

Gurukul Montessori School
Holiday Homework 2023-24
Class 10th

SUBJECT : BIOLOGY

1. It is well known that the plants are autotrophic in nutrition and are capable of synthesizing their organic food (e.g Glucose) from inorganic compounds like carbon dioxide and water in the presence of radiant energy of sunlight trapped by the chlorophyll pigment. From the above condition, it is evident that sunlight, carbon dioxide and chlorophyll all are necessary for photosynthesis. But the teacher explained to the students in the class that photosynthesis also depends upon the dark period of the day.

a. Which reactions occur during the light phase of photosynthesis?

b. What is significance of dark phase in the process of photosynthesis?

c. Differentiate between primary and accessory photosynthetic pigments

2. Prepare a model of human circulatory system or human respiratory system or human Excretory system.

3. Draw well labelled diagrams of the following: i. human heart

ii. Stomata

iii. nephron

iv. human digestive system

[Note- Do all written work in fair copy of Biology]

SUBJECT- ENGLISH

1. Prepare an Art integrated project on the states of Meghalaya and Arunachal Pradesh on the following points.

a. Location

b. Language and traditional dress

c. Tourist attractions

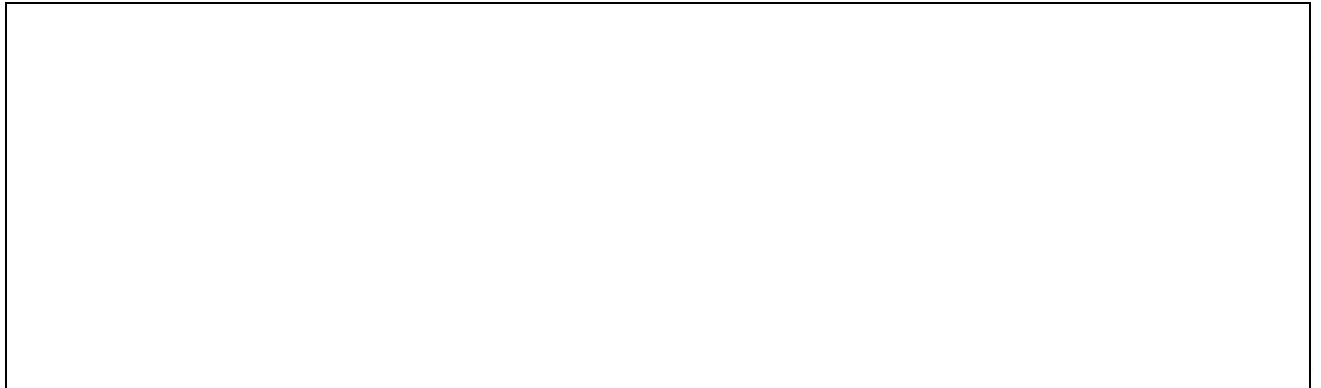
d. Famous dishes

e. Development since Independence

2. Record a speech of minimum 3 minutes on any topic and send on English Group.

3. Learn all the chapters taught.

SUBJECT- HINDI



पोर्टफोलियो



छात्र की सूचना

छात्र / छात्रा का नाम : _____

जन्म तिथि : _____ छात्र

/ छात्रा की उम्र : _____

कक्षा व वर्ग : _____

क्रम संख्या : _____

विद्यालय का नाम :

विद्यालय में प्रवेश तिथि : _____

विद्यालय में प्रवेश संख्या : _____

लंबाई : _____

भार :

रक्त समूह :

आधार संख्या : _____

पारिवारिक सूचना

माता का नाम: _____

माता की शैक्षिक योग्यता: _____

संपर्क दूरभाष : _____

पिता का नाम: _____

पिता की शैक्षिक योग्यता: _____

संपर्क दूरभाष : _____

परिवार के सदस्यों की संख्या : _____

भाई-बहन की संख्या : _____

परिवार की मासिक आय : _____

घर का पता :

छात्र/छात्रा के अपने जवाब

Q1. आपको किन चीजों से ज्यादा लगाव है ?

Ans° _____

Q2. आपके क्या शौक हैं ?

Ans° _____

Q3. आपका प्रिय खेल कौन-सा है ?

