**S.H.I.P.S.**
**[A Premier Institution]**

**SHREE HANUMAT INTERNATIONAL PUBLIC SCHOOL**
**(Senior Secondary)**
**Affiliated to the C.B.S.E., New Delhi, Vide Code No. – 1630686,**
**G.T. ROAD, GORAYA (Distt. Jalandhar)- 144409, Contact – 78376-36615, 99887-03474**

# Exploring, Learning & Growing-

# Home Assignment-2025-26

**(A Thoughtful Mix of Study, Play & Values)**

**Name :_____**

**Roll No. _____**

**Grade – X**

**Note to Parents and Guardians**

1. Marks for these assignments will be included in the Terminal Assessment.
2. Kindly encourage your child to complete the work independently. Gentle support is welcome, but let the learning be child-led.
3. You may use loose sheets for tasks requiring extra space or creativity.
4. The Best Assignment of the Year will be awarded and recognized during school events.

# Guidelines for a Balanced and Enriching Learning Experience at Home

Dear Parents and Guardians

Thank you for being an essential partner in your child's learning journey. Here are a few tips to make the most of this Home Assignment:

**Academics and Term I Preparation**

- Encourage a daily routine that includes time for reading, writing and activity-based learning.
- Focus on basic and conceptual skills.
- Revise the concepts covered in class as shared through circulars and communication.
- Prepare gradually for the Term I Exam in September — avoid last-minute stress.
- Create a study corner that's well-lit, quiet, and cheerful.

**Play & Creative Time**

- Ensure your child gets ample free play, which boosts brain development.
- Engage in art and craft using eco-friendly materials.
- Storytelling, singing rhymes and dancing together create joyful bonds.

**Seva & Social Responsibility**

- Introduce the child to values of compassion and sharing:
- Visit an old age home or Blind Ashram occasionally. Let the child offer fruits, biscuits or a handmade card.
- Encourage small acts of kindness like donating old toys/clothes.
- Explain the importance of Seva (selfless service) through simple examples.

**Family Time & Social Visits**

- Plan weekend visits to relatives or grandparents to strengthen family ties.
- Share stories from your own childhood — this builds emotional connection and moral learning.

**Stay Connected with Teachers**

- Don't hesitate to reach out for academic support or even emotional guidance.
- Teachers are here to help — schedule a brief chat during PTMs or via school communication channels.

**Final Tips**

- Assignments are meant to be child-led. Offer guidance but let the child explore.
- All submissions will be graded and the Best Assignment of the Year will be rewarded.
- Keep things light — learning should be joyful, not stressful

**Let's raise not just a student, but a good human being — one kind act, one thoughtful task at a time.**

# ENGLISH

**BBC COMPACTA**

**Module 1 - Reading Skills**
Practice Assignment (1,2) Pg.No.(27-32)

**Module 2- Writing Skills**
(i)Letter to the Principal
Practice Assignment (15,16)Pg.No.(161-164)

(ii)Letter to Secretary RWA
Homework Assignment(12) Pg.No(141-142)

**Project Work**
1.Explore the theme of poem 'Fire and ice' and create your own poem.

2.After reading chapter 'Nelson Mandela-Long walk to Freedom' ,you are highly motivated by the character and way Nelson Mandela fought for the Black people of his country.Pen-portrait the character sketch of any of your family member who motivates you and guides you through the process of your journey of life.

3.Write an email to the Principal of your school expressing your thanks for her support and guidance for the smooth functioning of your study.

4.Create a Family tree describing the qualities of each family member that makes you feel proud and blessed of having this family.

