

Model 2: The Periodic Table

The figure below shows part of the Periodic Table in which the elements are placed together in *groups* (the columns) and *periods* (the rows).

H																	He
Li	Be											B	C	N	O	F	Ne
Na	Mg											Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe

Critical thinking questions

1. Discuss any features and patterns you can see in the Periodic Table within your group. Summarise your discussion below. (*Hint*: look for blocks of elements in each row).

2. What filling patterns can you identify in the Periodic Table? (Your tutor will have a copy of the whole Table if you want to extend your work.).

3. Can you relate these features and patterns to Bohr's atomic model? Summarise your discussion below.

4. Are there any discrepancies between Bohr's model and the Periodic Table?