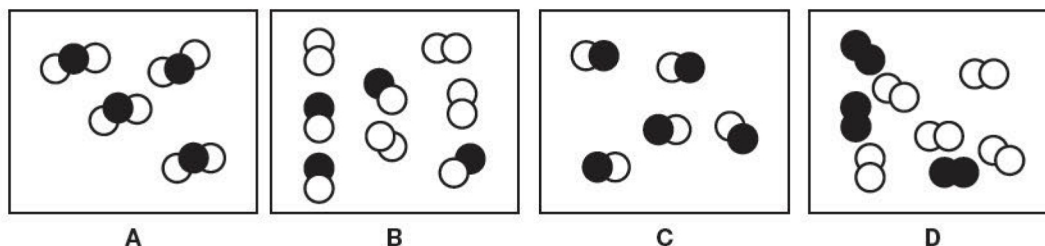


Atomic structure and the periodic table

REVIEW IT!

- 1 In the diagrams A to D the shaded and unshaded circles represent atoms of different elements.



Which of the diagrams A to D best represents the following:

- A mixture of two elements?
 - A mixture of a compound and an element?
 - The compound HCl?
 - A mixture of H_2 and Cl_2 ?
 - The compound H_2O ?
- 2 The table below shows data for five elements, A to E.

Element	Atomic number	Mass number	Number of protons	Number of neutrons	Number of electrons	Electronic structure
A	3	7				
B	17	35				
C	11			12		
D			10	10		
E	19	39				

- Copy the table and fill it in.
- Give the letter(s) for A to E that fit the following descriptions:
 - A very unreactive gas.
 - An element that is in period 4 of the periodic table.
 - Elements that are in the same group of the periodic table.
 - An element that does not form ions.
 - A reactive green gas.
- Describe the reaction of element E with water.
 - Explain why element E is more reactive than element A.
- Which of the 5 elements A to E form positive ions?
- Which of the 5 elements form negative ions?
- Element E forms a compound with another of the elements. Give the letter for this element and using your periodic table name the compound.