

The Periodic Table: questions

The table gives the electronic configuration of consecutive elements in each of two groups (**A** and **B**) of the Periodic Table.

| Group A | | Group B | |
|---------|-----------------------|---------|--|
| Element | Configuration | Element | Configuration |
| T | $1s^2 2s^1$ | X | $1s^2 2s^2 2p^4$ |
| V | $1s^2 2s^2 2p^6 3s^1$ | Y | |
| W | | Z | $1s^1 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p^4$ |

- a) In which group of the Periodic Table are:
 - a. T, V and W
 - b. X, Y and Z?
- b) Write down the electron configuration of:
 - a. W
 - b. Y
- c) For the electron in $3s^1$, what is meant by "3", "s" and "1"