Subject	Year 8 Chemistry Threshold Concepts – Spring Term	How to support students' learning
Reactions of metals	**Acids and metals** • State that metals react with acids to form salts and hydrogen gas • Recall indicators of a chemical reaction • Represent reactions using word and balanced symbol equations • Use patterns in reactions to make predictions about other reactions • Carry out and recall the test for hydrogen gas **Acids and metal oxides** • State that acids react with metal oxides to produce a salt and water • Recall indicators of a chemical reaction • Represent reactions using word and balanced symbol equations **Making salts** • State that when an acid is added to an alkali, neutralisation takes place, and a salt and water is produced • Describe how to obtain a neutral solution from an acid and an alkali • Represent reactions using word and balanced symbol equations **Acids and metal carbonates** • State that acids react with metal carbonates to produce a salt, carbon dioxide and water • Recall indicators of a chemical reaction • Carry out and recall the test for carbon dioxide gas • Represent reactions using word and balanced symbol equations	Encourage your child to read this information about metals reacting with acids What is an acid and metal reaction? - BBC Bitesize Encourage your child to watch this video about making and naming salts Making Salts - YouTube

	Making and naming salts • Represent reactions using word and balanced symbol equations • Recall the rules for naming salts • Plan a method to prepare a solid sample of a names salt **The reactivity series** • Using observations, identify an order of reactivity of metals • Use the reactivity series to make s sensible prediction about a reaction • Write word and balanced symbol equations **Metal ores and mining** • Link the reactivity of a metal to its use • Define an ore • Give an example of a native metal • Suggest a method of extraction for a metal using the reactivity series • Write word and symbol equations for reactions **Displacement reactions** • Use the reactivity series to predict whether a reaction will happen or not • Recall indicators of a chemical reaction • Write word and symbol equations for reactions	Encourage your child to watch this video about the reactivity series Reactivity Series of Metals | Environmental | Chemistry | FuseSchool - YouTube Encourage your child to read this page on BBC bitesize about the extraction of metals from their ores Extracting iron and copper - Reactions of metals - AQA - GCSE Chemistry (Single Science) Revision - AQA - BBC Bitesize