

MRCR Public School, Julana



HOLIDAY HOMEWORK CLASS-X



Name :-----

Father's Name :-----

Village :-----

Dear Parents,

For this summer vacation, we have planned chapterwise assignments and activities to keep the children engaged and also to help them in channelizing their energies. Kindly help and guide your ward in completing his/her work and also in exploring his/her creative self.

Note- Parents to download the Holiday homework from school website

<http://mrcrpublicschool.co.in>

General Instructions-

- This Holiday homework is planned by providing the chapter wise questions and worksheets which are beyond of their notebooks and will help them to revise the periodical syllabus.
- Make a set routine for him/her to do holiday homework as regular which will definitely to practice improves his/her learning and writing skills instead of forcing them to do their holiday homework at the eleventh hour.
- Encourage your child to cultivate the reading habit because it will not only enhances the knowledge acquired but also develops the vocabulary, language skills and improves spellings. Encourage your child to read newspaper, G.K book and current affairs to update himself/herself.
- Encourage your child to go out and play because sports instill discipline, generate sporting spirits, channelize energies constructively.
- Spend quality time with your child by engaging him / her in activities based on enhancing his / her powers of observation and imagination.
- Make sure that the Holiday Homework is to be done according to the given instructions and with neat and tidy handwriting.
- Above mentioned guidelines will help your child to become a smart and an active learner.



English

- ✚ Factual Passage – Page No. -15 to 21 (Grammar) 2:- Discursive Passage – Page No. 46 to 51(Grammar).
- ✚ Write articles on the given topics in about 150-200 words.
- ✚ The Deteriorating values
- ✚ India – A tourists paradise.
- ✚ You are interested in a short-term course in computer during the holidays. Write a letter to the director Fortune Graphics Computers, inquiring about their short-term courses and asking for all the necessary details. You are Anuj/Anju of 28A, Uttar Nagar, New Delhi.
- ✚ As head of the music department of your school, write a letter to Hyderabad Music House,
- ✚ Placing an order for some music instruments like Sitar, Tabla, Tanpura & Guitar. You are Anvita/Anil of DPS School,
- ✚ Rohini, New Delhi.
- ✚ Make a chart on the topic ‘Tenses’
- ✚ Read the newspaper daily and write only one news article under the given headings like National, International, sports,
- ✚ Glamour, Business and express your views on it.
- ✚ Write a diary elaborating details about how you spent your summer book review
- ✚ Read any popular novel/story book/drama/ and write its summary in about 400-500 words.
- ✚ Write the character sketch of its hero/heroine also.
- ✚ Revise and learn the syllabus covered till date in literature, Grammar and writing section.

Mathematics

1. Revise NCERT chapter 01,02,04,05,07 with examples for class test.
2. Chart :- Formulas related to area & volume of 2-Dimensional & 3-Dimensional figures.
3. Project :
 - a) Contribution of 5 famous great mathematician (other than Indian)
 - b) Recent research from last 2-years in the field of mathematics.
 - c) Prepare short notes for each chapter (01/02/04/05/07)
4. Assignment :- Reference book ‘element of mathematics’ ‘Higher order thinking skills’ objective type, very – short & short answer type questions of chapter (1,2,3,5,7).
(Only for those whose name are mentioned in the class)

Social Studies

1. Prepare a project file with the following details.
 - a) The total length of the project report should not be more than 10-12 written pages of A4 size sheet .
 - b) The project report should be hand written and credit will be awarded to original drawings.
 - c) The project report should be developed and presented in this order-
 - i) Cover page showing project title, student information school and year.
 - ii) Index-list of contents with page no.
 - iii) Introduction.
 - iv) Relevant content with headings.
 - v) Summary and conclusion based on findings.
- Topic – Soil and its type : soil erosion and conservation.

Revise all PT-1 syllabus.

Two charts on Resources and type, Earth summit 1992 and Agenda 21.

