HOLIDAYS HOME WORK

CLASS-7

1. Interdisciplinary project-

Andaman largely depends on **diesel**, which releases harmful gases when burned.

a) Name any two gases released from burning diesel that can make rainwater **acidic**.

b) How does this affect the nature of water bodies and marine life?

c) Suggest **two renewable energy sources** suitable for Andaman. Paste relevant pictures.
d) Explain how using renewable energy can help maintain the **natural (neutral/slightly basic) balance** of water.

e) "If ocean water becomes more acidic instead of slightly basic due to rainwater, it can harm coral reefs." Do you agree with this statement? Give reasons. Also, paste pictures depicting harmful effects.

Note- Do this work on A 4 size ruled sheets.

2. Art integrated project-

Creativity doesn't wait for the perfect moment"

As a part of thrust on experiential learning, art integrated education is embedded in the teaching learning process to create joyful learning experiences for the student

Art and Science are closely connected in our daily life. Scientific concepts can be expressed creatively through art forms like rangoli.

Use A-3 size plain sheet of white color to make this project.

In this project, use natural indicators such as turmeric, red rose extract, purple cabbage leaf and other substances to create a colorful rangoli design. You can use as many acidic and basic substances found in our kitchen and home. The color changes in the rangoli help us understand the properties of **acidic, basic and neutral substances** in an interesting and visual way.

4) Revise all the work done so far in book and notebook . **Revison Assessments to be completed (Take Printouts and paste in your science notebook on the plain side. On the ruled side you will write answers.)** SCIENCE WORKSHEET

Chapter 1: *Ever-Evolving World of Science*

A. MCQs

1. Science is described as “ever-evolving” because:
   a) It never changes
   b) New discoveries keep happening
   c) It is only based on old ideas
   d) It is limited to laboratories

2. Which of the following best represents scientific thinking?
   a) Blind belief
   b) Asking questions and testing ideas
   c) Ignoring evidence
   d) Guessing

3. Which of the following is an invention?
   a) Gravity
   b) Electricity in nature
   c) Mobile phone
   d) Sunlight

B. Very Short Answer Questions

4. What is science?

5. What is meant by invention?

6. Why do scientific ideas change over time?

C. Long Answer Questions

7. Explain why science is called an ever-evolving field. Give examples.

8. Describe the role of observation and experimentation in science.

9. Differentiate between discovery and invention with examples.

D. Case-Based Questions

Case 1:

Riya noticed that her shadow changes length during the day. She became curious and started observing it at different times. She also discussed it with her teacher and learned about the position of the Sun.

Questions:

10. What quality of a scientist is shown by Riya?
11. What role did observation play here?
12. What would happen if Riya did not ask questions?

Case 2:

Earlier, people believed that diseases were caused by supernatural forces. Later, scientists discovered that microorganisms cause many diseases.

Questions:

13. What does this example show about science?
14. Is this a discovery or an invention?
15. Why did the earlier belief change?

Case 3:

A group of students designed a simple water filter using sand, gravel, and charcoal after learning about purification methods in class.

Questions:

16. Is this a discovery or an invention?
17. Which scientific skills did the students use?
18. How does this activity show that science is useful in daily life?

Chapter 2: *Exploring Substances – Acidic, Basic and Neutral*

A. MCQs

1. Which of the following is acidic in nature?
   a) Soap solution
   b) Lemon juice
   c) Baking soda
   d) Toothpaste

2. A substance that turns red litmus paper blue is:
   a) Acid
   b) Base
   c) Neutral
   d) Salt

3. Which of the following is neutral?
   a) Vinegar
   b) Lemon juice
   c) Distilled water
   d) Soap

B. Very Short Answer Questions

4. What is an acid?
5. Name one natural indicator.
6. What is a neutral substance?

C. Long Answer Questions

7. Explain the properties of acids and bases with examples.
8. Describe how litmus paper is used to test substances.
9. Explain neutralization with an example from daily life.

D. Case-Based Questions

Case 1:

Rohan tested lemon juice and soap solution with litmus paper. Lemon juice turned blue litmus red, while soap solution turned red litmus blue.

Questions:
10. What is the nature of lemon juice?
11. What is the nature of soap solution?
12. What conclusion can you draw from this activity?

Case 2:

A student used turmeric paste on different substances. It remained yellow with lemon juice but turned reddish-brown with soap.

Questions:
13. What type of indicator is turmeric?
14. What does the color change indicate?
15. Classify lemon juice and soap based on this test.

Case 3:

While working in the lab, a student accidentally spilled an acid on the table. The teacher added a base to neutralize it.

Questions:

16. What is this process called?
17. Why is neutralization important?
18. Give one more example of neutralization in daily life.

5). Reading and vocabulary enrichment

🌞📚 *Story Time with Science!*

Lazy summer afternoons are perfect for reading! Choose an interesting **science-based storybook**, read it (online/offline), and enjoy discussing it with your family.

Your Task

4. Read **any ONE book** from the list below
5. Discuss the story with your family
6. Write in your science copy.

a. A short summary of the story

b. New words you learned

c. Scientific concepts you discovered

<u>Book Suggestions-</u>

1. The Amazing Adventures of Science – STEM Story Book
2. Just Science- Delightful stories with science facts
3. We learn science through stories