

## Year 11 Science Exam Information

You can support your child in improving their learning by encouraging them to access the resources on the next page and starting their revision early at home. Regular testing of key concepts, content and vocabulary is proven to improve memory and the ability to recall important knowledge. There are a lot of key concepts in Science so early and effective revision is key to success.

**Combined Science topics**

	<b>Biology</b>	<b>Chemistry</b>	<b>Physics</b>
<b>Paper 1</b>	<ul style="list-style-type: none"> <li>• Cell Biology</li> <li>• Organisation</li> <li>• Infection and Response</li> <li>• Bioenergetics</li> </ul>	<ul style="list-style-type: none"> <li>• Atomic Structure and the periodic table</li> <li>• Bonding and the properties of matter</li> <li>• Quantitative chemistry</li> <li>• Chemical changes</li> <li>• Energy changes</li> </ul>	<ul style="list-style-type: none"> <li>• Energy</li> <li>• Electricity</li> <li>• Particle model</li> <li>• Atomic Structure</li> </ul>
<b>Paper 2</b>	<ul style="list-style-type: none"> <li>• Homeostasis and Response</li> <li>• Inheritance, Variation and Evolution</li> <li>• Ecology</li> </ul>	<ul style="list-style-type: none"> <li>• Rates and the extent of chemical change</li> <li>• Organic Chemistry</li> <li>• Chemical analysis</li> <li>• Chemistry of the atmosphere</li> <li>• Using resources</li> </ul>	<ul style="list-style-type: none"> <li>• Forces</li> <li>• Waves</li> <li>• Magnets and Electromagnetism</li> </ul>
<b>Required Practical Paper 1</b>	<ul style="list-style-type: none"> <li>• Microscopes</li> <li>• Light intensity</li> <li>• Osmosis</li> <li>• Enzymes</li> <li>• Food Tests</li> </ul>	<ul style="list-style-type: none"> <li>• Making soluble salts</li> <li>• Electrolysis</li> <li>• Temperature change</li> </ul>	<ul style="list-style-type: none"> <li>• Specific heat capacity</li> <li>• I-V Characteristics</li> <li>• Resistance of a wire</li> <li>• Density</li> </ul>
<b>Required Practical Paper 2</b>	<ul style="list-style-type: none"> <li>• Reaction time</li> <li>• Quadrats/Population size</li> </ul>	<ul style="list-style-type: none"> <li>• Rate of a reaction</li> <li>• Chromatography</li> <li>• Water purification</li> </ul>	<ul style="list-style-type: none"> <li>• Acceleration</li> <li>• Hooke's law</li> <li>• Waves</li> <li>• Infrared</li> </ul>
<b>Key focus points from the bridging unit assessment</b>			
<ul style="list-style-type: none"> <li>• Enzyme and digestion</li> <li>• Recalling the key equations and know how to apply them to calculations.</li> <li>• Explaining the changes in reactivity for group 1 and group 7 elements.</li> <li>• The difference between transverse and longitudinal waves.</li> <li>• Specific heat capacity calculations.</li> </ul>			

### Tools to support your child's revision

- Revision guide- All the students have been issued with one.
- Seneca learning- Go to the website: [senecalearning.com](https://www.senecalearning.com) and set up a free student account.
- BBC Bitesize: <https://www.bbc.co.uk/bitesize/subjects/zp266yc>
- Youtube- access free science lessons videos- this is really useful for the required practicals
- Complete past exam papers-This is available online on the AQA website or can be picked up from their class teachers.
- GCSEPOD
- Pixl PowerPoints, Pixl questions and Knowledge maps available on Microsoft Teams
- Revision notes- it is advised for them to make their own revision notes (mind maps, flash cards) and then complete exam questions without the notes.
- Memorise the key equations and know how to apply them- These can be found on page 195-196 in the exam specification
- Exam specification: contains all the content that could be tested on the exam.  
<https://filestore.aqa.org.uk/resources/science/specifications/AQA-8464-SP-2016.PDF>
- Fundamental concept guide: this provides a useful starting point for their revision. Encourage to revise these key topics first, followed by the rest of the content from the list provided on page 1. Pick up a copy from their class teacher.

### Specific revision advice for this subject

#### **1. Plan to revise. Don't sit down without knowing what to do, creating a timetable will help with this.**

Try this.... "Right I am going to do 30 minutes on radioactivity. I will list 10 key facts, one idea I find tough and try 1 past paper question."

So plan your tasks and topics. It really helps. Plan out revision for Biology, chemistry, physics – do not try to do all together.

**2. Avoid distractions.** Revise with a friend so you don't think about what they are doing. Avoid revising when really tired or hungry.

**3. Reward yourself.** "If I do an hour or two this morning then I can go out this afternoon".

**4. Create your revision materials.** Put up posters, make flash cards or revision cards. Post-it your room with key ideas. Keep what you've made to help you realise you are working well.

**5. Practice past paper questions.** You have been provided with a lots of these and they are one of the best things you can do. Remember to B.U.G. (**B**ox the keyword, **U**nderline important info, **G**o through it twice).