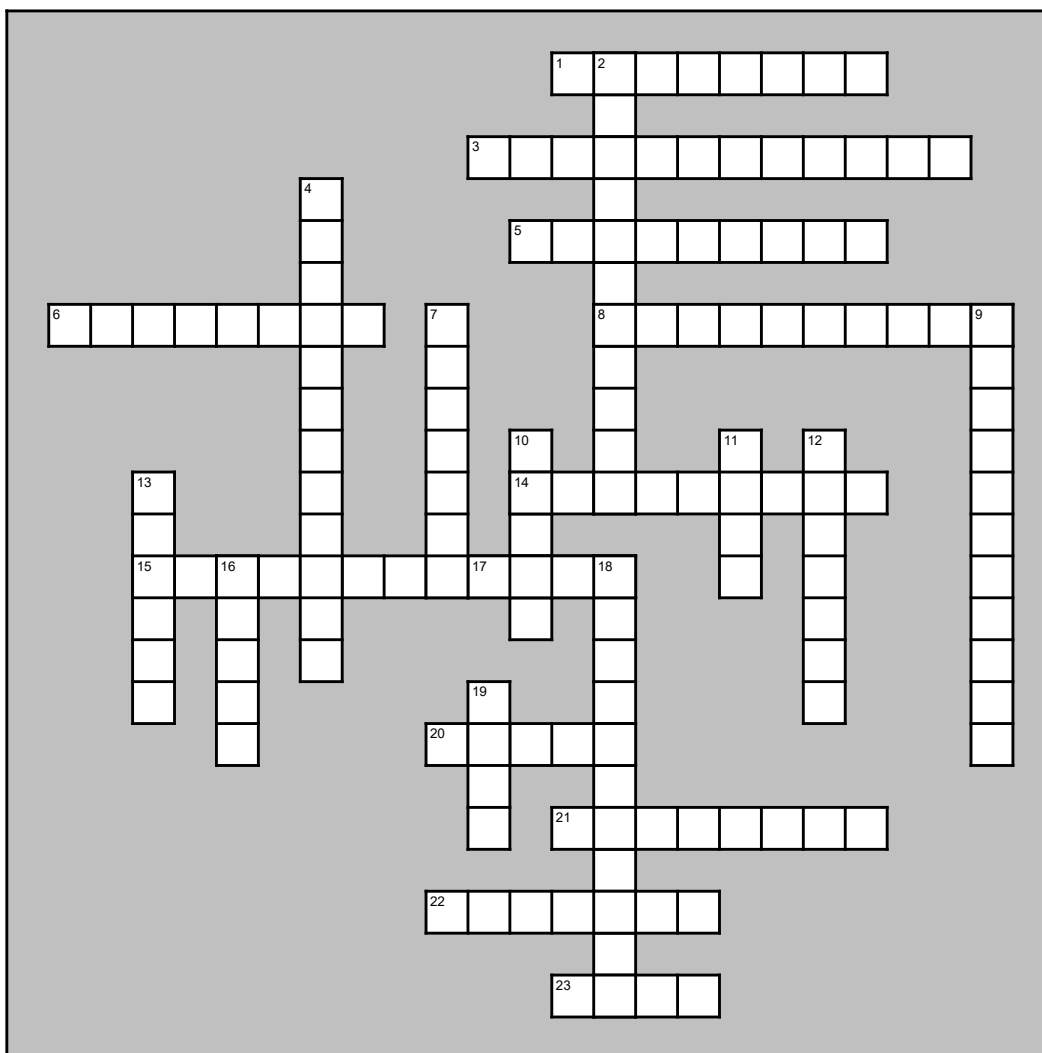


Crossword



Across

- In an endothermic reaction (or change), heat of reaction is a ____ in the equation. It has a positive sign.
- How does one know that Potential Energy is involved when a gas is changing to a liquid without a temperature change?
- Energy involved at phase changes. Fuel, food, chemical bonds.
- Heat (ΔH) based on the enthalpy difference between the products and reactants.
- Heat is released to the surroundings from the system.
- When the temperature of a liquid increases, what happens to the kinetic energy (KE) of the liquid?
- "c" in the $q = mc\Delta T$ calculation. The ability of a substance to "hold" heat. Water's is very high for a liquid.
- Includes mass with temperature.
- Unit of energy = 0.239 cal
- Unit of energy = 4.18 joules.
- In an exothermic reaction (or change), heat of reaction is a ____ in the equation. It has a negative sign.
- This law shows that many reactions have more than one pathway (intermediates).

Down

- Heat is added to the system from its surroundings.
- Heat involved at the boiling and condensation points. A form of PE. ~ 540 cal/g for water.
- Energy of motion ... related to temperature.
- Device used to measure the specific heat of a substance.
- Points in which the temperature remains constant: melting/freezing and boiling/condensation are examples.
- Heat flows from ____ to cold, representing kinetic energy (KE).
- How does one know that Potential Energy is involved when a solid is changing to a liquid without a temperature change?
- Heat involved at the melting and freezing points. A form of PE. ~ 80 cal/g for water.
- In a closed system, when one object loses heat, another object gains heat. The amount of loss is ____ to the amount of gain. Law of conservation of energy.
- Average kinetic energy (KE) of molecules in a system.
- Form of calorie = 1 kilocalorie.