

Worksheet 3.7

Trends in the Periodic Table

The diagram below shows a section of the Periodic Table showing Periods 3 and 4, together with Group IV.

			C					
Na	Mg	Al	Si	P	S	Cl	Ar	
K	Ca	Ga	Ge	As	Se	Br	Kr	
			Sn					
			Pb					

1 What trend is observed in the nature of the elements across Period 3 (Na to Ar)?

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2 Is the same trend observed exactly in Period 4 (K to Kr)?

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3 What trend do you observe in descending Group IV (C to Pb)?

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4 Which four elements form basic oxides?

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5 Which of the elements in Period 3 forms an amphoteric oxide?

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6 Which elements do not form oxides at all?

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7 Where in the Periodic Table is the most reactive and metallic metal found?

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8 Where in the Periodic Table is the most reactive and non-metallic non-metal found?

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9 Which is more reactive, calcium (Ca) or magnesium (Mg)?

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10 Arsenic oxide dissolves in both acids and alkalis. What does this tell you about arsenic oxide?

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