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| **Keyword** | **Definition** |
| **Chemical industry** | The industry that converts raw materials into useful products. E.g. crude oil – plastics |
| **Bulk chemicals** | Chemicals made by industry on a large scale. E.g. sulphuric acid, sodium hydroxide, ethanol. |
| **Fine chemicals** | Chemicals made by industry on a small scale. E.g. drugs, additives |
| **Chemical Plant** | A factory that makes or processes chemicals |
| **Pilot plant** | A test factory that makes chemicals on a small scale |
| **Scale up** | To redesign the process of manufacturing from small scale to large scale |
| **Acid** | A compound that dissolves in water to give a pH value of 1-7 |
| **Alkali** | A compound that dissolves in water to give a pH value of 7 – 14 |
| **pH scale** | A number scale that shows if a solution is acid or alkali |
| **Indicators** | A chemical that shows if a solution is acid or alkali |
| **Metals** | Elements on the left of the periodic table. They have characteristic properties. |
| **Salts** | Formed when an acid neutralises an alkali or when a metal and non-metal react |
| **Metal oxide** | A compound of a metal and oxygen |
| **Metal hydroxide** | A compound consisting of metal ions and hydroxide ions. E.g. NaOH Sodium Hydroxide |
| **Carbonates** | A compound that contains carbonate ions |
| **Hydrogen ions** | A hydrogen atom that has lost an electron |
| **Hydroxide ions** | A negative ion. Alkalis make aqueous hydroxide ions when dissolved in water. |
| **Neutralisation reaction** | A reaction when an acid and alkali react. The hydroxide ions in an alkali react with hydrogen ions in acid to make water. |
| **Titration** | A lab technique to find the exact volumes of solutions that react with each other |
| **Burette** | A tube with a tap or valve that measures liquid precisely |
| **End point** | The point during a titration at which the reaction is just complete |
| **Exothermic** | Gives off energy to its surroundings (heat) |
| **Endothermic** | Takes in energy from its surroundings (heat) |
| **Energy-level diagram** | A diagram to show the difference in energy between the reactants and the products of a reaction |
| **Rate of reaction** | Speed of reaction |
| **Concentration** | The quantity of a chemical in a solution (g/l) |
| **Surface area** | The exposed surface a solid that can react with other chemicals |
| **Catalyst** | Speeds up a reaction but is *not* used up |
| **Collision theory** | Reactions happen when molecules collide |
| **Risk assessment** | A check on the hazards involved in a scientific procedure |
| **Relative formula mass** | The combined relative atomic masses of the elements in a formula |
| **Reacting masses** | The masses of the chemicals that react together and products that are formed. Calculated from the balanced symbol equations. |
| **Actual yield** | The mass of the required chemical obtained from a chemical reaction. |
| **Theoretical yield** | The amount of a product that would be obtained in a reaction if all the reactants were converted to products exactly as described by the balanced symbol equation. |
| **Percentage yield** | A measure of the efficiency of a chemical synthesis. |