Ans° _____

Q4. आप अपने घर के किस सदस्य से ज्यादा प्यार करते हैं ?

Ans° _____

Q5 . आप भविष्य में क्या बनना चाहते हैं ?

Ans° _____

Q6 . आपके प्रिय शिक्षक/शिक्षिका कौन हैं ?

Ans° _____

Q7 . आपको किस चीज़ से ज्यादा डर लगता है ?

Ans° _____

Q8 . आपको किस बात पर जल्दी गुस्सा आता है ?

Ans° _____

Q9 . आप अपने घनिष्ठ मित्र का नाम बताइये।

Ans° _____

Q10 . आपको अपने मित्र के कौन से गुण अच्छे लगते हैं ?

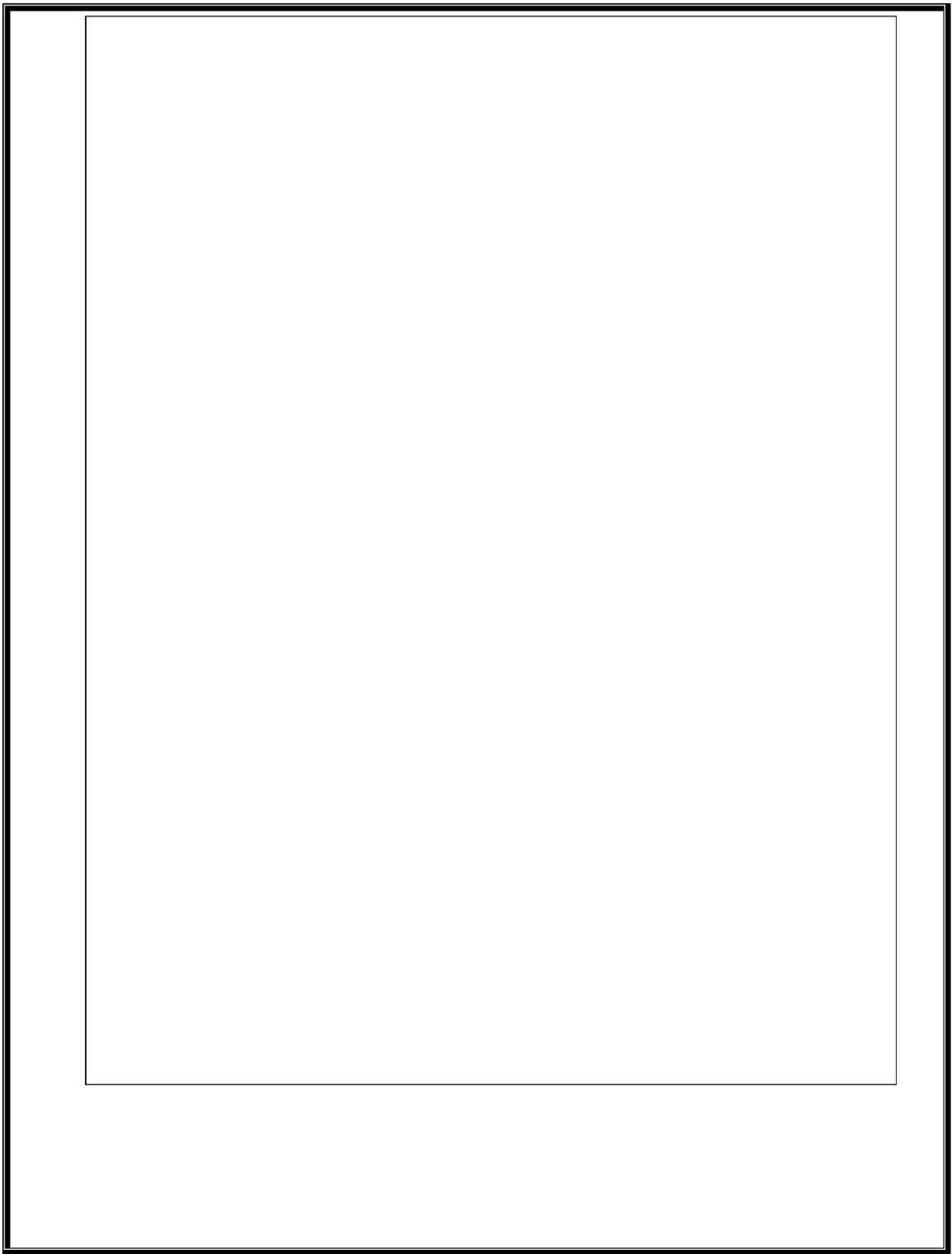
Ans° _____

अपने दोस्तों के साथ बिताए पलों के यादों को फोटोस चिपकाकर प्रस्तुत करें।

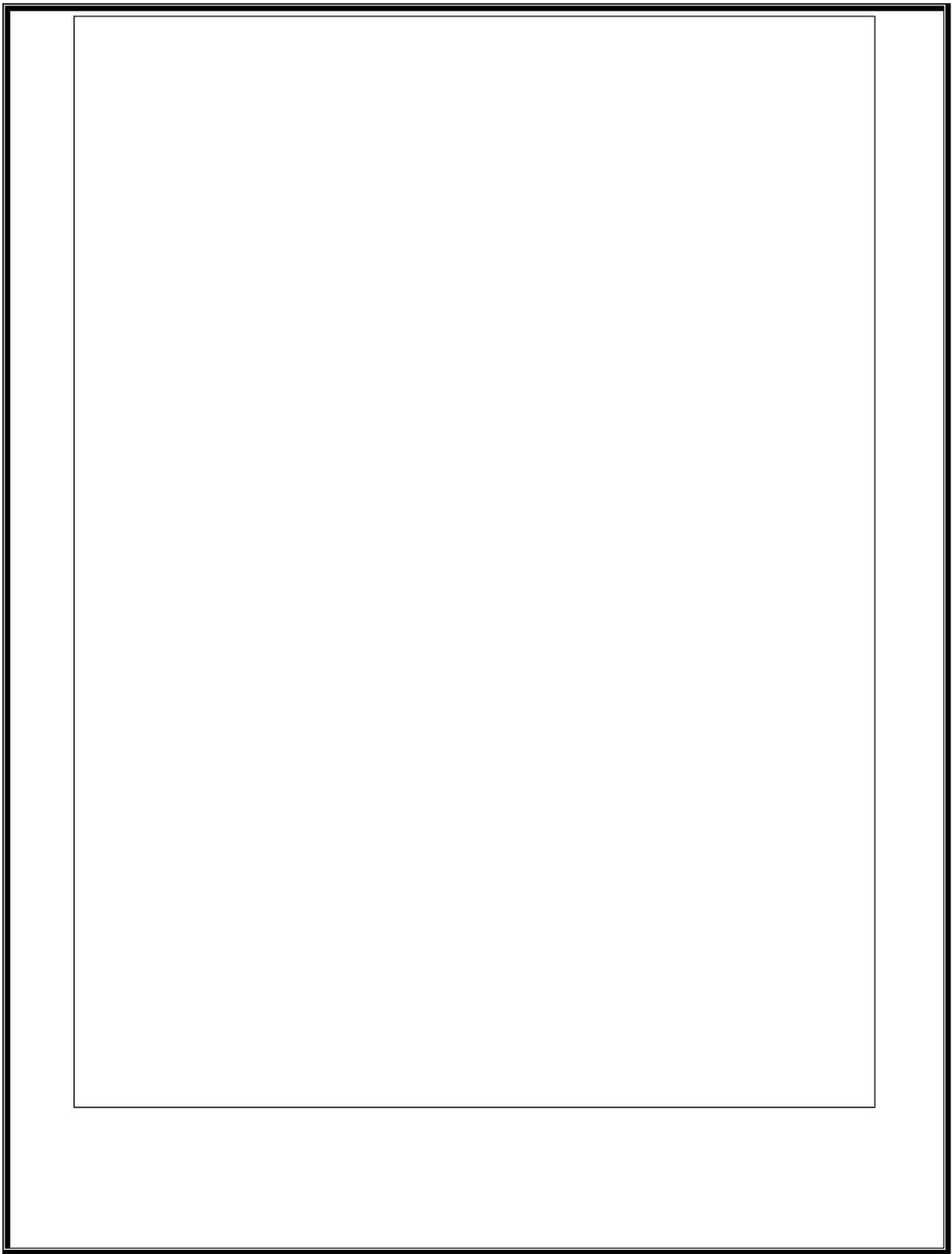
This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

