Across
4. the change of a substance from a liquid to a gas; it 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 as 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.