Complete your map book till page no. 15

Science

Biology

Chapter -6 Life processes

Worksheet –1

- Q1. Why do herbivores have longer, small intestine than carnivores? (1 marks)
- Q2. Write the balanced chemical equation for the process of photosynthesis.
How photosynthesis occurs in desert plants? (1 mark)

- Q3. In single celled organisms diffusion is sufficient to meet all their requirements of food, exchange of gases or removal of wastes but it is not in case of multicellular organisms. Explain the reason for this difference. (2 marks)
- Q4. Draw a neat labeled diagram of human alimentary canal. (2 marks)
- Q5. Explain the process of nutrition in Amoeba. (2 marks)
- Q6. How do guard cells regulate the opening and closing of the stomata? (2 marks)
- Q7. Explain exchange of gases in humans. (3 marks)
- Q8. State the role of the following in human digestive system: (3 marks)
- Digestive enzymes
 - Hydrochloric acid (HCl)
 - Villi
- Q9. Draw a diagram of human respiratory system and label the following: (3marks)
- Part where air is filtered by fine hairs and mucus
 - Part which terminates in balloon like structures
 - Part which separates chest cavity from abdominal cavity
 - Part where exchange of gases takes place.
- Q10. Draw a neat labeled diagram of opened and closed stomata. (3marks)
- Draw the following diagram well labelled and neat on A4 size sheet each from NCERT Book
- Digestive System
 - Heart
 - Excretory System

Worksheet -2

Life processes

Draw neat and well labelled diagrams of the following systems/organs/process on the A4 size sheets.

- Open and closed stomatal pore
 - Nutrition in Amoeba.
 - Human alimentary canal.
 - Human respiratory system
 - Schematic sectional view of human heart Excretory system
 - Structure of nephron
 - NOTE: Keep them safely for the portfolio in a folder .
2. Complete the assignment and textbook questions of these chapters.
3. Learn the notes and revise the chapters mentioned above

Q1. Prepare

- Project report and
- Model (working) on the following topics
 Roll no. 1- 5 Nutrition
 Roll no.6-10-16 Respiration
 Roll no.17-24 Transportation
 Roll no.25-32 Excretion
 Roll no.33-40 onwards Environment/Heart diagram

Q2. Write a note (100 words) on the following topics

- Dialysis
- Blood Pressure
- Lymph

Q3. Write differences between the following terms

- Autotroph and Heterotroph
- Respiration and Breathing
- Artery and Vein
- Xylem and Phloem

(A) Explain how the exchange of gases occurs in plants across the surface of stems, roots and leaves.

(B) How are water and minerals transported in plants

2. (a) Draw a diagram to show open stomatal pore and label on it:

- (i) guard cells
- (ii) chloroplast
- (b) State two functions of stomata.
- (c) How do guard cells regulate the opening and closing of stomatal pore?
- 3. Draw a neat diagram of excretory system of human beings and label the following:
 - (i) Kidney
 - (ii) Ureter
 - (iii) Urinary Bladder
 - (iv) Urethra
- 4. Explain the process of nutrition in Amoeba.
- 5. (a) Draw a sectional view of the human heart and label on it – Aorta, Right ventricle and Pulmonary veins.
- (b) State the functions of the following components of transport system:
 - (i) Blood (ii) Lymph

Very short answers for 1 marks

1. What is common for cuscuta, ticks and leeches?
 2. Why is small intestine in herbivores longer than in carnivores?
 3. Why do veins have thin walls as compared to arteries?
 4. What will happen if platelets were absent in the blood?
 5. What will happen if mucus is not secreted by the gastric glands?
 6. What is the significance of emulsification of fats?
 7. Why is the rate of breathing in aquatic organisms much faster than in terrestrial organisms?
 8. Plants have low energy needs as compared to animals. Explain.
- short answers questions for 2 marks
1. Differentiate between an artery and a vein.
 2. What are the adaptations of leaf for photosynthesis?
 3. Why does absorption of digested food occur mainly in the small intestine?
 4. Why is blood circulation in human heart called double circulation?
 5. Why is transpiration important for plants?
 6. Name the correct substrates for the following enzymes
 7. (a) Trypsin (b) Amylase (c) Pepsin (d) Lipase
 8. Name the energy currency in the living organisms. When and where is it produced?

