

Chemistry Practice HESI A2

Section: HESI A2 Chemistry Exams • Total Questions: 10 • Format: Verified Q&A

1. What can be predicted by using the periodic table?

- (A) The properties of each element
 - (B) The charges of polyatomic ions
 - (C) The number of isotopes for each element
 - (D) The potential for discovering new elements
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2. What is the SI unit of energy?

- (A) ohm
 - (B) joule
 - (C) henry
 - (D) newton
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3. Will solids always sink in liquids?

- (A) True, a solid is hard, and liquids are not.
 - (B) True, solids are heavier than liquids.
 - (C) False, solids have a smooth surface so they will float.
 - (D) False, it depends on the density of the solid and liquid.
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4. In a double replacement reaction, which of the following occurs?

- (A) Energy in the form of heat or light is not always produced.
 - (B) The reactants can involve a variety of elements.
 - (C) A gas, solid precipitate, or compound forms in the exchange of ions.
 - (D) All of the above.
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5. The products of a reaction are CO₂ and H₂O. Which type of reaction is this most likely to be?

- (A) Synthesis
 - (B) Decomposition
 - (C) Single replacement
 - (D) Combustion
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6. What occurs to an atom with a negative charge?

- (A) Gained an electron
 - (B) Lost an electron
 - (C) Gained a proton
 - (D) Lost a proton
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7. Which of the following substances is most dense?

- (A) A block of gold weighing 12g and having a volume of 4.6cm^3
 - (B) A cube weighing 6g and having a volume of 0.91cm^3
 - (C) A block weighing 143g and having a volume of 24.3cm^3
 - (D) None of the above.
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8. When propane is reacted in the presence of oxygen gas, the products of this combustion reaction are:

- (A) $\text{C} + \text{H}_2$
 - (B) $\text{CH}_2 + \text{H}_2\text{O}$
 - (C) $\text{CO}_2 + \text{H}_2$
 - (D) $\text{CO}_2 + \text{H}_2\text{O}$
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9. A block on your desk acts as a paperweight with measurements of 3 cm by 4 cm by 6 cm. The block has a mass of 184.32 g. What is its density?

- (A) $13,271.04\text{ g/cm}^3$
 - (B) 2.56 g/cm^3
 - (C) 0.39 g/cm^3
 - (D) None of the above
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10. Which of the following statements about dissociation is false?

- (A) It is reversible.
- (B) Ions are not present.
- (C) It involves molecules separating.
- (D) None of the above.