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| **What will we be learning?**  **C6 – Rate and Extent of Chemical Change** | **Why this? Why now?**  **Previous learning**  Paper 1 content  **What other GCSE Science units does this unit relate to?**  Chemistry – Quantitative Chemistry, Chemical Changes, Energy Changes  Biology – Bioenergetics, Homeostasis and Response  Physics - Energy | **Key Words:**  Rate of reaction  Reactant  Product  Gradient of graph  Collision  Temperature  Surface area  Concentration  Pressure  Catalyst  Activation energy  Reversible reaction  Dynamic equilibrium  Closed system  Forward reaction  Backward reaction |
| **What will we learn?**   * Rate of reaction * Reversible reactions and dynamic equilibrium   **Useful equations/formulae/maths skills for this unit:**  Mean rate = concentration of reactant used or product formed / time  Tangent – a straight line touching a curve at one point only  Gradient – change in y/change in x  **Required practical in this topic**  The effect of concentration on rate of reaction | |
| **What opportunities are there for wider study?**  **If you are interested in this unit, what careers does it relate to?**  Industrial chemistry Research chemist Chemical engineer  Analytical chemistry Make-up chemist Materials chemist  Drug manufacturing Formula 1 technician – fuels and energy  **Collins Revision guide relevant pages for this unit:**  Higher: P124-127, P135, P153  Foundation: P120-123, P130 -131, P148-149 | |
| **How will I be assessed?**  End of Topic assessment | |