

INTERNATIONAL INDIAN SCHOOL BURAIDAH
WORKSHEET FOR THE ACADEMIC YEAR 2026-27

Class-7th Subject : Science

LESSON: 2 Exploring Substances: Acidic, Basic, and Neutral

A. Choose the correct options:

1. Which of the following is a feature of acidic substance?

- (a) Turns red litmus paper blue (b) Turns blue litmus paper red
(c) Feels slippery (d) Has a bitter taste

2. Which of the following is an example of a basic substance?

- (a) Vinegar (b) Lemon juice (c) Soap solution (d) Orange juice

3. Select the incorrect match pair regarding acids and bases.

- (a) Vinegar – Acid (b) Baking soda – Base (c) Lemon juice – Base (d) Soap solution – Base

4. What colour does red rose extract turn in a basic solution?

- (a) Red (b) Green (c) Blue (d) Yellow

5. Which of the following is an acid-base indicator?

- (a) Turmeric (b) Vinegar (c) Baking soda (d) Lime water

6. Which of the following is an example of an olfactory indicator?

- (a) Turmeric (b) Rose extract (c) Onion (d) Litmus

7. What happens when an acid and a base are mixed?

- (a) They form salt and water. (b) They release a gas. (c) They form a new acid. (d) They form a new base.

8. Which of the following is not a property of bases?

- (a) They turn red litmus paper blue. (b) They have bitter taste.
(c) They feel slippery. (d) They have sour taste.

9. Which of the following contains acid?

- (a) lime water (b) baking soda (c) soap (d) vinegar

10. Which substance can be added to acidic soil to neutralise its acidity?

- (a) Lime (b) Water (c) Organic matter (d) Baking soda

B. Fill in the blanks:

1. Litmus is obtained from _____ and is used as an acid-base indicator.
2. To neutralise acidic factory waste in the lake, _____ substances should be added.
3. Substances that turn blue litmus paper red are _____ in nature.
4. Baking soda solution feels _____ when rubbed between fingers.
5. Turmeric paper can be used to test for _____ substances.
6. The fish population in a lake can decline due to _____ waste being released into the water.
7. The yellow colour of turmeric turns _____ in basic solutions.
8. When the soil is too basic, to improve its quality _____ must be added to the soil.
9. Lemon juice and vinegar taste _____ because they contain acid.
10. If the extract of red rose turns the liquid X to green, then the nature of liquid X is _____.

C. The questions given below consist of an Assertion and a Reason. Based on that, choose the appropriate option.

- (a) Both Assertion and Reason are true, and Reason is the correct explanation of Assertion.
(b) Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.
(c) The assertion is true, but the Reason is false.
(d) The assertion is false, but the Reason is true.

1. **Assertion:** Litmus is extracted from Lichens.

Reason: Blue litmus paper remains blue in distilled water.

2. **Assertion:** Solutions that do not change the colour of red or blue litmus are called basic solutions.

Reason: Acidic solutions turn blue litmus red.

D. One word answer type questions:

1. A substance that shows different colours with acids and bases.
2. Which solution turns red litmus blue?
3. What is the taste of bases?
4. Name a natural indicator used at home.
5. Name of acid found in tamarind

E. Case-Based Question

1. Read the paragraph and answer the following questions:

Ananya was helping her mother in the kitchen. She accidentally spilled some turmeric paste on her apron. Later, she cleaned the stain using soap and water. To her surprise, the yellow turmeric stain turned red where the soap touched it. Anita got curious and decided to mix the turmeric paste with vinegar and baking soda.

(i). What property of turmeric does this experiment show?

(a) It is used for cooking (b) It is yellow (c) It can act as a natural indicator (d) It dissolves in water

(ii). What happens when baking soda is added to turmeric paste?

(a) No change (b) It turns black (c) It turns red (d) It remains yellow

(iii). What will happen if vinegar is added to the turmeric paste?

(a) It turns green (b) It turns black (c) It turns red (d) It remains yellow
