



ACROSS

- 3** A _____ reaction is a sequence of reactions where a reactive product or by-product causes additional reactions to take place, a prominent example being the free radical halogenation of alkanes.
- 5** _____ is any material that is burnt or altered in order to obtain energy.
- 7** _____ is a chemical reaction that triggers one or more secondary reactions.
- 9** _____ is the process whereby complex organic molecules such as kerogens or heavy hydrocarbons are broken down into simpler molecules by the breaking of carbon-carbon bonds in the precursors.
- 10** _____ or burning is a complex sequence of exothermic chemical reactions between a fuel and an oxidant accompanied by the production of heat or both heat and light in the form of either a glow or flames.

DOWN

- 1** The _____ combustion engine is an engine in which the combustion of fuel and an oxidizer (typically air) occurs in a confined space called a combustion chamber.
- 2** Free _____ halogenation is a type of halogenation typical of alkanes and alkyl-substituted aromatics under application of heat or UV light.
- 4** _____ is a chemical reaction that incorporates a halogen atom into a molecule.
- 6** _____ combustion is a type of combustion which occurs without an external ignition source.
- 8** _____s, also known as paraffins, are chemical compounds that consist only of the elements carbon and hydrogen, where each of these atoms are linked together exclusively by single bonds.