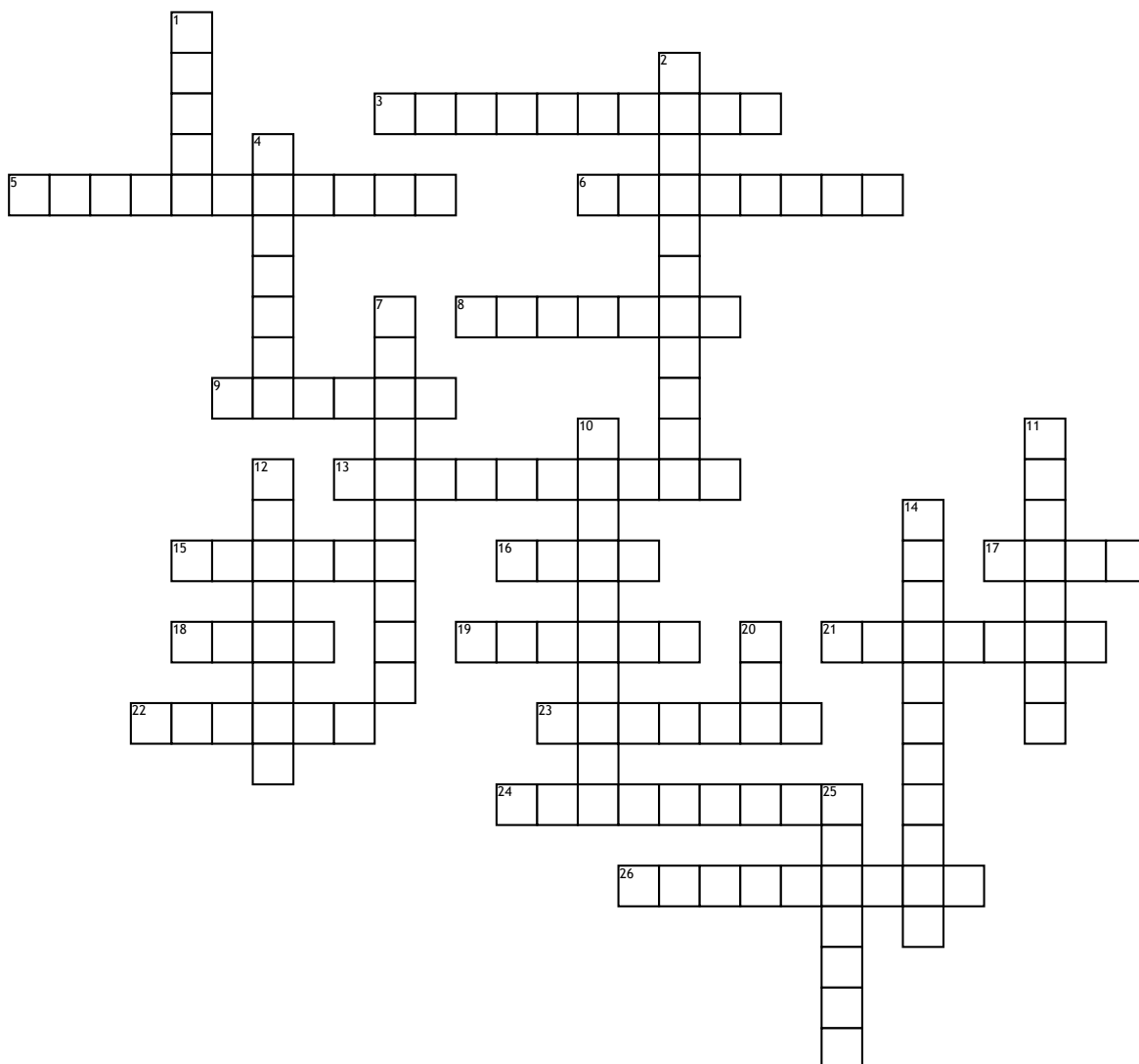


Name: _____

Date: _____

Thermodynamics



Across

3. work done by system divided by amount of energy transferred into the system

5. the average, internal kinetic energy of an object

6. this process occurs at constant pressure

8. _____ Law states that the volume of a given amount of gas held in constant pressure is directly proportional in Kelvin temperature

9. _____ Law of Thermodynamics states heat cannot spontaneously flow from a colder location to a hotter location

13. Thermal _____ is the opposite of thermal conductance

15. _____ heat is the energy required to change the phase of a substance

16. the energy transferred between systems that change the system that it is transferred to (measured in joules)

17. This is the energy that is transferred from one system to another in the form of internal energy due to differences in temperature

18. _____ boundary is a type of thermodynamic boundary that actually exists

19. _____ cycle was proposed in 1824

21. obsolete theory that heat was a fluid, flowing from cold to hot substances

22. _____ point of a substance is the temperature and pressure at which the three phases (gas, liquid and solid) of that substance coexist in thermodynamic equilibrium

23. 50 Kelvin = -223.15 _____

24. a physical property whose value depends upon the quantity of material

26. heat energy transferred through infrared light

Down

1. unit of work equal to N-m (N=Newton, m=meter)

2. Reaction that takes in heat from the surroundings

4. Temperature based on absolute zero, 1 degree is the same as 1 degree Fahrenheit

7. Heat transfer traveling on currents through a gas or liquid.

10. Temperature scale based upon the freezing point of brine

11. state change from a liquid to a solid

12. A measurement of the total energy in a thermodynamic system it is equal to the internal energy of the system plus the product of pressure and volume.

14. evaporation from solid directly to gas

20. the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit

25. the amount of heat that can't be used to do work