# हिन्दी

1- पोर्टफोलियो बनाना है।

2- पंजाब और उड़ीसा की संस्कृति, पोशाकें, ऐतिहासिक और धार्मिक स्थलों, खान-पान , और त्योहारों से संबंधित परियोजना कार्य पूर्ण करना है। ( पंचशीट में करना है कार्डबोर्ड फाइल में समस्त कार्य करना है तथा इससे संबंधित चित्र भी लगाने हैं।)

3- संस्कृति क्लब की ओर से एक भारत श्रेष्ठ भारत कार्यक्रम को बढ़ावा देने हेतु सांस्कृतिक कार्यक्रम का आयोजन किया जा रहा है। इसकी जानकारी देने हेतु तथा सहभागिता के लिए प्रेरित करते हुए अध्यक्ष की ओर से छात्रों को सूचित करें।

4. आपके विद्यालय में कविता उच्चारण प्रतियोगिता का आयोजन किया जा रहा है इस उपलक्ष्य में सूचना तैयार करें।

5.सरस्वती पुस्तक भंडार' पुस्तक की बिक्री बढ़ाने हेतु विज्ञापन तैयार करवाना चाहता है। आप उसके लिए एक विज्ञापन तैयार कीजिए।

6. ज्योति मोमबत्ती और दीपक की बिक्री बढ़ाने के लिए एक विज्ञापन तैयार करें।

7.समस्त पाठों की पुनरावृत्ति करनी है।

## ਪੰਜਾਬੀ

1. ਹੇਠ ਲਖਿ ਵਸਿ਼ਆਂ ਵੱਚੋਂ ਕਸਿੇ ਦੋ ਵਸਿ਼ਆਂ ਤੇ ਸੁੰਦਰ ਲਖਿਾਈ ਵੱਚਿ ਕਵਤਿਾ ਲਖਿੋ।

(1) ਪੰਜਾਬੀ ਮਾਂ ਬੋਲੀ

(2) ਪੰਜਾਬੀ ਸੱਭਆਿਚਾਰ

(3) ਦੇਸੀ ਮਹੀਨੇ

(4) ਰੁੱਤਾਂ ਤੇ ਤਉਿਹਾਰ

(5) ਪੰਜਾਬ ਦੇ ਮੇਲੇ

(6) ਭੁੱਲ ਰਹੇ ਪੰਜਾਬੀ ਮਾਂ ਬੋਲੀ

ਤਸਵੀਰਾਂ ਅਤੇ ਹੋਰ ਜਾਣਕਾਰੀ ਇਕੱਠੀ ਕਰ ਕੇ ਹੇਠ ਲਖਿੇ ਵਸਿ਼ਆਂ ਤੇ ਸਕ੍ਰੇਬ ਬੁੱਕ ਤਆਿਰ ਕਰੋ।

1. ਜ਼ਫ਼ਰਨਾਮਾ (Roll No 1-12)

2. ਪੁਰਾਤਨ ਸੱਭਆਿਚਾਰ ਬਾਰੇ ਜਾਣਕਾਰੀ

(Roll No 13- 24)

3. ਚਲੰਤ ਘਟਨਾਵਾਂ ਬਾਰੇ ਜਾਣਕਾਰੀ

( Roll No 25 - 34)

## MATHS

**Bk Singh Book Goyal Publishers**
**Ch 1 Ch 2 Ch 3 Ch 13 - All Solved examples**

## SCIENCE - BIOLOGY

**Syllabus:-**
Nutrition, Respiration
**MULTIPLE CHOICE QUESTIONS:-**
1. Desert plants take up which gas at night and prepare an intermediate which is acted upon by the energy absorbed during day

A.Oxygen B. Carbon dioxide C. Carbon monoxide D. Nitrogen

2. In Woody stem respiration take place through

A. Stomata B.General surface C lenticels D.Guard cells

3. The respiratory pigment haemoglobin has a very high affinity for which gas

A.Oxygen B. Carbon dioxide C. Carbon monoxide D. Nitrogen

4. The enzymes trypsin and acts on which of the following

A proteins B.fats C.lipids D.carbohydrates

5. How many molecules of ATP are gained during anaerobic respiration of 1 molecule of glucose

A. 36 B. 2 C. 38 D. 4

**ASSERTION/REASON**

**Read the Assertion and Reason carefully to mark the correct option out of the options given below:**

**(A) Both Assertion and Reason are true and Reason is the correct explanation of Assertion.**

**(B) Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.**

**(C) Assertion is true but Reason is false.**

**(D) Assertion is false but Reason is true.**

1. ASSERTION:-Those organism which can make their own food from the inorganic substance present in the environment are called autotrophs.

