



NEW ERA PUBLIC SCHOOL, PATNA

(Affiliated to C.B.S.E. Delhi, Upto 10+2 level)

Diwali & Chhath Puja Holiday Homework (2024-2025)

Class – 11 Science

English:-

1. Poster Making : Design a poster on the topic "Water as lifeline".

Instructions:

- Use an A4 size sheet for the poster.
- Choose relevant blue tones to symbolize the vital and life-sustaining essence of water.
- Incorporate central images that depict the importance of water, such as rivers, lakes, oceans, and water droplets, along with scenes of people and wildlife relying on water.
- Include impactful slogans that highlight the theme.
- Ensure the heading is aligned with the theme, clearly stating "Water: Our Lifeline."
- Add relevant hashtags like #Water Conservation, #SaveWater, #WaterIs Life, and #Protect OurWater to amplify the message.

Science:-

Physics:-

Solve all NCERT Book exercise problems of motion in plane.

Chemistry:-

Solve all NCERT Index and Exercise Problems of Redox Reactions.

Biology:-

Biomolecule

1. Describe the structure and function of carbohydrates, highlighting their importance in living organisms.
2. Explain the differences between monosaccharides, disaccharides, and polysaccharides, providing examples.
3. What are proteins? Discuss their classification, structure, and biological functions.
4. Describe the classification and functions of lipids in biological systems.
5. Explain the structure, synthesis, and functions of nucleic acids.
6. Compare and contrast DNA and RNA, highlighting their roles in genetic information.
7. Describe the types and functions of enzymes, including their classification.
8. What are vitamins? Classify and explain their functions in biological systems.

9. Explain the structure and functions of hormones, including their classification.
10. Discuss the importance of biomolecules in maintaining life processes.
11. Define respiration and explain its importance in plants.
12. Describe the stages of cellular respiration: glycolysis, Krebs cycle, and electron transport chain.
13. Compare and contrast aerobic and anaerobic respiration.
14. Explain the process of fermentation.
15. Describe the role of mitochondria in cellular respiration.
16. Discuss the differences between substrate-level phosphorylation and oxidative phosphorylation.
17. What is the significance of the electron transport chain?
18. Explain how plants adapt to different respiratory pathways.
19. Compare respiration in plants and animals.
20. Discuss the energy yield from complete oxidation of glucose.

Answer Requirements:

- Each answer should be approximately 150-200 words.
- Use diagrams and flowcharts where necessary.
- Label and explain diagrams.
- Use headings and subheadings for clarity.

Submission Guidelines:

- Use A4-sized paper.
- Leave 1-inch margins on all sides.
- Use legible handwriting.
- Staple or bind the pages.
- Submit on the designated date.

Project work:

Prepare a 3D model on Plasma membrane

Prepare a 3D str of Structure of Protein.

Maths:-

Do complete Exercise -10.3 and Miscellaneous exercise on Chapter 10 (Straight Lines) from NCERT Book

IP :-

Learn and Write all question answer of Ch-4 (Working with Lists and Dictionaries)

in School Copy.

Note: The School will remain closed on account of Deepawali & Chhath Puja between 30th of October, 2024 (Wednesday) to 09th of November, 2024 (Saturday).

• It will re-open on 11th of November, 2024 (Monday).



**!! Wish you a Very
Happy Diwali & Chhath Puja !!**