

01. 0620_w13_ms_31 Q: 1

- (a) uranium / plutonium / thorium [1]
- (b) graphite / carbon [1]
- (c) platinum / titanium / mercury / gold [1]
NOT: carbon / graphite
- (d) helium [1]
- (e) nitrogen / phosphorus [1]
- (f) argon [1]
ACCEPT: any ion 2 + 8 + 8 e.g. K⁺ etc.
- (g) tellurium [1]
ACCEPT: correct symbol
- [Total: 7]**

02. 0620_s12_ms_32 Q: 1

- (a) neon has full outer shell / energy level / valency shell / octet / 8 (electrons) in outer shell / neon does not need to lose or gain electrons; [1]
 fluorine atoms have 7 electrons / needs 1 to fill / has incomplete shell / forms bonds with other fluorine atoms / fluorine (atoms) form covalent bonds / shares electrons; [1]
- (b) atomic number / proton number / number of protons (in one atom); [1]
- (c) weak intermolecular (or between molecules) forces / Van der Waals forces between molecules / low amount of energy required to break bonds between molecules; [1]
 strong bonds don't break / covalent bonds don't break / (unnamed) bonds within molecules / between atoms don't break; [1]
- (d) 1 non-bonding pair on each nitrogen atom; [1]
 6 electrons between nitrogen atoms; [1]