REASON:- The autotrophs contain the green pigment called chlorophyll which is capable of trapping sunlight energy, This energy is utilised to form the food for the plant by the process of photosynthesis.

2. ASSERTION:- Villi are present in the inner surface of the small intestine.

REASON:- Villi help in absorbing digested food into the blood of a person

3. ASSERTION:- The formation of small cavities in the teeth due to the action of acid forming bacteria.

REASON:- Brushing of teeth twice a day prevents dental caries.

4. ASSERTION:- Respiration is essential for life because it provide energy for carrying out all the activity process necessary to keep the organisms alive

REASON:- Respiration is taking in Oxygen and giving out of carbon dioxide.

**SHORT ANSWER QUESTIONS:-**

**1.** Name the organ which separates the following enzyme in human digestive system

A.Pepsin B. Salivary amylase C. Trypsin D. Lipase

**2.** Why is the small intestine in herbivores longer than in carnivores?

3. Why is the rate of breathing in aquatic organisms much faster than terrestrial organisms?

4. What causes movement of food inside the alimentary canal?

5. Draw well labelled diagram of

a. Human digestive system

b. Human respiratory system

c. Respiratory organs in plants

d. Open and closed stomata

**HOTS :-**

1. After vigorous exercise you may experience cramps in your legs. Why does this happen?
2. Which organs secrets a hormone when the blood sugar rises. Name the hormone and digestive enzymes released by this organ.

3. "All plants give out oxygen during the day and carbon dioxide during the night" Do you agree with the statement? Give reason
4. If salivary amylase is lacking in the Saliva, which of the events in the mouth cavity will be affected and how?
5. Leaves of healthy potted plants were coated with Vaseline. Will this plant remain healthy for a long time? Give reason for your answer.

**MODEL: -** Working Model On (Any one)

- **Working model on Smart city (R.No.1-5)**
- **Solar energy to kinetic energy(R.NO 6-10)**
- **Preventive measure to Different types of Pollution. (R.NO 11-15)**
- **Waste management(R.NO16-20)**
- **Natural disasters Proofing buildings (R.NO 21-25)**
- **Working Model on STEM(Science, Technology Engineering And Mathematics) (R.NO 26-30)**
- **Biological model(Plant Cell or Animal Cell)(R.NO 30-35)**
- **Hydroponics(R.NO 35-40)**

**Note:-Complete fair notebook and Learn full chapters.**

**CHEMISTRY**

## I. Choose the correct option [1 mark]

Q1. When ferrous sulphate crystals are heated in a test tube, we observe

- ☐ a colourless gas with no smell is evolved ☐ a brown gas is evolved
- ☐ Green colour of the salt fades and a gas with the smell of burning sulphur is evolved
- ☐ Green colour of the salt fades and no gas is evolved

Q2. The reaction between iron nails and $CuSO_4$ solution is:

- ☐ decomposition reaction ☐ double displacement reaction
- ☐ displacement reaction ☐ combination reaction

Q3. Solutions of ferrous sulphate, copper sulphate, zinc sulphate and aluminium sulphate were separately taken in 4 test tubes and some iron nails were put in each of these test tubes. After a while it would be observed that the colour of the

- ☐ Solution of $Zn\ SO_4$, $CuSO_4$ and $Al_2(SO_4)_3$ changed and that of ferrous sulphate did not change
- ☐ Solutions of zinc sulphate and aluminium sulphate only changed
- ☐ Solutions of copper sulphate only changed
- ☐ All four solutions changed

Q4. The reaction between quick lime and water is an exothermic reaction, which is also may be a

- ☐ Combination reaction ☐ Decomposition reaction
- ☐ Displacement reaction ☐ Neutralisation reaction

Q5. The colour of the precipitate formed due to the reaction between lead nitrate and potassium iodide is yellow, this is due to

