

Indicators Quiz PDF

Indicators Quiz PDF

Disclaimer: *The indicators quiz pdf was generated with the help of StudyBlaze AI. Please be aware that AI can make mistakes. Please consult your teacher if you're unsure about your solution or think there might have been a mistake. Or reach out directly to the StudyBlaze team at max@studyblaze.io.*

Which factors can affect the accuracy of an indicator? (Select all that apply)

- Temperature
- Volume of the solution
- Light exposure
- Concentration of the solution

What color does universal indicator turn in a strongly acidic solution?

- Blue
- Green
- Yellow
- Red

At what pH does litmus paper change color?

- 4
- 10
- 12
- 7

Which of the following are examples of synthetic indicators? (Select all that apply)

- Phenolphthalein
- Methyl orange
- Red cabbage juice
- Bromothymol blue

Which of the following are limitations of using indicators? (Select all that apply)

- They provide an approximate pH value
- They are more precise than electronic pH meters

- They can change color due to light exposure
- They can be affected by temperature

What is the transition pH range for phenolphthalein?

- 3.1 to 4.4
- 4.5 to 6.0
- 11.0 to 12.5
- 8.2 to 10.0

What is the primary purpose of an indicator in chemistry?

- To measure temperature
- To determine the pH level of a solution
- To increase the volume of a solution
- To change the state of matter

Which indicator is commonly used in titrations involving strong acids and strong bases?

- Methyl orange
- Litmus
- Bromothymol blue
- Phenolphthalein

Which of the following are true about the universal indicator? (Select all that apply)

- It is a single chemical compound
- It shows a gradual color change over a wide pH range
- It can indicate both acidic and basic solutions
- It is only used for educational purposes

What are some applications of indicators? (Select all that apply)

- Determining the endpoint of a titration
- Measuring electrical conductivity
- Testing the pH of soil
- Illustrating acid-base reactions in education

Which of the following is a natural indicator?

- Phenolphthalein
- Red cabbage juice
- Bromothymol blue
- Methyl orange

Which indicator is colorless in acidic solutions and pink in basic solutions?

- Methyl orange
- Bromothymol blue
- Litmus
- Phenolphthalein

Which of the following are properties of indicators? (Select all that apply)

- They change color at a specific pH
- They can measure temperature
- They can be used to determine the concentration of a solution
- They provide a visual representation of pH

Which of the following is a synthetic indicator?

- Red cabbage juice
- Litmus
- Turmeric
- Bromothymol blue