छात्र/ छात्रा के प्रति शिक्षक/शिक्षिका की राय

अपने किसी भी मनपसंद विषय पर एक पोस्टर बनाइये



मनपसंद विषय चुनकर एक सुंदर सा विज्ञापन बनाईए



छात्र / छात्रा के हस्ताक्षर : _____

शिक्षक / शिक्षिका के हस्ताक्षर :

धन्यवाद

SUBJECT– MATHEMATICS

1. Revise the chapter real numbers, polynomials and pair of linear equations in two variables.
2. Do 5 questions everyday from the above mentioned chapters.

Note:- Make a separate thin copy for this work.

SUBJECT - SOCIAL SCIENCE

Every student has to compulsorily undertake any one project on the following topics:

Consumer Awareness

OR

Social Issues

OR

Sustainable Development

Objectives : The overall objective of the project work is to help students gain an insight and pragmatic understanding of the theme and see all the Social Science disciplines from an interdisciplinary perspective.

It should also help in enhancing the Life Skills of the students.

Students are expected to apply the Social Science concepts that they have learnt over the years in order to prepare the project report.

If required, students may go out for collecting data and use different primary and secondary resources to prepare the project.

If possible, various forms of art may be integrated in the project work.

Dear students,

Your project file must be arranged in the following order:-

- Cover Page
- Index
- Acknowledgment
- Topics page
- Matters
- Conclusion
- Picture gallery
- Bibliography

SUBJECT – INFORMATION TECHNOLOGY

1. What are styles?
 2. What are different categories of styles in writer?
 3. What are character styles? How are these different from paragraph styles?
 4. Write steps to create new style by drag and drop.
 5. Write short notes on
 - (i) Template
 - (ii) Resizing Image
6. What is digital documentation? Explain.
7. What do you understand by the hierarchy of headings? Explain with example.
8. What is table of contents? Explain.
9. Explain about the different tabs of cropping.
10. What are the ways to insert an image in your document? Explain each in brief.
11. What do you understand about positioning image? Explain.
12. What are the different arrangement techniques used in word processor?
13. Write the steps to perform the following:
 - (i) To apply a style to the selected text.
 - (ii) To insert graphics from gallery with drag and drop.
 - (iii) To insert scanned image in a document.

- (iv) To insert Calc chart into a text document.
- (v) To create a table of contents.
- (vi) To arrange image on the top of any graphics.
- (vii) To arrange the image one level down the screen.

14. Prisha is a book editor. She wants to change the indentation of all paragraphs, and change the font of all titles in the book. Which feature she should use to make the task easy?

15. Millennium University is organizing a reunion meet for their alumnae students. For this purpose, university wants to send the invite to all these students with their different addresses. Which feature of the Word Processor University should use to accomplish the task?

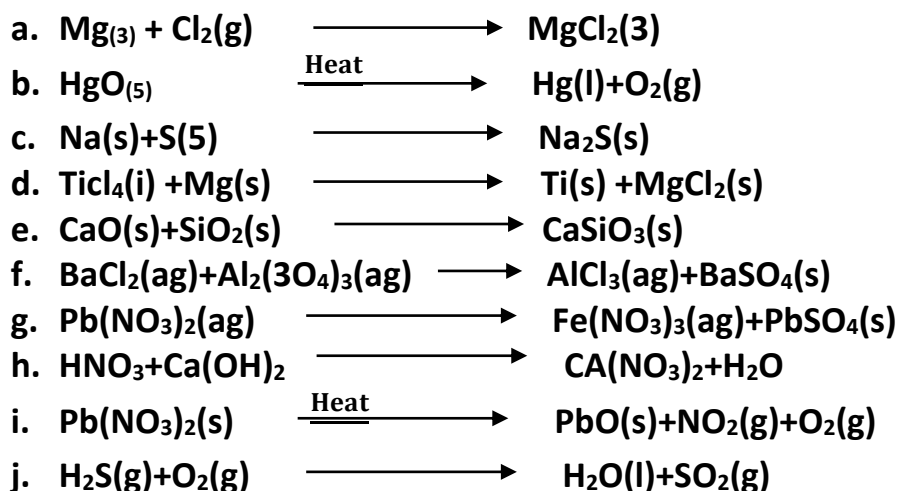
Note:- Make a separate thin copy for this work.

