## Acids and Alkalis

|  | Working towards Mastery (W) | Meeting Mastery (M) | Beyond Mastery (B) |
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| Acids and | - The pH of a solution depends on <br> the strength of the acid: strong acids <br> have lower pH values than weak <br> acids. <br> - - Mixing an acid and alkali produces <br> a chemical reaction, neutralisation, <br> forming a chemical called a salt and <br> water. <br> - Acids have a pH below 7, neutral <br> solutions have a pH of 7, alkalis have <br> a pH above 7. <br> - Acids and alkalis can be corrosive <br> or irritant and require safe handling. <br> - Hydrochloric, sulfuric and nitric acid <br> are strong acids. Acetic and citric <br> acid are weak acids. | - Identify the best indicator to <br> distinguish between solutions of <br> different pH, using data provided. <br> - Use data and observations to <br> determine the pH of a solution and <br> explain what this shows. <br> - Explain how neutralisation reactions <br> are used in a range of situations. <br> - Describe a method for how to make <br> a neutral solution from an acid and <br> alkali. | - Given the names of an acid and an alkali, work <br> out the name of the salt produced when they <br> react. <br> - Deduce the hazards of different alkalis and <br> acids using data about their concentration and <br> pH. <br> - Estimate the pH of an acid based on <br> information from reactions. |

