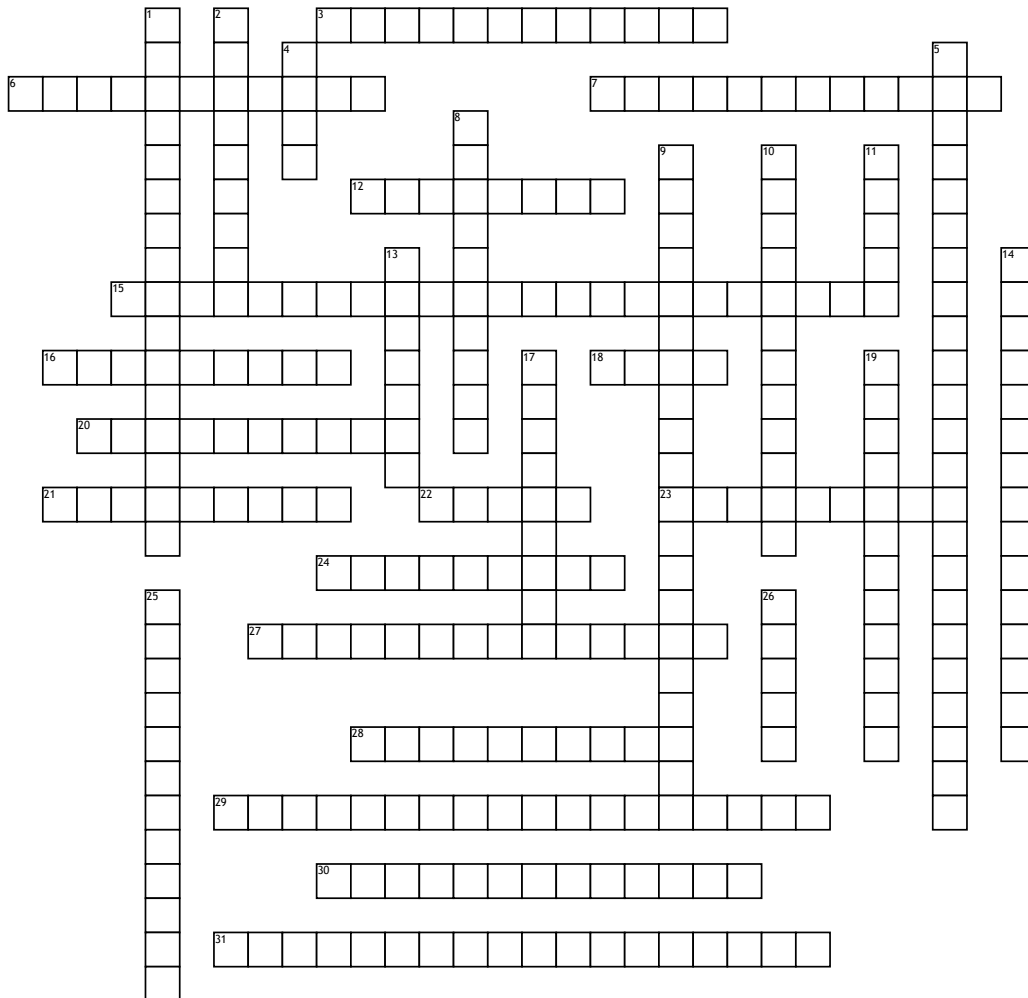


Name: \_\_\_\_\_

# Forensic terms



**Across**

- 3. Ignition resulting from self-heating. Synonymous with spontaneous ignition.
- 6. Circulation of air in any space by natural wind or convection or by fans blowing air into or exhausting air out of a building
- 7. The room or area where a fire began
- 12. A measurement of energy release rate
- 15. The process of recreating the physical scene during fire scene analysis through the removal of debris and the replacement of contents or structural elements in their pre-fire positions
- 16. Capable of burning with a flame
- 18. A form of energy characterized by vibration of molecules and capable of initiating and supporting chemical changes and changes of state
- 20. A reaction in which the velocity of the reaction front through the unreacted fuel medium is equal to or greater than the speed of sound
- 21. The transformation of a compound into one or more substances by heat alone. Often precedes combustion
- 22. The gas phase of a substance; particularly of those that are normally liquids or solids at ordinary temperatures
- 23. Heat transfer by way of electromagnetic energy
- 24. Sensing the existence of a fire

- 27. The quantity of heat energy that must be absorbed by a substance to ignite and burn
- 28. An agent, often an ignitable liquid, used to initiate or speed the spread of a fire
- 29. Heat, gases, solid particulates, and liquid aerosols produced by burning.
- 30. Plastic materials that soften and melt under exposure to heat and can reach a flowable rate
- 31. Any subsequent explosion resulting from an initial explosion

**Down**

- 1. The systematic pursuit of knowledge involving the recognition and formulation of a problem
- 2. A fire that spreads rapidly through a diffuse fuel, such as dust, gas, or vapors of an ignitable liquid, without the production of a damaging pressure
- 4. A rapid oxidation process with the evolution of light and heat in varying intensities
- 5. The process of recreating the physical scene during fire scene analysis through the removal of debris and the replacement of contents or structural elements in their pre-fire positions
- 8. Combustion without flame, usually with incandescence

- 9. The fuel that is first set on fire by the heat of ignition. To be meaningful, both a type of material and a form of material should be identified
- 10. An abnormal connection of low resistance between normal circuit conductors where resistance is normally much greater.
- 11. The crime of maliciously and intentionally, or recklessly, starting a fire or causing an explosion
- 13. The escape of smoke and heat through openings in a building
- 14. A crater-like indentation created at the point of origin of an explosion
- 17. Any chemical compound, mixture, or device the primary purpose of which is to function by explosion
- 19. A buoyant layer of hot gases and smoke produced by fire in a compartment
- 25. The process of determining the origin, cause, development, and responsibility as well as the failure analysis of a fire or explosion
- 26. An airborne particulate product of incomplete combustion suspended in gases, vapors, or solid and liquid aerosols

**Word Bank**

- |                   |                           |                |                           |                   |
|-------------------|---------------------------|----------------|---------------------------|-------------------|
| Seat of Explosion | Fire Scene Reconstruction | Area of Origin | Short Circuit             | Kilowatt          |
| Detection         | Flammable                 | Explosive      | Accelerant                | Ventilation       |
| Fire Analysis     | Material First Ignited    | Heat           | Ceiling Layer             | Thermoplastic     |
| Smoldering        | Secondary Explosion       | Flash Fire     | Arson                     | Detonation        |
| Fire              | Pyrolysis                 | Self-Ignition  | Ignition Energy           | Scientific Method |
| Vapor             | Combustion Products       | Venting        | Fire Scene Reconstruction | Radiation         |
| Smoke             |                           |                |                           |                   |