☐ Lead iodide ☐ potassium iodide ☐ potassium nitrate ☐ lead nitrate

Q6. The electrolytic decomposition of water gives $H_2$ and $O_2$ in the ratio

☐ 1: 2 by volume ☐ 2: 1 by volume ☐ 8: 1 by mass ☐ 1: 2 by mass

Q7. When a magnesium ribbon is burnt in air, the ash formed is

☐ black ☐ white ☐ yellow ☐ pink

Q8. An element X on exposure to moist air turns reddish-brown and a new compound Y is formed. The substance X and Y are

- ☐ X = Fe, Y = $Fe_2O_3$ ☐ X = Ag, Y = $Ag_2S$
- ☐ X = Cu, Y = CuO ☐ X = Al, Y = $Al_2O_3$

## II. Answer the following in a sentence : [1 mark each]

Q1. State the law on which the balancing of chemical equation is based?

Q2. Observe the following reaction [$2Al + Fe_2O_3 \rightarrow 2Fe + Al_2O_3 + Heat$ ]

a. Name the oxidising agent: _____

b. Name the substance oxidized: _____

c. Name the reducing agent: _____

d. Name the substance reduced: _____

Q3. A yellowish coloured compound x is a photosensitive material. On exposure to sunlight, it gives a greyish substance y and brown fumes of a gas z. Identify x, y, z. Write the balanced chemical equation of this.

_____

_____

_____

_____

Q4. (a) Name the different types of chemical reactions.

_____

(b) What is redox reaction? Give one example

_____

**II. Answer the following in about 30 words :** [2 mark each]

Q1. Is burning of a candle, Physical or a chemical change? Give reasons for your answer.

_____

_____

_____

_____

Q2. List four observations that help us to determine whether a chemical reaction has taken place

_____

Q3. Why is the amount of gas collected in one test tube double that collected in another test tube, during electrolysis of water?

Q4. Iron does not rust when kept in distilled water. Justify the statement.

**V. Answer the following in about 50 words :** [3 mark each]

Q1. Photosynthesis and respiration are two very important biological processes, one is exothermic and another is endothermic reaction, identify that and give reason for it.

Q2. Do as directed:

a. Give two examples of oxidation reaction seen in your everyday life.

b. What is rancidity ? Give any 2 preventive measures against rancidity.

c. Name two antioxidants.

Q3. Explain any 2 characteristics of chemical reaction with examples and balanced chemical equations.

Q4. Define skeletal equation. Why do we need to balance them?

Q5. Write a balanced equation, to represent photosynthesis. Why do desert plants take up carbon di oxide for photosynthesis?

V. **Answer the following in about 70 words :** [5 mark each]

Q1. A white solid when dropped in water produces a hissing sound. What the solid may be? Give the chemical reaction for the above. Name the product formed.

Q2. A copper coin is kept in a solution of silver nitrate for some time. What will happen to the coin and the colour of the solution?

Q3. Do as directed:

(a) Write one equation for each for two decomposition reaction when energy is supplied in the form of (a) heat, (b) light

Q2. Read the following and answer the questions that follow:

Chemical equation is a method of representing a chemical reaction with the help of symbols and formulae of the substances involved in it. In a chemical equation, the substances which combine or react are called reactants and new substances produced are called products. A chemical equation is a short hand method of representing a chemical reaction. A balanced chemical equation has equal number of atoms of different elements in the reactants and products side. An unbalanced chemical equation has unequal number of atoms of one or more elements in reactants and products. Formulae of elements and compounds are not changed to balance an equation

*a. Consider the following reaction:* $pMg_3N_2 + qH_2O \longrightarrow rMg(OH)_2 + sNH_3$

*When the equation is balanced, the coefficients p. q, r, s respectively are*

☐ 1, 3, 3, 2 ☐ 1, 6, 3, 2 ☐ 1, 2, 3, 2 ☐ 2, 3, 6, 2

*b. Which of the following information is not conveyed by a balanced chemical equation?*

☐ Physical states of reactants and products.
☐ Symbols and formulae of all the substances involved in a particular reaction.
☐ Number of atoms/molecules of the reactants and products formed
☐ Whether a particular reaction is actually feasible or not.

