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| **Subject** | **Year 9 Chemistry Threshold Concepts – Spring Term** | **How to support students’ learning** |
| Reactions of acids | ***Reactions of acids with metals (HT only)****•* ***Explain in terms of gain or loss of electrons, that these are redox reactions• Identify which species are oxidised and which are reduced in given chemical equations*****Neutralisation of acids and salt production**• Predict products from given reactants• Use the formulae of common ions to deduce the formulae of salts**Soluble salts**• Describe how to make pure, dry samples of named soluble salts from information provided**The pH scale and neutralisation**• Describe the use of universal indicator or a wide range indicator to measure the approximate pH of a solution• Use the pH scale to identify acidic or alkaline solutions***Strong and weak acids (HT only)****•* ***Use and explain the terms dilute and concentrated (in terms of amount of substance), and weak and strong (in terms of the degree of ionisation) in relation to acids• Describe neutrality and relative acidity in terms of the effect on hydrogen ion concentration and the numerical value of pH (whole numbers only)*** | Encourage your child to watch this video on redox reactions [GCSE Chemistry - Oxidation and Reduction - Redox Reactions #39 (Higher Tier) - YouTube](https://www.youtube.com/watch?v=jyvcVjrZnJA)Encourage your child to visit this website to learn about acids, bases, salts and neutralisation reactions [Neutralisation | S-cool, the revision website](https://s-cool.co.uk/gcse/chemistry/acids-and-alkalis/revise-it/neutralisation)Encourage your child to watch this video on strong and weak acids [GCSE Chemistry - The pH Scale & Strong vs Weak Acids (Higher Tier) #35 - YouTube](https://www.youtube.com/watch?v=_gYBbzkqrmE) |