Summer Vacation Homework
Subject: Science
Class: VII

Chapters: Exploring the Substance: Acid, Base, and Neutral; Light: Shadows and Reflections; Life Processes in Animals

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Part A: Exploring Acids, Bases, and Neutrals

1. Prepare a simple table at home:
   - Test 5 household substances (like lemon juice, soap solution, vinegar, saltwater, milk) with natural indicators (turmeric, red cabbage, or litmus paper if available).
   - Record whether they are acidic, basic, or neutral.
2. Write a short paragraph (5–7 lines) explaining:
   - How you identified acids, bases, and neutrals.
   - Why using indicators is important.
   - Write a short note on the importance of neutral substances in daily life.
   - Explain the neutralization reaction with an example from daily life.
   - Differentiate between acidic and basic substances based on their reaction with litmus.

Bonus: Find out what happens when turmeric is sprinkled on soap water. Explain the color change!

Part B: Light – Shadows and Reflections

1. Make a shadow puppet theatre:
   - Cut out simple animal or object shapes from black paper.
   - Use a torch and a plain wall or screen to show how shadows form.
2. Answer the following in your notebook:
   - Why are shadows formed?
   - How does the size of a shadow change when the object moves closer or farther from the light source?
   - What is the difference between regular and diffused reflection?
   - Draw a labeled diagram showing incident ray, reflected ray, normal, angle of incidence, and angle of reflection.
   - State the two laws of reflection.

- Explain the difference between real images and virtual images with suitable examples.
- If a mirror is broken into pieces, will each piece still reflect light? Why or why not?

Part C: Life Processes in Animals

1. Make a colorful poster or flowchart showing:
   - The process of digestion in humans (starting from the mouth to the intestines).

Bonus: Write the names of three animals whose life processes (like breathing or digestion) are different from humans and explain briefly.

Instructions:

- All activities should be done neatly in a separate notebook or scrapbook.
- Use pictures, drawings, and colors to make your work attractive.
- Submit your homework on the first day after summer vacation.

Enjoy your learning and have a fun-filled holiday!

SCIENCE
CLASS VIII
SUMMER VACATION HOMEWORK

Write the answer of following questions:

1. What are food miles?

2. We feel cold when sanitiser is applied to the skin.why?

3. write the name of all nutrients and their deficiency diseases.

4.write the definition of seed germination.

5.what is a balanced diet and why should we take a balanced diet.

6.How does water help in seed germination?

7.How is millet cultivation helpful for the farmers?

8.Effect of changing habitats of animals on biodiversity.

9.Draw a water cycle and identify various processes involved in it like evaporation,condensation.

10.Draw a flow chart of the conversion of different states of matter.