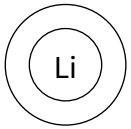
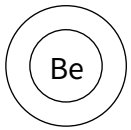
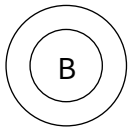
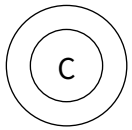
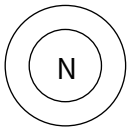
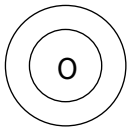
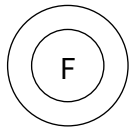
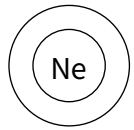
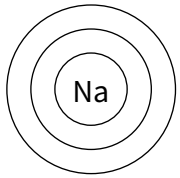
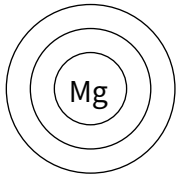
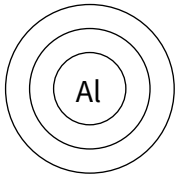
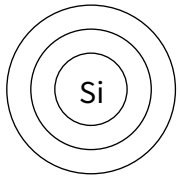
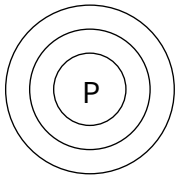
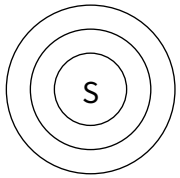
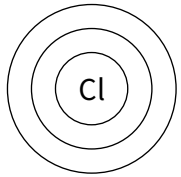
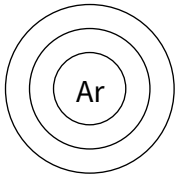
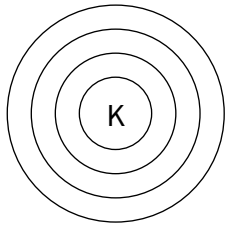
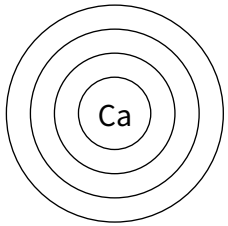
Electronic configurations and the periodic table

The diagram shows a shortened form of the periodic table. It covers the first 20 elements (hydrogen is not really a group 1 element).
Complete all the electronic configuration diagrams:

- use dots to represent the electrons of hydrogen and the metals, and crosses to represent the electrons of the non-metals other than hydrogen.

	1	2	3	4	5	6	7	0
1	 hydrogen, $_{1}$H							 helium, $_{2}$He
2	 lithium, $_{3}$Li	 beryllium, $_{4}$Be	 boron, $_{5}$B	 carbon, $_{6}$C	 nitrogen, $_{7}$N	 oxygen, $_{8}$O	 fluorine, $_{9}$F	 neon, $_{10}$Ne
3	 sodium, $_{11}$Na	 magnesium, $_{12}$Mg	 aluminium, $_{13}$Al	 silicon, $_{14}$Si	 phosphorus, $_{15}$P	 sulfur, $_{16}$S	 chlorine, $_{17}$Cl	 argon, $_{18}$Ar
4	 potassium, $_{19}$K	 calcium, $_{20}$Ca						

Study your completed diagram.

Describe the link between the electronic configuration of an element and its:

(a) atomic (proton) number

(b) group number (each numbered column)

(c) period number (each numbered row).