Science
Guessing

🎯 Learning Targets

1. Use the limitations of the ACT test format to improve the accuracy of guesses.

2. Apply statistically effective strategies when making a random guess.

3. Practice applying the Column Counting strategy.

Instructions

Use Guessing strategies to answer the following question.

Guessing

On the Science test, the right answers like to fit in with the in crowd. When you have to guess, use one of these strategies to improve accuracy:

1. **Get trendy.** Pick a choice that's consistent with the trends you see in the data.

2. **Blend in.** Choose the answer that fits based on the patterns in the data.
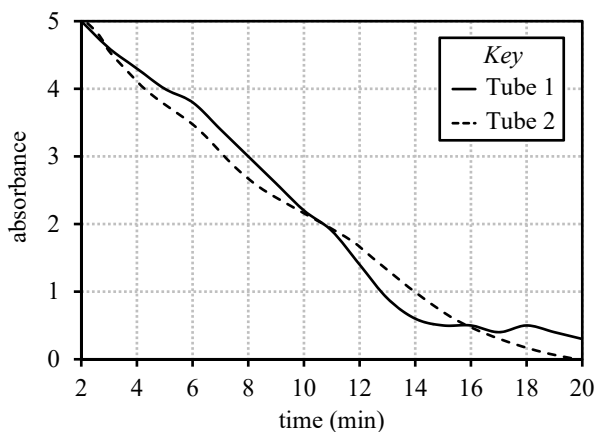

Figure 1

1. According to Figure 1, for Tube 2, as time increases, absorption:

    A. increases only.
    B. decreases only.
    C. increases, then decreases.
    D. decreases, then increases.

Instructions

Use Guessing strategies to answer the following question.

Table 1	
Resistance = 7.5 kΩ	
Capacitance (µF)	Time constant (RC)
1.5	11.25 ms
2.5	18.75 ms
6.0	45.00 ms
10.0	75.00 ms
12.5	93.75 ms

2. Based on the data in Table 1, if a capacitor having a value of 3 µF is in series with a resistor having a value of 7.5 kΩ, the time required for the capacitor to reach 63% of its full charge will be:

   F. less than 11.25 ms.
   G. between 11.25 ms and 18.75 ms.
   H. between 18.75 ms and 45.00 ms.
   J. greater than 45.00 ms.

Instructions

Use Guessing strategies to fill in the answer sheet.

> **Bubble Sheet Strategies**
>
> On the test, a wild guess is better than no guess at all. When you have to guess, use one of these strategies to improve accuracy:
>
> **1.** Use statistics to your advantage. In the back half of the test, avoid the C/H column.
>
> **2.** Column count to even out. Try to get the same number of answers for each letter option by dropping random guesses into the emptiest column.

Test 4 - Science

1. Ⓐ Ⓑ Ⓒ Ⓓ	8. Ⓕ Ⓖ Ⓗ Ⓙ	15. Ⓐ Ⓑ Ⓒ Ⓓ	22. Ⓕ Ⓖ Ⓗ Ⓙ	29. Ⓐ Ⓑ Ⓒ Ⓓ	36. Ⓕ Ⓖ Ⓗ Ⓙ
2. Ⓕ Ⓖ Ⓗ Ⓙ	9. Ⓐ Ⓑ Ⓒ Ⓓ	16. Ⓕ Ⓖ Ⓗ Ⓙ	23. Ⓐ Ⓑ Ⓒ Ⓓ	30. Ⓕ Ⓖ Ⓗ Ⓙ	37. Ⓐ Ⓑ Ⓒ Ⓓ
3. Ⓐ Ⓑ Ⓒ Ⓓ	10. Ⓕ Ⓖ Ⓗ Ⓙ	17. Ⓐ Ⓑ Ⓒ Ⓓ	24. Ⓕ Ⓖ Ⓗ Ⓙ	31. Ⓐ Ⓑ Ⓒ Ⓓ	38. Ⓕ Ⓖ Ⓗ Ⓙ
4. Ⓕ Ⓖ Ⓗ Ⓙ	11. Ⓐ Ⓑ Ⓒ Ⓓ	18. Ⓕ Ⓖ Ⓗ Ⓙ	25. Ⓐ Ⓑ Ⓒ Ⓓ	32. Ⓕ Ⓖ Ⓗ Ⓙ	39. Ⓐ Ⓑ Ⓒ Ⓓ
5. Ⓐ Ⓑ Ⓒ Ⓓ	12. Ⓕ Ⓖ Ⓗ Ⓙ	19. Ⓐ Ⓑ Ⓒ Ⓓ	26. Ⓕ Ⓖ Ⓗ Ⓙ	33. Ⓐ Ⓑ Ⓒ Ⓓ	40. Ⓕ Ⓖ Ⓗ Ⓙ
6. Ⓕ Ⓖ Ⓗ Ⓙ	13. Ⓐ Ⓑ Ⓒ Ⓓ	20. Ⓕ Ⓖ Ⓗ Ⓙ	27. Ⓐ Ⓑ Ⓒ Ⓓ	34. Ⓕ Ⓖ Ⓗ Ⓙ	
7. Ⓐ Ⓑ Ⓒ Ⓓ	14. Ⓕ Ⓖ Ⓗ Ⓙ	21. Ⓐ Ⓑ Ⓒ Ⓓ	28. Ⓕ Ⓖ Ⓗ Ⓙ	35. Ⓐ Ⓑ Ⓒ Ⓓ	

Instructions

Use Column Counting to fill in the remaining answers.

> **Bubble Sheet Strategies**
>
> On the test, a wild guess is better than no guess at all. When you have to guess, use one of these strategies to improve accuracy:
>
> 1. Use statistics to your advantage. In the back half of the test, avoid the C/H column.
>
> 2. Column count to even out. Try to get the same number of answers for each letter option by dropping random guesses into the emptiest column.

Test 4 - Science

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