



Name _____ Class _____ Date _____

1

The ability of carbon to **attract** electrons is

- A greater than that of nitrogen, but less than that of oxygen
- B less than that of nitrogen, but greater than that of oxygen
- C greater than that of nitrogen and oxygen
- D less than that of nitrogen and oxygen

2

In a **potential energy diagram**, the difference between the potential energy of the **products** and the potential energy of the **reactants** is **equal** to the

- A heat of reaction
- B entropy of the reaction
- C activation energy of the forward reaction
- D activation energy of the reverse reaction

3

When butane burns in an excess of oxygen, the **principal products** are

A CO₂ and H₂O

4

Which **substance** has vibrating particles in regular, fixed positions?

A Cu(s)

5



PREVIEW

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7

- ENERGY**
- A absorbed, only
 - B released, only
 - C both absorbed and released
 - D neither absorbed nor released

- A NH₃(g)
- B NH₃(l)
- C NH₃(s)
- D NH₃(aq)

9

The **activation energy** required for a chemical reaction can be decreased by

- A increasing the surface area of the reactant
- B increasing the temperature of the reactant
- C adding a catalyst to the reaction
- D adding more reactant

10

What occurs when the temperature is **increased** in a system at equilibrium at constant pressure?

- A The rate of the forward reaction increases, and the rate of the reverse reaction decreases.
- B The rate of the forward reaction decreases, and the rate of the reverse reaction increases.
- C The rate of the endothermic reaction increases.
- D The rate of the exothermic reaction decreases.



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