

CARMEL CONVENT SCHOOL KUNJWANI, JAMMU
HOLIDAY HOMEWORK
SESSION 2023-2024

Class: X

Theme : One Earth, One Family, One Future

In our growing and developing world it is very important to think about the resources we are using. We need to adopt sustainable practices to ensure that we are creating a cleaner, greener and bluer future.



SECTION A(PHYSICS)

WHERE TO DO: CLASSCOPY/NOTECOPY

WHOM TO SUBMIT: SUBJECT TEACHER

WHEN TO SUBMIT: ON THE OPENING DAY OF SCHOOL

APPLICATION BASED (NUMERICAL ANALYSIS):

1. An object is placed 20cm in front of a plane mirror. The mirror is moved 2cm towards the object. What is the distance between the positions of the original and final images seen in the mirror?
2. At what distance from a concave mirror of focal length 10cm should an object be placed so that (i) its real image is formed 20cm from the mirror (ii) its virtual image is formed 20cm from the mirror.

DIAGRAM BASED QUESTIONS (DRAW RAY DIAGRAM PROPERLY):

(FOR RAY DIAGRAM: USE SEPARATE A4 SIZE PAGES)

3. A ray of light strikes a plane mirror PQ at an angle of incidence 30° , is reflected from the plane mirror and then strikes a second plane mirror QR placed at right angles to the first mirror. What will be the angle of reflection at the second mirror? (Draw ray diagram to support your answer)

4. Draw ray diagrams to show the formation of images when the object is placed in front of a converging mirror: (i) between pole and focus (ii) between its centre of curvature and focus.

5. What happens to the image when the object is moved away from a convex mirror, gradually? Draw ray diagrams to show this.

SECTION – B: CHEMISTRY

WHERE TO DO: CLASSCOPY/NOTECOPY

WHOM TO SUBMIT: SUBJECT TEACHER

WHEN TO SUBMIT: ON THE OPENING DAY OF SCHOOL

PROJECT BASED

Prepare Your Own Indicator:

- Crush beetroot in a mortar.
- Add sufficient water to obtain the extract.
- Filter the extract by the procedure learnt by you in earlier classes.
- Collect the filtrate to test the substances you may have tasted earlier.
- Arrange four test tubes in a test tube stand and label them as A,B,C and D. Pour 2 mL each of lemon juice solution, soda-water, vinegar and baking soda solution in them respectively.
- Put 2-3 drops of the beetroot extract in each test tube and note the colour change if any.

APPLICATION BASED

*Write a power point presentation on the "Approaches for carbon Capture & it's utilization with flowchart & diagrams.

1. Define the following chemical reactions and give one example of each: a) Displacement reaction b) Precipitation reaction

