

<p>How does the reactivity of the alkali metals change as you go down the group?</p>	<p>What are the word and symbol equations for the reaction of an alkali metal with water?</p>
<p>Why do alkali metals get more reactive as you go down the group?</p>	<p>What are the colours and states of the group 7 elements at room temperature?</p>
<p>How does the reactivity of the halogens change as you go down the group?</p>	<p>What is the name for group 7 elements?</p>
<p>Why do the halogens get more reactive as you go down the group?</p>	<p>What is a displacement reaction?</p>

<p>Metal + water → metal hydroxide + hydrogen</p> $2M + H_2O \rightarrow 2MOH + H_2$	<p>It increases</p>
<p>Fluorine—pale yellow gas Chlorine—pale green gas Bromine—brown liquid Iodine—grey-black solid</p>	<p>The atoms get larger so it is easier to lose an electron</p>
<p>Halogens</p>	<p>It decreases</p>
<p>Where a more reactive element displaces a less reactive element from a compound</p>	<p>The atoms get larger so it is harder to gain an electron</p>

<p>What state are all of the group 0 elements?</p>	<p>What is the trend in boiling point and density as you go down group 0?</p>
<p>Why are the noble gases (group 0) unreactive?</p>	<p>Transition metals have typical properties of metals. What are these?</p>
<p>List the metal reactivity series including hydrogen</p>	<p>In an experiment where a metal reacts with acid, what would you observe for a more reactive metal?</p>
<p>How are transition metal ions different to group 1 and group 2 metal ions?</p>	<p>What are transition metals used for?</p>

<p>Both increase</p>	<p>Gases</p>
<p>They are shiny, good conductors of heat and electricity, strong, malleable and have high melting points</p>	<p>They have a full outer shell so have no need to gain or lose electrons</p>
<p>More bubbles of hydrogen produced per minute, a bigger temperature change</p>	<p>K &gt; Na &gt; Ca &gt; Mg &gt; Al &gt; <b>C</b> &gt; Zn &gt; Pb &gt; <b>H</b> &gt; Cu &gt; Ag &gt; Au &gt; Pt</p>
<p>Catalysts</p>	<p>Transition metals can have different charges on their ions e.g. Fe<sup>2+</sup> and Fe<sup>3+</sup></p>