



# NCERT Solutions for 7th Class Science: Chapter 5-Acids, Bases and Salts



**IndCareer**  
Schools



indCareer



indCareer



indCareer

## NCERT Solutions for 7th Class Science: Chapter 5-Acids, Bases and Salts

Class 7: Science Chapter 5 solutions. Complete Class 7 Science Chapter 5 Notes.

### NCERT Solutions for 7th Class Science: Chapter 5-Acids, Bases and Salts

NCERT 7th Science Chapter 5, class 7 Science Chapter 5 solutions

Page No: 56

#### Exercises

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-science-chapter-5-acids-bases-and-salts/>

**1. State differences between acids and bases.**

**Answer**

<b>Acids</b>	<b>Bases</b>
(i) Acids are sour in taste.	(i) Bases are bitter in taste.
(ii) It turns litmus paper red.	(ii) It turns litmus paper blue.
(iii) It doesn't change the colour of turmeric indicator.	(iii) It changes the colour of turmeric indicator to red.
(iv) It doesn't feel soapy on touching.	(iv) It feels soapy on touching.

**2. Ammonia is found in many household products, such as window cleaners. It turns red litmus blue. What is its nature?**

**Answer**

Ammonia turns red litmus blue so it is basic in nature.

**3. Name the source from which litmus solution is obtained. What is the use of this solution?**

**Answer**

Litmus solution is obtained from lichens dissolved in distilled water.

It is used to detect the acidic and basic characteristic of a substance as it changes its colour to red in acidic medium and into blue in basic medium.

**4. Is the distilled water acidic/basic/neutral? How would you verify it?**

**Answer**

The distilled water is neutral.

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-science-chapter-5-acids-bases-and-salts/>

Litmus paper can be used to verify whether the distilled water acidic/basic/neutral.

Distilled water doesn't change the colour of blue or red litmus paper. So, it is neutral in nature.

**5. Describe the process of neutralisation with the help of an example.**

**Answer**

When an acid solution and a base solution are mixed in suitable amounts both the solutions

neutralise the effect of each other and a new substance salt is formed. This process is called neutralisation.

When the solution of sodium hydroxide (a base) and hydrochloric acid (an acid) is mixed in test tube in proper ratio, both neutralize each other. In this reaction, a new substance sodium chloride is formed. The mixture obtained is neutral in nature which can be justified by litmus solution or phenolphthalein solution.

The reaction can be written as:

Hydrochloric acid(HCl) + Sodium hydroxide(NaOH) → Sodium Chloride(NaCl) + Water (H<sub>2</sub>O)

**6. Mark 'T' if the statement is true and 'F' if it is false:**

(i) Nitric acid turns red litmus blue. (T/F)

(ii) Sodium hydroxide turns blue litmus red. (T/F)

(iii) Sodium hydroxide and hydrochloric acid neutralise each other and form salt and water. (T/F)

(iv) Indicator is a substance which shows different colours in acidic and basic solutions. (T/F)

(v) Tooth decay is caused by the presence of a base. (T/F)

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-science-chapter-5-acids-bases-and-salts/>

**Answer**

(i) F

(ii) F

(iii) T

(iv) T

(v) F

**7. Dorji has a few bottles of soft drink in his restaurant. But, unfortunately, these are not labelled. He has to serve the drinks on the demand of customers. One customer wants acidic drink, another wants basic and third one wants neutral drink. How will Dorji decide which drink is to be served to whom?**

**Answer**

Dorji will take red and blue litmus paper and dip it into every bottles of soft drink. The drink in which red litmus paper turns blue is bottle of basic drink. The drink in which blue litmus paper turns red is bottle of acidic drink. The drink in which both litmus paper show no changes in colour is of neutral drink.

**8. Explain why:**

**(a) An antacid tablet is taken when you suffer from acidity.**

**(b) Calamine solution is applied on the skin when an ant bites.**

**(c) Factory waste is neutralised before disposing it into the water bodies.**

**Answer**

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-science-chapter-5-acids-bases-and-salts/>

(a) Excessive amount of acids in stomach causes pain and antacids prove relief from that pain. Antacids neutralises the effect of excessive acid as it is a base and acts against the acids.