WORKSHEET -3

Short answers questions for 3 marks

1. Mention the major events during photosynthesis
2. What is the advantage of having four chambered heart?
3. Explain the role of mouth in digestion of food.
4. What are the functions of gastric glands present in the wall of the stomach?
5. Why and how does water enter continuously into the root xylem?

Long answers questions for 5marks

1. Describe the flow of blood through the heart of human beings.
2. How do carbohydrates, proteins and fats get digested in human beings?
3. Explain the process of nutrition in Amoeba.
4. Label the parts in the diagram

1. Draw the structure of a neuron and explain its function.
2. What are the major parts of the brain? Mention the functions of different parts.

Now this is time to show our creativity, along with the learning. We are going to learn science in colourful or creative manner. So in science we are going to learn about many life processes essential for life for all living organisms. In holiday homework you all have to make two or three dimensional model/file/reports/collage/ with any material like chart paper, Thermocol or any waste material.

In this regard you can take subtopic of the topic, like

1. DIGESTIVE SYSTEM OF HUMAN BEING
2. RESPIRATORY SYSTEM
3. EXCRETORY SYSTEM(Nephron or kidney)
4. CIRCULATORY SYSTEM
5. CENTRAL NERVOUS SYSTEM

WORKSHEET-4

CHAPTER 1: Life Processes – UNIT I: NUTRITION

Energy is required by an organism even during sleep. Why?

ii. Define peristaltic movement.

2. Which is the largest digestive gland in human body ? What is its function?

3. Draw a diagram of human heart. Label the following parts :

(a) pulmonary vein (b) aorta

(c) septum (d) venacava .

4. Discuss the process of inhalation during breathing.

Chemistry

WORKSHEET-1

1. Write the experimental work in your practical file and this will be sent in separate pdf file.

2. Write the names of some (at least 10) chemical compounds that you use in your day to day life. Classify them as acids, base and salts.

3. Give 10 examples of redox reaction. Mention the oxidising and reducing agents in it.

4. Learn and write NCERT text book questions answer (intext and exercise) of ch-1 chemical reactions and equations and chapter-2 acids bases and salts in fair copy. Learn and read the content from ncert only.

5. Balance the following equations.

a) Sodium + Nitrogen \rightarrow Sodium nitride

b) Aluminium + Chlorine \rightarrow Aluminium chloride

c) Iron (III) oxide + Hydrogen \rightarrow Iron + Water

d) Phosphorous + oxygen \rightarrow Phosphorus pentoxide

A. Balance the following chemical equation-

a) $\text{HNO}_3 + \text{Ca}(\text{OH})_2 \rightarrow \text{Ca}(\text{NO}_3)_2 + \text{H}_2\text{O}$

b) $\text{NaOH} + \text{H}_2\text{SO}_4 \rightarrow \text{Na}_2\text{SO}_4 + \text{H}_2\text{O}$

c) $\text{NaCl} + \text{AgNO}_3 \rightarrow \text{AgCl} + \text{NaNO}_3$

d) $\text{BaCl}_2 + \text{H}_2\text{SO}_4 \rightarrow \text{BaSO}_4 + \text{HCl}$

6. PORTFOLIO WORK: -

A. On the A-4 sheet show either pictorial representation collage 2D or 3D image using any waste material available at home: -

Topics: -

a. Acids & alkali & pH scale.

b. Importance of Ph.

c. Periodic table of the elements.

d. Examples of chemical in daily life.

B. You can represent your art integration work illustrating corrosion or rancidity covering factors affecting them and ways to prevent it.

(portfolio work)

7. Draw the mind map of both chapter 1. Chemical reaction and equation and

2. Acids bases and salts in fair copy.

8. Complete your notes and fair copy.

1. What is rancidity? Write a common method to prevent it.

2. Explain how respiration is an exothermic reaction.

3. What is meant by balanced chemical equation? Why are chemical equations balanced? Balance the following equation:



4. Name the gas which is liberated when an acid reacts with a metal.

Illustrate with an example. How will you test the presence of the gas?