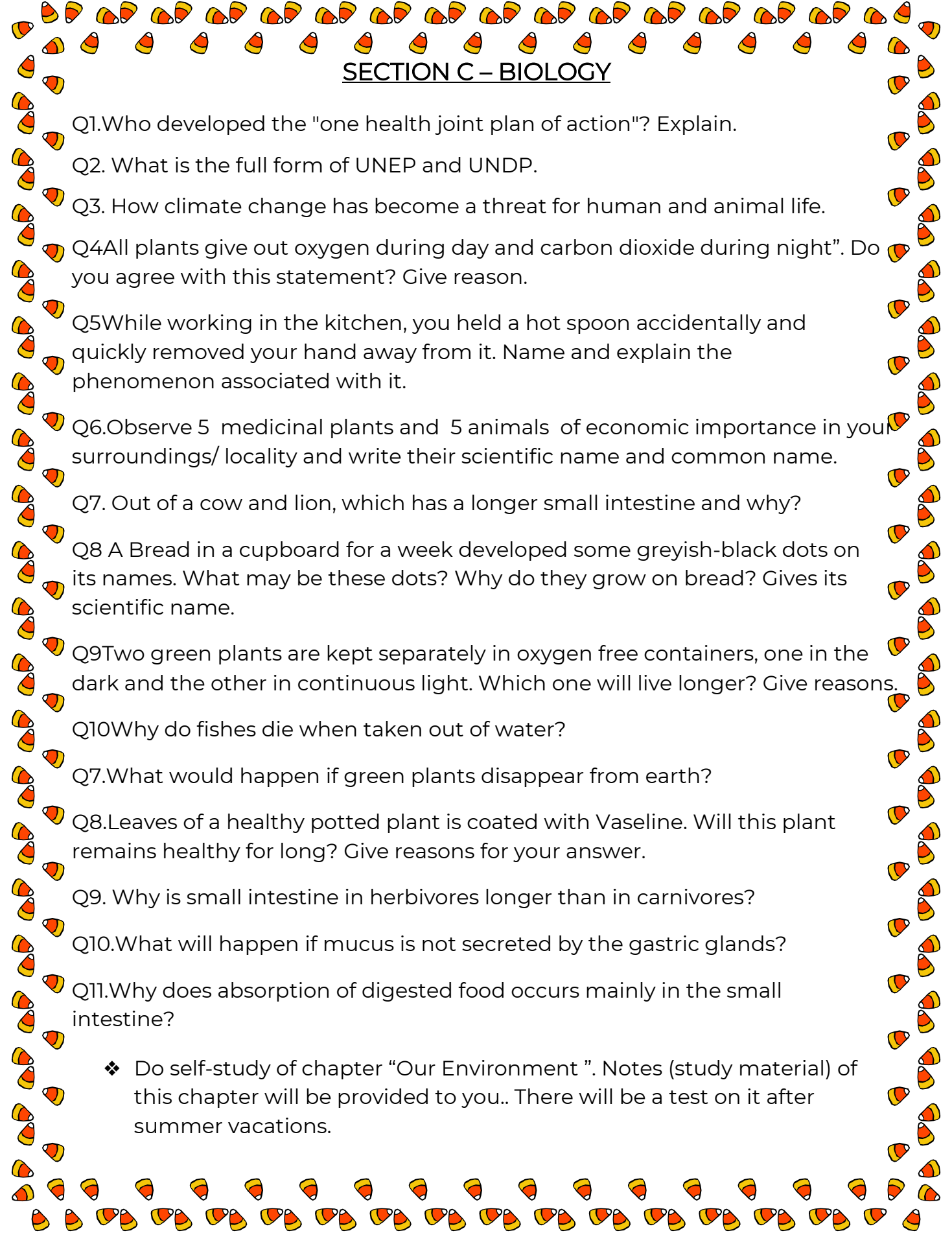
2. Identify the oxidising and reducing agent

in the following reactions: $\text{CuO} + \text{H}_2 \rightarrow \text{Cu} + \text{H}_2\text{O}$

3. On heating blue colour powder of copper (II) nitrate in a boiling tube, copper oxide (black), oxygen gas and a brown gas X is formed: i) Identify the brown gas X evolved. ii) Name the type of reaction. iii) Write a balanced chemical equation for it.

4. A small amount of quick lime is added to water in a beaker. a) Name the type of reaction. b) State two observations that you will make in this reaction.

5. Write the differences between combination and decomposition reaction giving examples of each.



SECTION C – BIOLOGY

Q1. Who developed the "one health joint plan of action"? Explain.

Q2. What is the full form of UNEP and UNDP.

Q3. How climate change has become a threat for human and animal life.

Q4. All plants give out oxygen during day and carbon dioxide during night". Do you agree with this statement? Give reason.

Q5. While working in the kitchen, you held a hot spoon accidentally and quickly removed your hand away from it. Name and explain the phenomenon associated with it.

Q6. Observe 5 medicinal plants and 5 animals of economic importance in your surroundings/ locality and write their scientific name and common name.

Q7. Out of a cow and lion, which has a longer small intestine and why?

Q8. A Bread in a cupboard for a week developed some greyish-black dots on its surface. What may be these dots? Why do they grow on bread? Give its scientific name.

Q9. Two green plants are kept separately in oxygen free containers, one in the dark and the other in continuous light. Which one will live longer? Give reasons.

Q10. Why do fishes die when taken out of water?

