**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_ Pd:\_\_\_\_\_\_\_\_\_\_\_**

**1.** Which of the following is a chemical property of water?

A. boils at 100 C

B. is transparent

C. has no odor

D. reacts with calcium

**2**. Which of the following is a physical property of hydrogen?

A. is less dense than air

B. reacts with oxygen

C. is highly flammable

D. forms hydrochloric acid

**3.** Which of the following is true of chemical properties?

A. describe the phase the substance is in

B. are measurements of the size or mass of the substance

C. explain how the substance reacts with other substances

D. predict how much of the substance is found in the universe.

**4.** Two students mix vinegar and baking soda. They observe bubbles forming, baking soda dissolving, and vinegar turning cloudy. They infer that a chemical change has occurred. Which data support this inference?

A. bubbles formed

B. baking soda dissolved

C. vinegar evaporated

D. color of vinegar changed

**5**. The scientific discovery of the chemical and physical properties of atoms took place over several centuries. Why was it important for scientists to find out about the properties?

A. So atoms could be seen and their parts identified.

B. So that the books written about them would all have complete information.

C. So people knew how they could use the substances.

D. So our understanding of time and space could be complete.

**6.** Which of the following is a chemical property of gold?

A. does not react with most other chemicals.

B. is very malleable, can form thin sheets

C. is very dense

D. it forms beautiful and valuable jewelry.

**7.** Thin sheets of gold are often used to cover clay statues to create the appearance of the statue being made of solid gold. Which property of gold allows it to be used this way?

A. Taste

B. Density

C. Reactivity

D. Malleability

**Essay**

8. Describe the difference between a chemical and a physical property. Give an example of each.

9. Pick a substance you are familiar with and describe a physical property and a chemical property of that substance.

.Answers:

1. D
2. A
3. C
4. A
5. C
6. A
7. D

**Essay answers:**

8. *Chemical property* is how the substance reacts with other substances and what new products may form.

*Physical property* describes the substance’s characteristics.

Examples will vary

9. Answers will vary