*c. The balancing of chemical equations is in accordance with*

☐ (a) law of combining volumes ☐ (b) law of constant proportions
☐ (c)law of conservation of mass ☐ both (b) and (c)

*d. Which of the following chemical equations is an unbalanced one?*

☐ $2NaHCO_3 \longrightarrow Na_2CO_3 + H_2O + CO_2$
☐ $2C_4H_{10} + 12O_2 \longrightarrow 8CO_2 + 10H_2O$
☐ $2Al + 6H_2O \longrightarrow 2Al(OH)_3 + 3H_2$
☐ $4NH_3 + 5O_2 \longrightarrow 4NO + 6H_2O$

**PHYSICS**

1. **The laws of reflection hold true for**
(a) plane mirrors only (b) concave mirrors only
(c) convex mirrors only (d) all reflecting surface

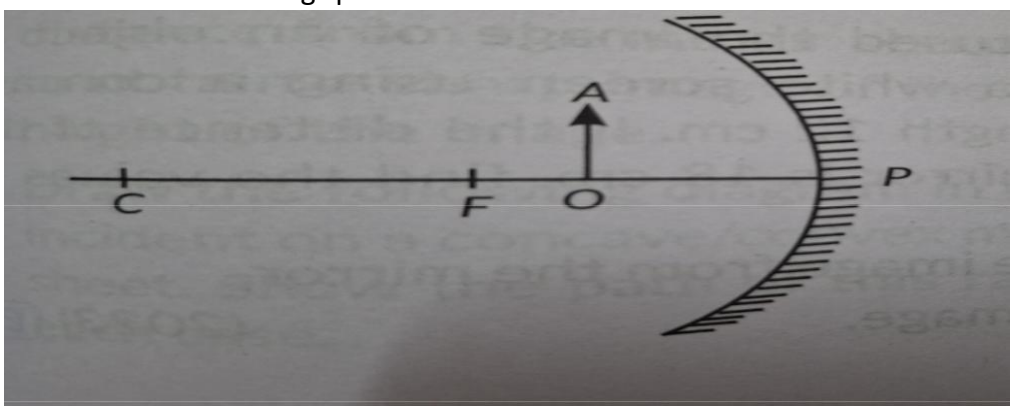
2. **An optical device forms an erect image of an object placed in front of it. If the size of the image is one half that of the object, the optical device is a**
(a) concave mirror (b) convex mirror (c) plane mirror (d) convex lens

3. **The image of an object placed in front of a concave mirror is formed between 15 cm and 30 cm in front of the object. The distance between the object and its image is**
(a) 15 cm (b) 30 cm (c) 60 cm (d) 45 cm

4 **The relation R = 2f is valid**
(a) For concave mirrors but not for convex mirrors
(b) For convex mirrors but not for concave mirrors
(c) Neither for concave mirrors nor for convex mirrors
(d) For both concave and convex mirrors.

**5. In which of the following is a concave mirror used?**
(a) A solar cooker b) A rear view mirror in vehicles
c) A safety mirror in shopping malls d)In viewing full size images of distant tall buildings.

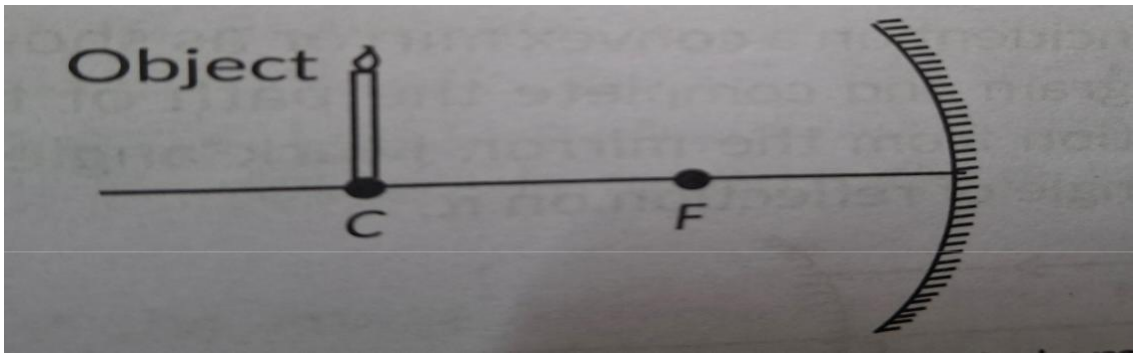
6. For the diagram shown, according to the new Cartesian sign convention the magnification of the image formed will have the following specifications:




