

Chemistry SAT Practice Test 27

Q1. May be used in combination with a calorimeter to compare the specific heats of two substances

- A. Thermometer
- B. Conductivity tester
- C. Salt bridge
- D. Buret
- E. Graduated cylinder

Q2. Is used to measure the volume of a solid by water displacement

- A. Thermometer
- B. Conductivity tester
- C. Salt bridge
- D. Buret
- E. Graduated cylinder

Q3. Useful for adding small quantities of acid into a base

- A. Thermometer
- B. Conductivity tester
- C. Salt bridge
- D. Buret
- E. Graduated cylinder

Q4. Completes the circuit of an electrochemical cell

- A. Thermometer
- B. Conductivity tester
- C. Salt bridge
- D. Buret
- E. Graduated cylinder

Q5. Always amphoteric in nature

- A. Nucleic acids
- B. Proteins
- C. Carbohydrates
- D. Lipids
- E. Electrolytes

Q6. Found as both straight-chained and branched polymers

- A. Nucleic acids
- B. Proteins
- C. Carbohydrates
- D. Lipids
- E. Electrolytes

Q7. Deoxyribose in DNA nucleotides belongs to this family of biologically important molecules

- A. Nucleic acids
- B. Proteins
- C. Carbohydrates
- D. Lipids
- E. Electrolytes

Q8. Always ionic in nature

- A. Nucleic acids
- B. Proteins
- C. Carbohydrates
- D. Lipids
- E. Electrolytes

Q9. Tend not to be water soluble, and aggregate into droplets or molecular bilayers

- A. Nucleic acids
- B. Proteins
- C. Carbohydrates
- D. Lipids
- E. Electrolytes

Q10. Represents the decomposition of a compound into its constituent elements

- A. $\text{Ag}^+ + \text{Br}^- \rightarrow \text{AgBr}$
- B. ${}^{14}_6\text{C} \rightarrow {}^{14}_7\text{N} + {}^0_{-1}\text{e}$
- C. ${}^{234}_{92}\text{U} \rightarrow {}^{230}_{90}\text{Th} + {}^4_2\text{He}$
- D. $+ {}^{30}_{15}\text{P} \rightarrow {}^{30}_{14}\text{Si} + {}^0_1\text{e}$
- E. $2\text{HgO} \rightarrow 2\text{Hg} + \text{O}_2$

Q11. Represents alpha decay

- A. $\text{Ag}^+ + \text{Br}^- \rightarrow \text{AgBr}$
- B. ${}^{14}_6\text{C} \rightarrow {}^{14}_7\text{N} + {}^0_{-1}\text{e}$
- C. ${}^{234}_{92}\text{U} \rightarrow {}^{230}_{90}\text{Th} + {}^4_2\text{He}$
- D. $+ {}^{30}_{15}\text{P} \rightarrow {}^{30}_{14}\text{Si} + {}^0_1\text{e}$
- E. $2\text{HgO} \rightarrow 2\text{Hg} + \text{O}_2$

Q12. Causes the neutron-to-proton ratio in a nucleus to be lowered

