


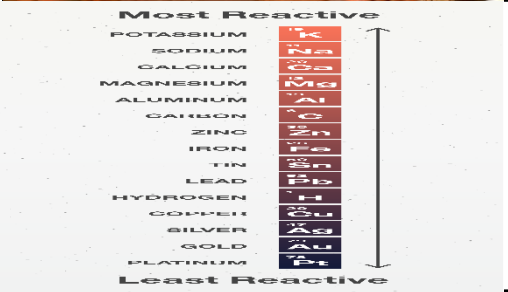



Rationale

This topic builds on pupils knowledge of chemical reactions: what are they, how to recognise one and some simple examples. Pupils will now learn to understand how reactions rates can be affected, and why this happens in terms of number of collisions

Diagrams	Keywords	Definitions
 <p>©Carolina Biological Supply Company</p>	<p>Chemical Reaction</p> <p>Combustion</p> <p>Incomplete Combustion</p>	<p>A change in which atoms are rearranged to create new substances.</p> <p>A chemical process in which a substance reacts rapidly with oxygen and gives off heat. The original substance is called the fuel</p> <p>Occurs when the supply of air or oxygen is poor. Water is still produced, but carbon monoxide and carbon are produced instead of carbon dioxide</p>
	<p>Thermal Decomposition</p>	<p>In a thermal decomposition reaction, there is only one reactant, but two or more products.</p>
	<p>Oxidation</p> <p>Reduction</p>	<p>A chemical reaction in which a substance combines with oxygen. E.g. Rusting</p> <p>Reduction is the opposite of oxidation.</p>
 <p>Most Reactive</p> <p>POTASSIUM K</p> <p>SODIUM Na</p> <p>CALCIUM Ca</p> <p>MAGNESIUM Mg</p> <p>ALUMINIUM Al</p> <p>CARBON C</p> <p>ZINC Zn</p> <p>IRON Fe</p> <p>TIN Sn</p> <p>LEAD Pb</p> <p>HYDROGEN H</p> <p>COPPER Cu</p> <p>SILVER Ag</p> <p>GOLD Au</p> <p>PLATINUM Pt</p> <p>Least Reactive</p>	<p>Reactivity Series</p> <p>Displacement reaction</p>	<p>A list of metals in order of how vigorously they react</p> <p>Occurs when a more reactive element displaces, or pushes out, a less reactive element from a compound</p>
	<p>Endothermic Reaction</p> <p>Exothermic Reactions</p>	<p>When energy is taken in from the surroundings, this is called an endothermic. reaction and the temperature of the surroundings decreases</p> <p>when energy is transferred to the surroundings</p>