SUBJECT – PHYSICS

1. Solve 10 questions on mirror formula.
2. Solve 10 questions on lens formula.
3. Solve 5 questions on refractive index.
4. Solve 5 questions on power of lens.
5. Solve all NCERT questions of chapter Light.

SUBJECT – CHEMISTRY

1. Prepare a chart on types of reaction.
2. Write the balanced chemical equations for the following reactions and identify the type of reaction in each case.



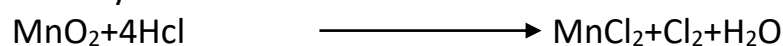
3. Identify the reducing agent in the following reaction –

- a. $4\text{HN}_3 + 5\text{O}_2 \longrightarrow 4\text{HN} + 6\text{H}_2\text{O}$
- b. $\text{H}_2\text{O} + \text{f}_2 \longrightarrow \text{Hf} + \text{Hof}$
- c. $\text{Fe}_2\text{O}_3 + 3\text{CO} \longrightarrow 2\text{Fe} + 3\text{CO}_2$
- d. $2\text{H}_2 + \text{O}_2 \longrightarrow 2\text{H}_2\text{O}$
- e. $\text{CuO} + \text{H}_2 \longrightarrow \text{Cu} + \text{H}_2\text{O}$

4. Identify the oxidizing agent in the following reactions :

- a. $\text{Pb}_3\text{O}_4 + \text{QHCl} \longrightarrow 3\text{PbCl}_2 + \text{Cl}_2 + 4\text{H}_2\text{O}$
- b. $2\text{Mg} + \text{O}_2 \longrightarrow 2\text{MgO}$
- c. $\text{CuSO}_4 + \text{Zn} \longrightarrow \text{Cu} + \text{ZnSO}_4$
- d. $\text{V}_2\text{O}_5 + 5\text{Ca} \longrightarrow 2\text{V} + 5\text{CaO}$
- e. $3\text{Fe} + 4\text{H}_2\text{O} \longrightarrow \text{Fe}_3\text{O}_4 + 4\text{H}_2$

5. Identify the substance oxidized and reduced



6. Write the chemical equation for the reaction in which the following changes take place with an example of each

- i. Change in colour
- ii. Change in temperature
- iii. Formation of precipitate
- iv. Evolution of gas

7. 2g of ferrous sulphate crystals are heated in a dry boiling tube-

- i. List any 2 observations.
- ii. Name the type of chemical reaction taking place.
- iii. Write the chemical equation for the reaction.

8. Why are oil and fat containing food items flushed with nitrogen?

9. Explain all the types of chemical reactions with examples.

10. Explain the process of corrosion and rusting.

11. What happens when water is added to solid calcium oxide taken in a container?

12. Why is photosynthesis considered an endothermic reaction?

13. How is corrosion different from rusting?

14. What is rancidity? How can we reduce the problem of rancidity?

15. Write any two limitations of a chemical equation.

16. What is an oxidation reaction? Give an example of an oxidation reaction and how it differs from reduction explain with example.

17. What is a combination reaction. Give an example which is also an exothermic reaction.

18. What is observed when a solution of potassium iodide is added to a solution of lead nitrate taken in a test tube?

- i. What type of reaction is this?
- ii. Write a balanced chemical equation for it.

19. Balance the following equations

- i. $\text{FeCl}_3 + \text{NH}_4\text{OH} \longrightarrow \text{Fe}(\text{OH})_3 + \text{NH}_4\text{Cl}$
- ii. $\text{Na}_2\text{S}_2\text{O}_3 + \text{I}_2 \longrightarrow \text{Na}_2\text{S}_4\text{O}_6 + 2\text{NaI}$

20. What change in colour is observed when white silver chloride is left exposed to sunlight?
State the type of chemical reaction in this change.

All the Work should be done in a separate copy.

SUBJECT – BIOLOGY

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