**WS B-1 Unit B Quiz**

**Part A: Modified True/False**

1. False; A physical property can be observed without

changing the chemical composition of a substance.

2. False; A compound is a pure substance made up of atoms

of two or more elements combined in fixed ratios.

3. True

4. False; The chemical equation 2 C + O2 S 2 CO is the

balanced chemical equation for the reaction of carbon

(C) and oxygen (O2) to form carbon monoxide (CO).

**Part B: Completion**

5. mixtures; pure substances

6. sharing; transferring

7. less than, greater than

8. reactants; products

**Part C: Matching**

9. (c); 10. (a); 11. (d); 12. (b)

**Part D: Multiple Choice**

13. D; 14. C; 15. B; 16. B; 17. C; 18. C; 19. C; 20. B;

21. D; 22. C; 23. C; 24. C; 25. C; 26. B

**Part E: Short Answer**

27. An element’s atomic number is the number of protons

found in the nucleus of an atom of the element.

28. Cl1\_; An atom with 17 protons is a chlorine atom. The

ion has one extra electron, so the ion must have a

charge of \_1.

29. The student could test the solution with litmus paper. If

the litmus paper turns red, the solution is an acid. If it

turns blue, the solution is a base. If it does not change

colour, the solution is a salt.

30. The scientist could crush substance A into a powder.

That would increase reaction rate because it would

increase the surface area of substance A, and increasing

the surface area of a substance is one way to increase

reaction rate. The scientist could also heat substance B

before mixing it with substance A. That would increase

reaction rate because most reactions proceed more

quickly at higher temperatures.

31. Acids, bases, and salts all conduct electricity well

when they are dissolved in water. If that is the only

observation the student has, he or she cannot conclude

that the compound is a salt.