(b) When an ant bites, it injects the acidic liquid (formic acid) into the skin. Calamine solution contains zinc carbonate which neutralises the effect of acid injected by the ant.

(c) Factory waste is neutralised before disposing it into the water bodies because these wastes contain chemicals and harmful acids which may be harmful for the aquatic life and also its leads to pollution of water.

Page No: 57

**9. Three liquids are given to you. One is hydrochloric acid, another is sodium hydroxide and third is a sugar solution. How will you identify them? You have only turmeric indicator.**

**Answer**

Dip the turmeric indicator in each liquids. The liquid in which the colour of turmeric indicator changes to red is basic in nature i.e. sodium hydroxide. Since, we already identified sodium hydroxide. We will pour the sodium hydroxide in other two bottles. The liquid which get warm after pouring the sodium hydroxide(base) in it is of hydrochloric acid as heat gets evolved in the neutralisation process. The last one which shows no effect is liquid of sugar solution.

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-science-chapter-5-acids-bases-and-salts/>

**10. Blue litmus paper is dipped in a solution. It remains blue. What is the nature of the solution? Explain.**

**Answer**

The above solution could be a base or a neutral solution because blue litmus paper doesn't change its colour in the neutral as well as basic solution.

**11. Consider the following statements:**

**(a) Both acids and bases change colour of all indicators.**

**(b) If an indicator gives a colour change with an acid, it does not give a change with a base.**

**(c) If an indicator changes colour with a base, it does not change colour with an acid.**

**(d) Change of colour in an acid and a base depends on the type of the indicator.**

**Which of these statements are correct?**

(i) All four

(ii) a and d

(iii) b and c

(iv) only d

**Answer**

(iv) only d

NCERT 7th Science Chapter 5, class 7 Science Chapter 5 solutions

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-science-chapter-5-acids-bases-and-salts/>



# Chapterwise NCERT Solutions for Class 7 Science :

- Chapter 1 Nutrition in Plants
- Chapter 2 Nutrition in Animals
- Chapter 3 Fibre to Fabric
- Chapter 4 Heat
- Chapter 5 Acids, Bases and Salts
- Chapter 6 Physical and Chemical Changes
- Chapter 7 Weather, Climate and Adaptations of Animals to Climate
- Chapter 8 Winds, Storms and Cyclones
- Chapter 9 Soil
- Chapter 10 Respiration in Organisms
- Chapter 11 Transportation in Animals and Plants
- Chapter 12 Reproduction in Plants
- Chapter 13 Motion and Time
- Chapter 14 Electric Current and Its Effects
- Chapter 15 Light
- Chapter 16 Water: A Precious Resource
- Chapter 17 Forests: Our Lifeline
- Chapter 18 Wastewater Story

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-science-chapter-5-acids-bases-and-salts/>



## About NCERT

The National Council of Educational Research and Training is an autonomous organization of the Government of India which was established in 1961 as a literary, scientific, and charitable Society under the Societies Registration Act. The major objectives of NCERT and its constituent units are to: undertake, promote and coordinate research in areas related to school education; prepare and publish model textbooks, supplementary material, newsletters, journals and develop educational kits, multimedia digital materials, etc. Organise pre-service and in-service training of teachers; develop and disseminate innovative educational techniques and practices; collaborate and network with state educational departments, universities, NGOs and other educational institutions; act as a clearing house for ideas and information in matters related to school education; and act as a nodal agency for achieving the goals of Universalisation of Elementary Education. In addition to research, development, training, extension, publication and dissemination activities, NCERT is an implementation agency for bilateral cultural exchange programmes with other countries in the field of school education. Its headquarters are located at Sri Aurobindo Marg in New Delhi. [Visit the Official NCERT website](#) to learn more.

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-science-chapter-5-acids-bases-and-salts/>