Name: _____ Date: _____

1. The three basic ingredients required to create a fire include 1) fuel and 2) oxygen. What is the third?

   a) Wood b) Heat c) Positive air pressure d) Venting

2. What state must a fuel be in for combustion to take place?

   a) Solid or vapor only b) Vapor only c) Solid only d) Solid, liquid, or vapor

3. What does the S stand for in STMR?

   a) Surface b) Striking c) Specialized d) Standard

4. As electricity flows through a wire, what relationship, if any, is there between the resistance in the wire and any heat produced by the current?

   a) There is no relationship between these two quantities.
   b) The further the resistance is from the optimal of 1.0, in either direction, the greater the heat produced.
   c) The greater the resistance, the more heat is produced.
   d) The greater the resistance, the less heat is produced.

5. What is one of the toxic gases often present in smoke?

   a) Zinc oxide b) Nitrogen sulfide c) Hydrogen cyanide d) Sodium hydroxide

6. What is the term for the transfer of heat in a material directly from one molecule to another?

   a) Induction b) Reduction c) Conduction d) Production

7. What is the transfer of heat energy in the form of invisible waves called?

   a) Conduction b) Radiation c) Convolution d) Shimmer

8. What is the term for the lowest temperature at which a liquid produces a flammable vapor?

   a) Fire point b) Upper flammable limit c) Lower flammable limit d) Flash point

9. What is the vapor density of air?

   a) 0.0 b) 1.0 c) 14.7 d) 21.7

10. How are flammability limits and explosive limits related, if at all?

    a) Flammability limits are used to calculate explosive limits.
    b) Explosive limits are used to calculate flammability limits.
    c) The two terms are neither mathematically nor conceptually related.
    d) They are interchangeable terms meaning the same thing.

11. What class of fire involves ordinary combustibles such as wood and paper?

    a) Class C b) Type I c) Class A d) Type III

12. What is the method of choice for extinguishing most Class B fires?

    a) Excluding the oxygen
    b) Cooling the fuel
    c) Interrupting the chemical chain reaction
    d) Polymerizing the fuel

13. What new class of fire involves combustible cooking media, such as oils and grease?

    a) Class C b) Class D c) Class K d) Class O

14. What is the normal percentage of oxygen in the air?

    a) 11 b) 14.7 c) 19.5 d) 21

15. What term refers to the total quantity of all the combustible products that are within a room or a space?

    a) Vapor space b) Internal stacking c) Fuel load d) Combustibility

16. What danger is suggested by the observation of smoke puffing in and out of a structure?

    a) Impending structural collapse
    b) The presence of backdraft conditions
    c) Weak structural roofing members
    d) Un-tempered, un-reinforced glazing in windows

17. What is one warning signal of possible backdraft conditions?

    a) Glass smoke-stained and blackened due to heavy carbon deposits from the smoke
    b) Smoke observed pouring out a burned-through opening in the roof
    c) Front door unaccountably wide open
    d) Upper windows observed to be open or shattered

18. What is the fire phase called when the fire has consumed either the available fuel or oxygen and is starting to die down?

    a) Isothermic phase b) Overhaul phase c) Under control phase d) Decay phase

19. What is another term for fire point?

    a) Ignition point b) Flame point c) Flash point d) Thermal point

20. What does the E stand for in LEL?

    a) Endothermic b) Energetic c) Explosive d) Evolution

Answer Key

1. b
2. b
3. a
4. c
5. c
6. c
7. b
8. d
9. b
10. d
11. c
12. a
13. c
14. d
15. c
16. b
17. a
18. d
19. b
20. c