(a) Sign - Positive, Value - Less than 1 b)Sign - Positive, Value - More than 1
c) Sign - Negative, Value - Less than 1 c) Sign - Negative, Value - More than 1

7. **The radius of curvature of a converging mirror is 30 cm. At what distance from the mirror should an object be placed so as to obtain a virtual image?**
(a) Infinity (b) 30 cm
(c) Between 15 cm and 30 cm (d) Between 0 cm and 15 cm

8. Which of the following statements is not true in reference to the diagram shown above?




(a) Image formed is real. b)Image formed is enlarged.

(b) Image is formed at a distance equal to double the focal length.

(c) Image formed is inverted.

9. An object of height 4 cm is kept at a distance of 30 cm from the pole of a diverging mirror. If the focal length of the mirror is 10 cm, the height of the image formed is:
(a) +3.0 cm (b) +2.5 cm (c) +1.0 cm (d) +0.75 cm

10. When an object is kept within the focus of a concave mirror, an enlarged image is formed behind the mirror. This image is
(a) real (b) inverted (c) virtual and inverted d) virtual and erect

11. Draw a labelled ray diagram to show the path of the reflected ray corresponding to an incident ray of light parallel to the principal axis of a convex mirror.

12. To construct a ray diagram we use two rays of light which are so chosen that it is easy to know their directions after reflection from the mirror. Choose these two rays and draw a ray diagram to locate the image of an object placed at a distance of 15 cm from a concave mirror.

(b) A concave mirror produces a three times magnified image on a screen. If the object is placed 20 cm in front of the mirror, how far is the screen from the object?

13.Draw ray diagrams for the following cases when a ray of light:

(i) passing through the centre of curvature of a concave mirror is incident on it.
(ii) parallel to the principal axis is incident on a convex mirror.
(iii) is passing through the focus of a concave mirror incident on it.

14.A concave mirror is used for image formation for different positions of an object. What inferences can be drawn about the following when an object is placed at a distance of 10 cm from the pole of a concave mirror of focal length 15 cm?

(i) Position of the image ii) Size of the image iii) Nature of the image

Draw a labelled ray diagram to justify your inferences.

15.(a) To get an enlarged, real and inverted image of an object by a concave mirror, where should the object be placed? Draw a labelled ray diagram to justify your answer.

(b) If an object is placed at the centre of curvature of this mirror, what will be the magnification produced?

16.A student should an object be placed in front of a concave mirror of focal length 20 cm so as to obtain a two times magnified virtual image of the object?

17.A concave mirror has a focal length of 20 cm. At what distance from the mirror should a 4 cm tall object be placed so that it forms an image at a distance of 30 cm from the mirror? Also calculate the size of the image formed.

18.The image of a candle flame placed at a distance of 60 cm from a mirror is formed on a screen placed in front of the mirror at a distance of 60 cm from its pole. What is the nature of the mirror? Find its focal length. If the height of the flame is 2.4 cm, find the height of its image. State whether the image is erect or inverted.

19.An object 4 cm in height is placed at 15 cm in front of a concave mirror of focal length 10 cm.
At what distance from the mirror should a screen be placed to obtain a sharp image of the object. Calculate the size of the image. Draw the image.

20. The image of an object formed by a mirror is real, inverted and is of magnification –1. If the image is at a distance of 40 cm from the mirror, where is the object placed? Where would the image be if the object is moved 20 cm towards the mirror? State reason and also draw ray diagram for the new position of the object to justify your answer

21. A student wants to project the image of a candle flame on a screen 48 cm in front of a mirror by keeping the flame at a distance of 12 cm from its pole.
(a) Suggest the type of mirror he should use.

