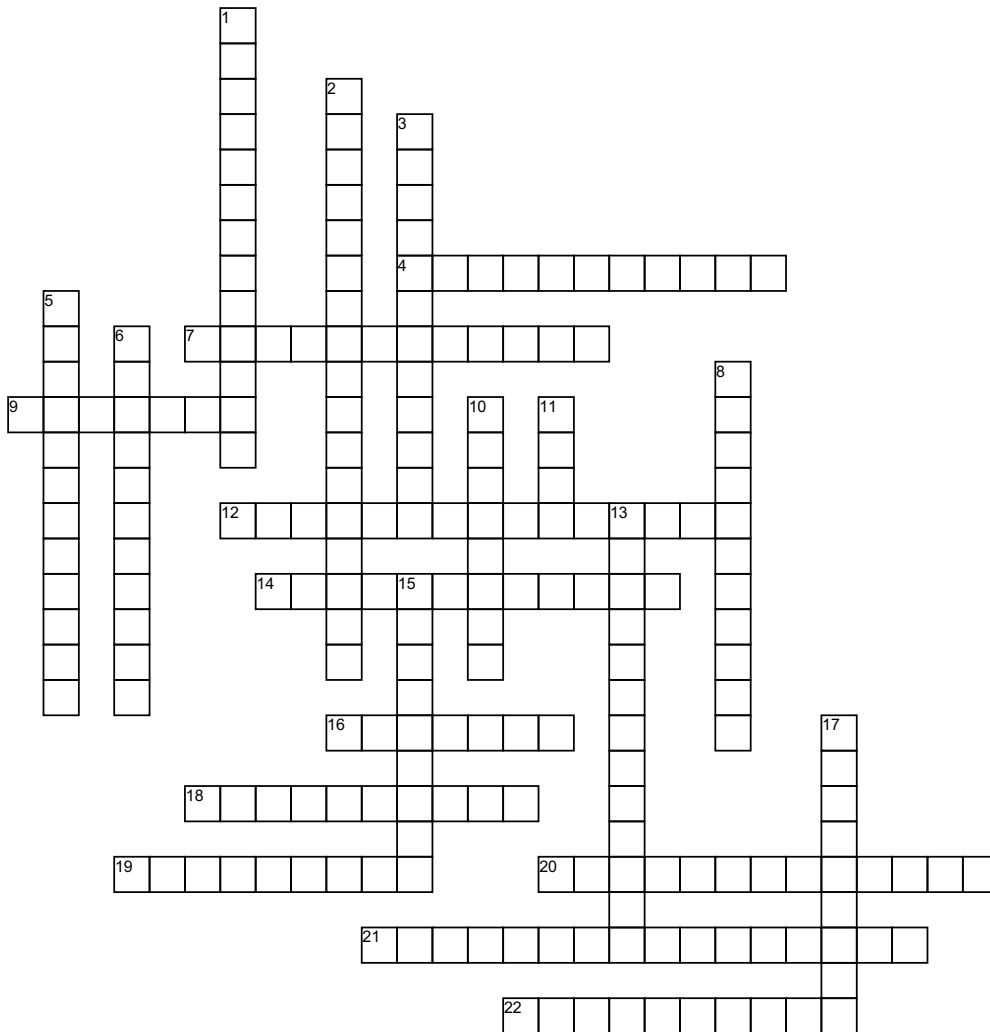


# Heat and Energy



## Across

4. the change of a substance from a liquid to a gas; it that takes place at the surface of a liquid.
7. a temperature scale that defines the freezing point of water as 0 degrees and the boiling point of water as 100 degrees
9. the temperature at which no thermal energy can be removed from matter.
12. a temperature scale that defines the freezing point of water as 32 degrees and the boiling point of water a 212 degrees
14. The amount of heat that must be absorbed or lost for 1 gram of a substance to change its temperature by 1°C.
16. the changing a solid to a liquid.
18. the transfer of energy by direct contact. The term can apply to either heat transfer or electron transfer.
19. a material that transfers heat, electricity, or both easily.
20. a physical property that describes matter as a solid, liquid, or gas.
21. the spreading apart of the matter particles of an object when that object is heated.
22. the transfer of thermal energy by the circulation or movement of a liquid or gas.

## Down

1. the total energy of all the particles in an object.
2. the movement of a fluid, caused by differences in temperature, that transfers heat from one part of the fluid to another.
3. the changing of a gas to a liquid.
5. the temperature at which no thermal energy can be removed from matter.
6. the temperature scale in which the freezing point of water is 273 K and the boiling point is 373 K; 0 K is absolute zero
8. the measure of motion of matter particles.
10. the withdrawal of heat to change something from a liquid to a solid.
11. thermal energy that is transferred from matter at a higher temperature to matter at a lower temperature.
13. the physical change of matter from one state to another.
15. a material that does not transfer, heat, electricity, or both easily.
17. the transfer of energy by electromagnetic waves.