


The reactivity series of metals – AQA

The table shows the specified metals in order of decreasing reactivity.

Reactions become less vigorous as you down the reactivity series.


Metal	Reaction of metal with:		Symbol		
	Cold water	Cold dilute acid			
Potassium	Reacts	Reactions become less vigorous going down the reactivity series	K	 most reactive	
Sodium			Na		
Lithium			Li		
Calcium			Ca		
Magnesium	No reaction		Mg		
Zinc			Zn		
Iron *			Fe		
Copper			No reaction		Cu

* Iron reacts with air and cold water to form hydrated iron(III) oxide (rust).

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The reactivity series of metals – Edexcel

Metal	Reaction of metal with:		Symbol
	Water	Dilute acid	
Potassium	React vigorously with cold water	Reactions become less vigorous going down the reactivity series	K
Sodium			Na
Calcium			Ca
Magnesium	* No reaction		Mg
Aluminium			Al
Zinc	** Reacts with steam		Zn
Iron			Fe
Copper	Does not react with water or steam	No reaction	Cu
Silver			Ag
Gold			Au

most reactive



least reactive

- * Magnesium reacts very slowly with water to begin with, but a layer of insoluble magnesium hydroxide forms. This stops further reaction. However, magnesium reacts vigorously with steam. Aluminium is protected from contact with water by a natural layer of aluminium oxide.
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The reactivity series of metals – IGCSE

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