Marks

- Explain in terms of their electronic configurations and ionisation energies why the alkali metals (Group 1) are powerful *reducing* agents.

2

- The half-life for the first order decomposition of $N_2O_5(g)$ is 6.00×10^4 s at 20 °C. Calculate the rate constant, k, at this temperature.

3

$k =$

What percentage of the N_2O_5 molecules will have reacted after one hour?

ANSWER: