DATE: NAME: CLASS:

CHAPTERS 1–3

Quiz-Quiz-Trade: Atoms, Elements, and Compounds

Activity 3

Goal • Use this quiz-quiz-trade activity to build your understanding of the concepts in Unit 1.

What to Do

1. **Quiz** Each card has a question at the top and an answer at the bottom. Take a card and choose a partner. Ask the question on your card. If your partner answers correctly, move to step 2. If your partner answers incorrectly, or doesn't know, share the answer, then move to step 2.

2. **Quiz** Repeat step 1 using your partner's card.

3. **Trade** Trade cards with your partner. Find a new partner and start the quiz-quiz-trade again.

DATE: NAME: CLASS:

Activity 3 continued

Question: What term describes anything that has mass and volume? **Answer:** Matter Chapter 1	**Question:** Which is a physical property? • Combustibility • Luster • Reactivity with acid • Reactivity with water **Answer:** Luster Chapter 1
Question: Which is a chemical property? • Conductivity • Density • Reactivity • Texture **Answer:** Reactivity Chapter 1	**Question:** Which scientist believed the atom to be the same throughout and indivisible? **Answer:** John Dalton Chapter 1
Question: Which scientist believed negative charges were scattered throughout the positive area of an atom? **Answer:** Ernest Rutherford Chapter 1	**Question:** What term describes the smallest particle of an element and retains the properties of that element? **Answer:** Atom Chapter 1

Question: Which part(s) of the atom has (have) a negative charge? • Electron • Electron and neutron • Proton • Proton and neutron **Answer:** Electron Chapter 1	**Question:** Which part(s) of the atom make(s) up most of the mass of the atom? • Electron • Electron and neutron • Proton • Proton and neutron **Answer:** Proton and neutron Chapter 1
Question: What term is used to describe scientific descriptions of events, patterns, or relationships that have been observed over and over again? **Answer:** Law Chapter 1	**Question:** Which part(s) of the atom is (are) found outside of the atom's nucleus? • Electron • Electron and neutron • Proton • Proton and neutron **Answer:** Electron Chapter 1
Question: Which element has the chemical symbol Cu? **Answer:** Copper Chapter 2	**Question:** Which element has the chemical symbol N? **Answer:** Nitrogen Chapter 2

Question: Which element has the chemical symbol Hg? **Answer:** Mercury Chapter 2	**Question:** Which element has the chemical symbol Cl? **Answer:** Chlorine Chapter 2
Question: Which element has the chemical symbol Fe? **Answer:** Iron Chapter 2	**Question:** What is one of Mendeleev's two main contributions to the development of the periodic table? **Answer:** Either of: First individual to organize the known elements according to their properties and chemical characteristics; recognized that spaces needed to be held for elements that had not yet been discovered Chapter 2
Question: The atomic mass of aluminum is 27 and its atomic number is 13. How many electrons does it have? **Answer:** 13 Chapter 2	**Question:** The atomic mass of sodium is 23 and its atomic number is 11. How many neutrons does it have? **Answer:** 12 Chapter 2

Question: Which class of elements is the largest? • Halogens • Metals • Noble gases • Non-metals **Answer:** Metals Chapter 2	**Question:** Which is a property of non-metals? • Conducts heat • Conducts electricity • Ductile • Dull **Answer:** Dull Chapter 2
Question: What is a horizontal row on the periodic table called? **Answer:** Period Chapter 2	**Question:** What is the most stable and unreactive family of elements in the periodic table? **Answer:** Noble gases Chapter 2
Question: What term is used to describe electrons in the highest energy level of an atom? **Answer:** Valence electrons Chapter 2	**Question:** What term describes a pure substance made of more than one kind of element in which the atoms of the elements are joined together? **Answer:** Compound Chapter 3

Question: Which type of elements combines to form molecular compounds? **Answer:** Non-metals Chapter 3	**Question:** Which types of elements combine to form ionic compounds? **Answer:** Non-metals and metals Chapter 3
Question: What is the chemical formula for methane? **Answer:** CH_4 Chapter 3	**Question:** What the name for a change resulting in the production of new compounds? **Answer:** Chemical change Chapter 3
Question: Which is a chemical change? • Apple ripening • Sugar dissolving • Butter melting • Tomato being sliced **Answer:** Apple ripening Chapter 3	**Question:** Give any 3 of the 5 pieces of evidence that a chemical change may have occurred. **Answer:** Any 3 of the following: • Production or absorption of heat • Appearance of a new colour • Formation of a precipitate • Production of a gas • Process is difficult to reverse Chapter 3