



IONISATION ENERGY – HIGHER HIGHER

First ionisation energy

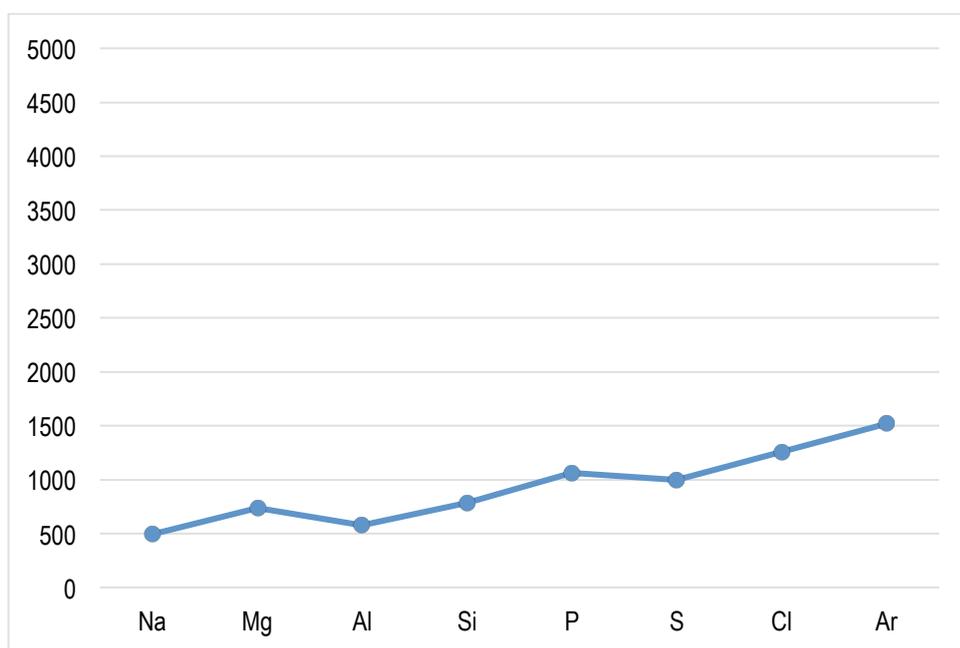
Circle the element with the higher first ionisation energy.

Give the electron structure of each atom. Use this to explain which has the higher first ionisation energy.

	circle the higher one	electron structure	explanation
1	argon v potassium	Ar K	
2	phosphorus v sulfur	P S	
3	magnesium v calcium	Mg Ca	
4	magnesium v aluminium	Mg Al	
5	oxygen v fluorine	O F	

Second ionisation energy

The diagram below shows the first ionisation energy for some elements. Sketch a line to show the second ionisation energy for these same elements.



Circle the element with the higher **second** ionisation energy and explain why it is higher.

Give the electron structure of each atom. Use this for your explanation.

	circle the higher one	electron structure	explanation
6	sodium v magnesium	Na ⁺ Mg ⁺	
7	neon v sodium	Ne ⁺ Na ⁺	
8	sulfur v chlorine	S ⁺ Cl ⁺	