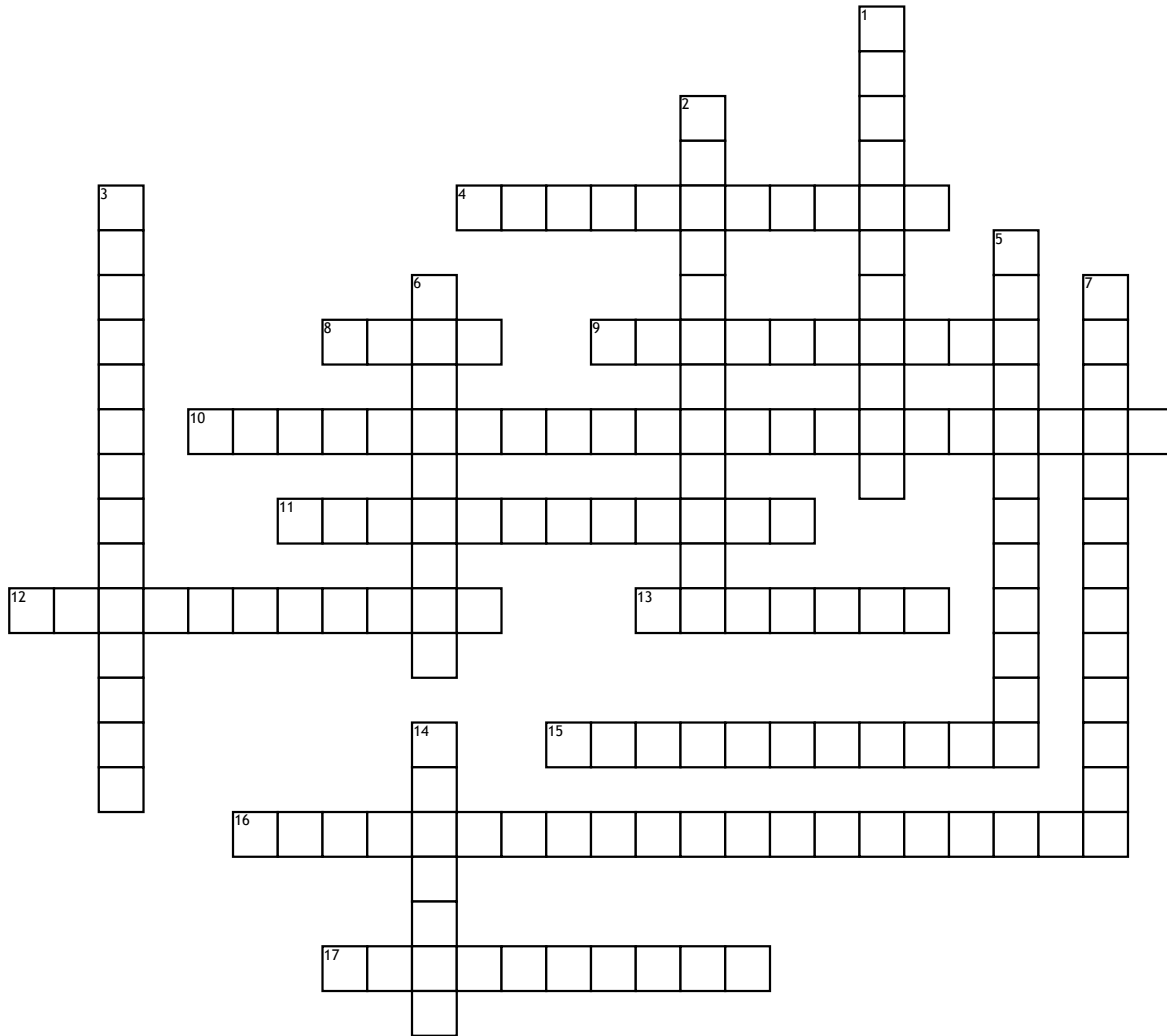


# Thermal Energy & Heat



**Across**

- 4. This is the device used to find the average amount of energy of the particles of a substance.
- 8. The energy transferred from an object at a higher temperature to an object at a lower temperature.
- 9. The transfer of heat between particles within solid objects
- 10. The theory that all matter is made up of small particles that are always moving.
- 11. A graph of temperature and time that shows what happens to the temperature of a substance as it is heated.

- 12. A slow change of state from a liquid to a gas
- 13. The change of state from a solid to a liquid.
- 15. The change of state from a solid to a gas or a gas to a solid.
- 16. The amount of heat transferred when the temperature of 1.0kg of a substance changes by 1.0 degree celsius.
- 17. The transfer of heat within liquids and gases

**Down**

- 1. A measure of the average energy of the particles in a substance.

- 2. A graph of temperature and time that shows what happens to the temperature of a substance as it releases heat.
- 3. The change of state from a liquid to a solid. Also called freezing.
- 5. The change of state from a gas to a liquid.
- 6. The transfer of heat without the use of particle movement. Heat is transfer using electromagnetic waves of energy.
- 7. The total energy of all the particles in an object
- 14. A fast change of state from a liquid to a gas.