Name:

Date:

School:

Facilitator:

6.04 Interpreting Fire Patterns (40 Points)

**Utilize information from Fire Patterns and Their Interpretation to answer the following questions.**

****Plume-Generated Patterns****

1. Place the following fire patterns in the order in which they typically occur (youngest fire to most developed fire). (4 points)

U-shape, V-shape, Columnar, Triangular

1. Fires patterns become much more difficult to interpret once the entire room is involved. The point at which the entire room becomes involved in the flame is known as      . (2 points)

****Confinement Patterns****

1. If confinement patterns are present on the 5th floor of an apartment building in which the ceiling has collapsed, what does this indicate to investigators?       (4 points)

****Movement Patterns****

1. How can investigators determine that a fire moved from one room to another? For example, what evidence would demonstrate that a fire moved from the bedroom to the bathroom and not from the bathroom to the bedroom?       (4 points)

****Irregular Patterns****

1. In the lesson, irregular pour patterns were discussed as evidence of arson. What caution does the article give about interpreting these irregular patterns?       (4 points)

6. How could suspected pour patterns be confirmed?       (2 points)

****Spalling****

7. What is spalling?       (2 points)

8. Is spalling evidence of an ignitable liquid? Explain.       (4 points)

****Intensity Patterns****

9. Materials respond to high heat exposure. This response can be caused by a longer duration of burning but they can also be caused by      . (2 points)

****Ventilation-Generated Fire Patterns****

10. Flashover decreases the amount of       within the compartment, which is needed for the fire to continue. (2 points)

11. Fire is likely to be more intense around ventilated areas such as      and      . (2 points)

12. Fire can also be intense directly across from a ventilation source. Why is this the case?       (4 points)

13. Explain why it is important for fire investigators to be able to correctly identify the origin of a fire. (4 points)

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| *Write your response below using complete sentences:* |
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