25, 2023

Guidelines for Art integrated project

1. It is compulsory to submit the Art Integrated Project involving subjects English, Hindi, Maths, Science and Social Studies.

2. Use colourful assignment sheets of A – 4 size to complete the project.

3. Draft acknowledgement on very first page of the project (Page – 1)

4. Make index on page no.2

5. Make collage, paste pictures and draw diagrams, figures, pie – chart, bar graph etc. by using pencil colours, sketches or any other medium of colours wherever required.

6. Search the material required from any source available and mention the source under bibliography on last page.

7. Punch all the assignment sheets and tag in a decorated file.

8. Write beautifully in neat and clean handwriting.

S. No.	Subject order	No. of assignment sheets
01	Science	06
02	Maths	03
03	Social Studies	05
04	English	02
05	Hindi	02

Science

- Introduction to elements and compounds
- Make the atomic model of first 10 elements using beads / buttons and thread.

Maths

- Write the ratio of first ten elements present in India in the form of a table and find which one is found in greater value and least value.
- Draw the bar graph for these elements (in % age) present in India
- Compare the number of elements present in Punjab and Odisha

Social Studies

Compare the elements of river system of Punjab and Odisha

The project should include following subtopics:

- Origination of Punjab rivers
- Origination of Odisha rivers
- Name the rivers of Punjab
- Name the rivers of Odisha

- *River map of Punjab*
- *River map of Odisha*
- *Drainage pattern of Punjab rivers*
- *Drainage pattern of Odisha rivers*
- *Type of river deposits in Punjab*
- *Type of river deposits in Odisha*

English

Write an article on "Importance of metals in daily life." (400 words Approx.)

Hindi

"दैनिक जीवन में रसायन विज्ञान का महत्व" पर अनुच्छेद लिखें |

Sewa Project

Topic: - Ornamental Plants

Duration: - 1 Week

Date: - June 6, 2023 – June 12, 2023

Guideline for the Project

- *The project should be beautifully made on Health and physical Education file.*
- *Paste relevant Pictures.*
- *Use different means like books and internet to get proper information and make the project impressive.*
- *Fill the forms given in the health & Physical Education file from Page 9 to 16.*
- *The project should include following content*
    1. *Acknowledgement*
    2. *Index*
    3. *What are Ornamental plants?*
    4. *Classification of Ornamental plants*
    5. *Benefits of Ornamental plants.*
    6. *Care of Ornamental plants*
    7. *How it can give employment to the people*
    8. *Bibliography*