Q7. What would happen if green plants disappear from earth?

Q8. Leaves of a healthy potted plant is coated with Vaseline. Will this plant remain healthy for long? Give reasons for your answer.

Q9. Why is small intestine in herbivores longer than in carnivores?

Q10. What will happen if mucus is not secreted by the gastric glands?

Q11. Why does absorption of digested food occur mainly in the small intestine?

- ❖ Do self-study of chapter "Our Environment". Notes (study material) of this chapter will be provided to you.. There will be a test on it after summer vacations.



Maths

Prepare a ppt on G20 and India Presidency

General Instructions:

1. Project assigned to you is an Individual task.
2. The project should have less than 10 slides
3. The project should be original.
4. The project should contain Cover Page, Table of contents, Acknowledgement Headings and subheadings

Collect the GDP of previous 5 years of any three member countries of G20 and three non-member countries. Compare the data using line graph or pie chart. Write a report covering your observation about the two types.

• Collect data of any one country participating in G20 about women empowerment and draw its Bar graph. Recognise top 10 women-led start-ups in the year 2022-23, explain any two in details like: start-up idea, initial costing, and details of product, marketing and how they generate revenue. Compare the contribution of top 5 start-ups in GDP using line graph. • Draw a Pie chart which depicts the different business run by women entrepreneur.

Social Science

R.no 1-20

- 1) Create a mind map of G-20 Agenda.
- 2) Explain its elements with the help of pictures.

R.NO 21-40

- 1) Draw the picture of logo of G-20 India 2023 and depict it's significance.
- 2) How can you think the India can benefit from G-20 Summit.

R.NO 41- 56

- 1) Through a collage, show the greener and cleaner environment to G-20 countries and their leaders.
- 2) Explain how world is One Family (The need to live together and living with others)

★ FOR ALL

★ WRITE THE PROSPECT OF 2023 G20 SUMMIT FOR COUNTRY OF INDIA IN INDUSTRIAL SECTOR. PRESENT THIS WORK IN A-4 SIZE PAPER WITHIN 200 WORDS.

Hindi

1. भारत की G20 प्रेसिडेंसी थी मवसुधैव कुटुंबकम या 'एक पृथ्वी एक परिवार एक भविष्य है' का पूर्णरूप क्या है? सम्मेलन में कितने सदस्य देश शामिल होते हैं इसका मुख्यालय कहां स्थित है? और साथ में G20 शिखर सम्मेलन 2023 कहां आयोजित हुआ था और इसकी शुरुआत किस रूप में हुई थी?

2. G20 सम्मेलन पर कोई दो नारा लेखन कीजिए

सभी कार्य A4 रंगीन पेज पर करें।

ENGLISH

Students, we have learn about G20 its purposes activities and how India presidency has prompt many activities for all to participate and contribute now try the following questions based on your reading G20 .

Qno1: how do you think India can benefit from its G20 presidency?

Qno2: what can India offers to G20 countries as its president?

Qno3: as a student write a letter to the prime minister of India suggesting him and important ideas, points or actions fir school students in the G20 agenda .what would you suggest for green and cleaner environment to G20 countries and their leader

Use interleaf sheets and attach them in a file with illustrations and pictures.

Qno.4:Script Writing

How to do: Write a script on any social issue It should be divided in to iv scenes .

Name of the characters should be written on a different pages.

Where to do: A4 SIZE sheet

Paraneter: Contents, presentation, setting of a plot



Information Technology

Class 10

Make a PowerPoint presentation on Care and Maintenance of a Computer (10 slides at the most)

Design a poster exhibiting the Flags of G20 member countries.

Prepare an Excel sheet with the following information of G20 member Countries.

G20 Summit	Date	Host	
Country	Capital	Venue& Host City	Host Leader

ART

THINK AND CREATE A LOGO OF G20 AND MAKE A POSTER OF IT.

Physical Education

1. History and classification of athletics and draw athletics track and long jump
2. History and rule of kabaddi and draw kabaddi and volleyball ground .
3. Do physical exercises and yoga at home stay fit and health.

Happy Holidays

Sanjeet & Madhumati