(b) Find the linear magnification of the image produced.

(c) How far is the image from its object?

(d) Draw a ray diagram to show the image formation in this case.

22.A student wants to project the image of a candle flame on a screen 48 cm in front of a mirror by keeping the flame at a distance of 12 cm from its pole.

(a) Suggest the type of mirror he should use.
(b) Find the linear magnification of the image produced.
(c) How far is the image from its object?
(d) Draw a ray diagram to show the image formation in this case.

23A student wants to obtain an erect image of an object using a concave mirror of 12 cm focal length. What should be the range of distance of the object from the mirror? State the nature and size of the image he is likely to observe. Draw a ray diagram to show the image formation in this case.

24 .An object 4.0 cm in size, is placed 25.0 cm in front of a concave mirror of focal length 15.0 cm.

(i) At what distance from the mirror should a screen be placed in order to obtain a sharp image?
(ii) Find the size of the image.
(iii) Draw a ray diagram to show the formation of the image in this case.

25. (a) A security mirror used in a big showroom has a radius of curvature 5 m. If a customer is standing at a distance of 20 m from the cash counter, find the position, nature and size of the image formed in the security mirror.

(b) Neha visited a dentist in his clinic. She observed that the dentist was holding an instrument fitted with a mirror. State the nature of this mirror and reason for its use in the instrument used by the dentist.

## SOCIAL SCIENCE

1. **Complete map work on the map skill:-**

   Ch -1 Resources and Development (geography)
   Identify: locate and label Major Soil Types

2. Prepare a project on any one of these topics:-
   a. Maximum pages of the project should be 15-20.
   b. Write the project in a very neat handwriting.
   c. Write the project on the sheets used for science practical file.
   d. Paste the photographs or draw table, diagram, flow chart etc. on every blank page (on the left side left blank side) related to the content written on the right side page having lines.

   **Project Topics :-**

   1. How consumers are exploited in the market
   2. Sustainable development goals and their objectives
   3. Various social issues in the society
   4. Various means of transport used in rural and urban areas
   5. Globalization

3. **Write the answer of the following questions in your social science notebooks:-**

**Answer the following questions**

11) Write three places related to Satyagraha movement?

2) What was the Rowlatt Act?

3) Why was the Rowlatt Act imposed ?

4) Name two main Satyagraha movement organisedby Mahatma Gandhi successfully in favour of peasants in 1916 &1917?

5) Discuss the effects of world war ?

6) Discuss the impact of Non-Cooperation movement?

7) When was the Non-cooperation movement started?

8) Explain the major provisions of the Rowlatt Act?

9) How was Rowlatt Act opposed by the people in India?

10) Who ordered to open fire on the innocent people in Jallianwala Bagh?

11)Describe the incident of Jallianwala Bagh?

WORKSHEET

12) What was the other names of Dandi March?

13) From where did the Salt March start?

14) When did they reach Dandi ?

15) Write a note on Civil Disobedience Movement ?

16) Describe the economic effects of NonCooperation movement ?

17) Describe the peasant movements in brief?

18) When was Muslim league formed?

19) Give three demands of the peasants of Awadh?

20) How many policemen were burnt alive in ChauriChaura incident?

21) Name the leaders who pressed the mass agitation & full independence?

22) Who was Sir John Simon ?

23) Why was Simon Commission rejected in India?

24) To whom Gandhi wrote a letter demanding 11 points ?

25) Why was countryside in turmoil by 1930 ?

26) When Gandhi- Irwin Pact was signed ?

27) Where did the round table conference take place?

28) What was Poona Pact ?

29) What were the agreements made in GandhiIrwin Pact ?

30) Mention violent clashes took place during the movement?

31) Write a short note on Simon Commission ?

32) Distinguish between the Non-Cooperation movement & Civil Disobedience Movement?

33) How does nationalism spread ?

34) What action was taken by the Britis Government on the Civil Disobedience movement ?

35) Who had designed the swaraj flag?

36) Explain the main features of swaraj flag?

37)What does the sense of collective belonging means ?

38) Who created the first image of Bharat Mata?