

| Subject | Year 8 Chemistry content – Summer Term | How to support students' learning |
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| Practical Skills | <p><u>Planning and implementing</u></p> <ul style="list-style-type: none"> • Select, plan and carry out the most appropriate types of scientific enquiries to test predictions, including identifying independent, dependent and control variables, where appropriate • Make predictions using scientific knowledge and understanding • Pay attention to objectivity and concern for accuracy, precision, repeatability and reproducibility • Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work, paying attention to health and safety • Evaluate risks, identifying features of investigations which are considered as hazards and risks and identifying ways to control these <p><u>Rates of reaction practical</u></p> <ul style="list-style-type: none"> • Ask questions and develop a line of enquiry based on observations of the real world, alongside prior knowledge and experience • Select, plan and carry out the most appropriate types of scientific enquiries to test predictions, including identifying independent, dependent and control variables, where appropriate • Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work, paying attention to health and safety • Make and record observations and measurements using a range of methods for different investigations <p><u>Analysing results: graphs and averages</u></p> | <ul style="list-style-type: none"> • Encourage your child to visit the BBC bitesize website to learn how to plan an investigation and what you need to include Planning an experiment - Working scientifically - KS3 Science - BBC Bitesize - BBC Bitesize • Encourage your child to visit the Oak National Academy website to complete a virtual lesson on rates of reaction Lesson: Rate of reaction Teacher Hub Oak National Academy (thenational.academy) |

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| | <ul style="list-style-type: none"> • Present observations and data using appropriate methods, including tables and graphs • Interpret observations and data, including identifying patterns and using observations, measurements and data to draw conclusions <p><u>Conclusions and evaluations</u></p> <ul style="list-style-type: none"> • Interpret observations and data, including identifying patterns and using observations, measurements and data to draw conclusions • Present reasoned explanations, including explaining data in relation to predictions and hypotheses • Evaluate data, showing awareness of potential sources of random and systematic error • Identify further questions arising from their results <p><u>Scientific literacy</u></p> <ul style="list-style-type: none"> • Ask questions and develop a line of enquiry based on observations of the real world, alongside prior knowledge and experience • Understand that scientific methods and theories develop as earlier explanations are modified to take account of new evidence and ideas, together with the importance of publishing results and peer review • Pupils should develop their use of scientific vocabulary, including the use of scientific nomenclature and units and mathematical representations. | <ul style="list-style-type: none"> • Encourage your child to visit the BBC bitesize website to learn how to represent data correctly in tables and graphs Graphs and charts - Working scientifically - KS3 Science - BBC Bitesize - BBC Bitesize <p>Encourage your child to read a scientific article or watch a scientific documentary and discuss what they learnt with a friend, parent, carer or sibling. Here is a link to Science journals for kids to get them started Upper high school Archives - Science Journal for Kids and Teens</p> |
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