**A. Groups in the periodic table**

1. Explain why the Noble gases have stable electronic arrangements. (1)
2. **Extended response question:**

Place the halogens including Astatine, in order of reactivity, with the most reactive element first. Explain your answer, making sure you include the trend in reactivity and how the reactivity can be explained, referring to halide ions. (6)

1. Caesium is near the bottom of Group 1 in the periodic table. What do you think will happen if it was dropped into water containing universal indicator solution? Explain what you would observe (5).
2. Explain the pattern in reactivity of the alkali metals in terms of electronic configurations. (4)
3. (HT) Explain why displacement reactions are redox reactions in terms of electrons. Give an example explaining which of the substances are oxidised and which are reduced. (4)
4. Explain the relative reactivity of the halogens in terms of electronic configurations. (4)