

100% Homework

Subject: Science

Parents / carers can support their child in improving their learning by accessing the 100% Homework resources and encouraging self-quizzing at home. Regular testing of key concepts, content and vocabulary is proven to improve memory and the ability to recall important knowledge.

Key learning for half term 2:

	What they need to know	What they should be doing at home	What resources are available	How can I help?
Yr 7	Topic: Chemistry – types of reactions. Including: <ul style="list-style-type: none"> • Physical and Chemical Reactions • Solubility and Dissolving • Filtration • Crystallisation • Distillation • Chromatography • Acids and Alkalis • Indicators • Neutralisation 	Learning key words Revising key knowledge using knowledge organisers Completing all homework tasks set	Seneca Learning BBC Bitesize	Talk to your child about their science lessons. Quiz them on the information they have been learning. Encourage them to watch Science programmes, and to take notice of Science in the news.
Yr 8	Topic: Chemistry – chemical reactions and the environment. Including:	Learning key words		

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	<ul style="list-style-type: none"> • Metals and oxygen • Metals and Acids • Acids and Hydroxides • Acids and Carbonates • Conservation of Mass • Word and Symbol Equations • Combustion • Reactivity Series • Displacement • Extracting Metals • Rates of Reaction • Fossil Fuels • Climate Change • Greenhouse effect • Carbon Cycle • Recycling 	<p>Revising key knowledge using knowledge organisers</p> <p>Completing all homework tasks set</p>		<p>Encourage them to create a revision timetable</p> <p>Past exam question papers</p>
Yr 9	<p>Topics:</p> <ul style="list-style-type: none"> • Chemistry Fundamentals • Energy and waves 	<p>Learning key words</p> <p>Revising key knowledge using knowledge organisers</p> <p>Completing all homework tasks set</p>	<p>Seneca Learning GCSE pod</p> <p>Free Science lessons, You tube videos, AQA website for specification and practise exam papers</p>	<p>Talk to your child about their science lessons.</p> <p>Quiz them on the information they have been learning.</p>
Yr 10	<p>Topics:</p> <ul style="list-style-type: none"> • Human Biology 	<p>Learning key words</p>	<p>Revision guides</p>	<p>Encourage them to watch Science</p>

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	<ul style="list-style-type: none"> Nuclear physics, radiation and magnetism 	<p>Revising key knowledge using knowledge organisers</p> <p>Completing all homework tasks set</p>		<p>programmes, and to take notice of Science in the news.</p> <p>Encourage them to create a revision timetable</p>
<p>Yr 11</p>	<p>Topics</p> <ul style="list-style-type: none"> Ecology Chemistry of the Atmosphere Using Resources <p>Mock exams</p>	<p>Learning key words</p> <p>Revising key knowledge using knowledge organisers</p> <p>Completing all homework tasks set</p>		<p>Past exam question papers</p>

Reading:



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Reading is a key driver in the improvement of learning and the ability to recall knowledge. All pupils have the following suggested reading list in their student planners. Please encourage your child to read in order to deepen their knowledge of the subjects they study. All books are available in our school library.

Books suitable for KS3	<ul style="list-style-type: none">• Ada Twist, Scientist (Andrea Beaty)• Ada Byron Lovelace and the Thinking Machine (Laurie Wallmark)• Nick and Tesla's High-Voltage Danger Lab: A Mystery with Electromagnets, Burglar Alarms, and Other Gadgets You Can Build Yourself (Bob Pflugfelder and Steve Hockensmith)• The Curious World of Calpurnia Tate (Jaqueline Kelly)
Books suitable for KS4	<ul style="list-style-type: none">• Human Body Theater (Maris Wicks)• Women in Science: 50 Fearless Pioneers Who Changed the World (Rachel Ignotofsky)• Planesrunner (Ian McDonald)

“Books expose children to more facts and to a broader vocabulary than virtually any other activity, and persuasive data indicate that people who read for pleasure enjoy cognitive benefits throughout their lifetime” — Daniel T. Willingham