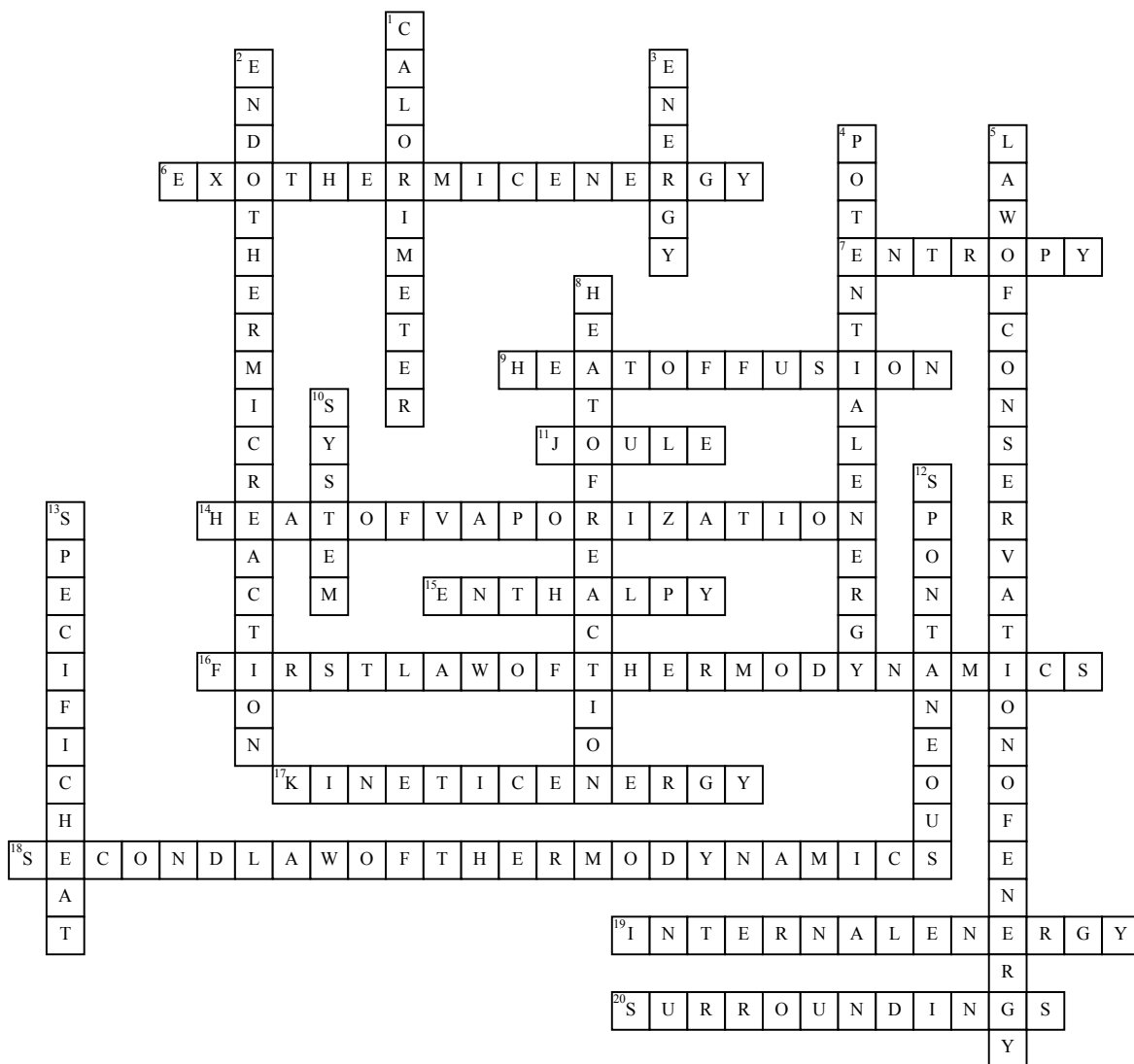


# Chapter 6



## Across

6. Release of energy that was stored in chemical bonds

7. A measure of the disorder or randomness of a system

9. Heat per unit mass required to melt a substance at its melting point

11. SI Unit of energy and energy transfer

14. Heat per unit mass required to vaporize a substance at its normal boiling point

15. Internal heat plus the product of the pressure and volume

16. The principal that the change of energy of a thermodynamic system is equal to heat transferred minus the work done

17. Energy associated with motion.

18. No cyclic process is possible in which heat is absorbed from a reservoir at a single temperature and converted completely to mechanical work.

19. Sum of all possible forms of energy of all ions, atoms and molecules in a system

20. Remainder of universe

## Down

1. Device measuring heat flow

2. Energy absorbed into the reactant substance

3. Ability to do work.

4. Energy also associated with the position of an object relative to a force upon it

5. Energy can never be created or destroyed

8. Total amount of heat liberated or absorbed between short end of reaction all products are at original temperature

10. Portion of universe or sample of matter being studied

12. Able to occur without any continuing outside help

13. Heat required to cause a unit to rise in the temperature of a unit or mass