5. Oil and fat containing food items are flushed with nitrogen. Why?

6. What are the colours of aqueous solutions of CuSO_4 and FeSO_4 as observed in a laboratory?

7. Define endothermic reaction.

8. Why does milkiness disappear from limewater disappear when

- excess CO₂ is passes through it?
9. Decomposition reactions require energy either from heat, light or electricity from breaking down the reactants. Write one equation each for decomposition reactions where energy is present in form of heat, light and energy.
 10. Why are decomposition reactions called opposite of combination reactions? Write equations for these reactions.
 11. On passing excess carbon dioxide gas through lime water, it first turns milky and then becomes colorless. Explain why? Write all the chemical equations of reactions involved.

Physics

- Q.1. Give two uses of a convex mirror. Explain why you would choose convex mirror for these uses.
- Q. 8. An object placed 20cm in front of a mirror is found to have an image 15cm (a) in front of it, (b) behind the mirror. Find the focal length of the mirror and the kind of mirror in each case.
- Q. 9. A man holds a spherical shaving mirror of radius of curvature 60cm and focal length 30cm, at a distance of 15cm from his nose. Find the position of image, and calculate the magnification.
- Q. 10. What is the nature of the image formed by a concave mirror if the magnification produced by the mirror is +3?

WORKSHEET-2

1. Collect all the questions and numerical problems of reflection and refraction of light from CBSE- Sample papers. From 2008 to 2018, which are available on the CBSE site (cbse.nic.in) and solve them in class Home Work register.
2. Read all the activities of reflection and refraction of light from NCERT Science book.
3. Read the practical of (i) Focal length of concave mirror when the object is at infinity. (ii) Focal length of convex mirror when the object is at infinity. (iii) Refraction of light through a glass slab.
4. Read the MCQ problems of reflection and refraction of light from the lab manual.
5. Do revise the questions of notebook and remain up to date.

हिन्दी

- 1 निम्न 200-250 शब्दों में निबंध लिखिए।
 क) मोबाइल का प्रयोग विद्यार्थी जीवन में लाभकारी या हानिकारक ख) कोरोना महामारी में समाज की स्थिति
 ग) भारत की संस्कृति व गौरवशाली इतिहास घ) ग्लोबल वार्मिंग की समस्या
- 2 निम्न पर चार्ट बनाइए।
 क) वाक्य व इसके भेद ख) रस व इसके भेदों के नाम
- 3 निम्नलिखित पत्र लिखिए व याद कीजिए।
 क) बीमारी के कारण अवकाश हेतु प्रधानाचार्य को प्रार्थना-पत्र लिखिए।
 ख) अपने क्षेत्र के पोस्टमास्टर को मनीऑर्डर प्राप्त न होने की करते हुए पत्र लिखिए।
 ग) हरियाणा परिवहन विभाग के मुख्य प्रबंधक को पत्र लिखकर एक बस चालक के प्रशंसनीय व्यवहार की सूचना देते हुए उसे सम्मानित करने का आग्रह कीजिए।
 घ) समाज में बढ़ती असुरक्षा के संबंध में अपने विचार प्रकट करते हुए 'दैनिक भास्कर' के संपादक को पत्र लिखिए
 ङ) अपने पिताजी को पत्र लिखकर बताइए कि आपके विद्यालय में वार्षिकोत्सव किस प्रकार मनाया गया।
- 4 निम्न पाठों का सार लिखिए व याद कीजिए।
 क) नेताजी का चश्मा ख) कविता-सूरदास के पद
- 5 निम्नलिखित मात्राओं से 20-20 शब्दों का निर्माण कीजिए।
 ऊ, ओ, आ, ई, की।

Note:- Do all the work in your Fair Note books and Submit complete work to your Class Incharge in school on 4th July 2022.

Happy Summer Vacations