

# AQA GCSE Biology: Foundation tier

Advance Information of Assessed Content 2022

Link to specification:

[GCSE Biology Specification](#)

Link to advance information document:

[AQA Advanced information - GCSE Biology](#)

# Triple Biology Paper 1

These specification points will be the **major focus** of this paper.

**Exam date: 17<sup>th</sup> May**

All other specification points from B1, other those on the [next slide](#) that are not explicitly omitted, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	CGP Biology revision guide pages	Bitesize	YouTube
4.1.1 Cell Structure	<ul style="list-style-type: none"> <li>- Difference between prokaryotic and eukaryotic cells</li> <li>- Comparison of plant cells and animal cells</li> <li>- Function of organelles</li> <li>- Cell differentiation and specialised plant cells and animal cells</li> </ul>	11, 14	<a href="https://www.bbc.co.uk/bitesize/guides/z84jtv4/revision/1">https://www.bbc.co.uk/bitesize/guides/z84jtv4/revision/1</a>	<a href="#">Prokaryotic and eukaryotic cells</a>  <a href="#">Animal cells</a>  <a href="#">Plant cells</a>
<b>Required practical 1:</b> use of light microscope to observe cells	<ul style="list-style-type: none"> <li>- How to prepare slides</li> <li>-How to use the microscope to improve field of view, clarify, change magnification</li> <li>- Microscopy calculations</li> <li>- Unit conversions (mm, micrometres etc)</li> </ul>	12-13	<a href="https://www.bbc.co.uk/bitesize/guides/z84jtv4/revision/1">https://www.bbc.co.uk/bitesize/guides/z84jtv4/revision/1</a>	<a href="#">Required practical - Use of microscopes</a>  <a href="#">Microscopy</a>  <a href="#">Orders of magnitude</a>
4.1.3 Transport in cells	<ul style="list-style-type: none"> <li>- Diffusion</li> <li>- Factors affecting the rate of diffusion</li> <li>- Osmosis</li> <li>- Active transport</li> </ul>	20-22	<a href="https://www.bbc.co.uk/bitesize/guides/zs63tv4/revision/4">https://www.bbc.co.uk/bitesize/guides/zs63tv4/revision/4</a>	<a href="#">Osmosis</a>  <a href="#">Diffusion</a>  <a href="#">Active transport</a>
<b>Required practical 3:</b> Investigate the effect of a range of concentrations of salt solution on the mass of plant tissue	<ul style="list-style-type: none"> <li>- Calculate rate of water uptake</li> <li>- Identify independent, dependent and control variables</li> <li>- Calculate percentage change in mass</li> <li>- Interpret graph to find salt/ sugar concentration in potato</li> </ul>	21	<a href="https://www.bbc.co.uk/bitesize/guides/zs63tv4/revision/5">https://www.bbc.co.uk/bitesize/guides/zs63tv4/revision/5</a>	<a href="#">Required practical link</a>

*Continued on next slide...*

# Triple Biology Paper 1

These specification points will be the **major focus** of this paper.

**Exam date: 17<sup>th</sup> May**

All other specification points from B1, other those on the [next slide](#) that are not explicitly omitted, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
<b>4.2.2</b> Animal tissues, organs and organ systems	<ul style="list-style-type: none"> <li>- Functions of tissues and organs in the digestive system</li> <li>-Digestive enzymes</li> <li>-Functions of tissues and organs in the circulatory system</li> <li>-Pathway of blood through the heart</li> <li>-adaptations of components of the blood</li> <li>-risk factors of non-communicable diseases</li> </ul>	28, 30, 31, 33, 34, 35, 37, 38 - 40	<a href="#">Digestion</a>  <a href="#">Animal transport systems</a>	<a href="https://www.youtube.com/watch?v=4ui4oSHHnzA">https://www.youtube.com/watch?v=4ui4oSHHnzA</a>  <a href="https://www.youtube.com/watch?v=VLK2wANjQm0">https://www.youtube.com/watch?v=VLK2wANjQm0</a>  <a href="https://www.youtube.com/watch?v=bpYaKM2hVFY">https://www.youtube.com/watch?v=bpYaKM2hVFY</a>
<b>Required practical 4:</b> Use qualitative reagents to test for a range of carbohydrates, lipids and proteins	<ul style="list-style-type: none"> <li>- Reagents used to test for sugars, starch, proteins and lipids</li> <li>- Positive result for each food test</li> <li>- Conditions required to carry out food test</li> </ul>	32	<a href="#">Food tests</a>	<a href="#">Food tests – video summary</a>  <a href="#">Food tests - detailed methods</a>
<b>4.2.3</b> Plant tissues, organs and systems	<ul style="list-style-type: none"> <li>- cross section of a leaf</li> <li>- functions and adaptations of xylem and phloem</li> <li>- transpiration</li> <li>- translocation</li> </ul>	42 - 44	<a href="#">Plant organisation</a>	<a href="#">Plant organisation</a>  <a href="#">Transpiration</a>  <a href="#">Plant cell specialisations</a>

# Triple Biology Paper 1

These specification points will be the **major focus** of this paper.

**Exam date: 17<sup>th</sup> May**

All other specification points from B1, other those on the [next slide](#) that are not explicitly omitted, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.3.1 Communicable Diseases	<ul style="list-style-type: none"> <li>-definition and examples of pathogen</li> <li>-how viruses and bacteria make us ill</li> <li>-examples of diseases caused by each type of pathogen</li> <li>-human defence mechanisms</li> <li>-what happens in a vaccine</li> <li>-comparing antibody production after active and passive immunity</li> </ul>	46 – 50	<a href="https://www.bbc.co.uk/bitesize/guides/zs4mk2p/revision/1">https://www.bbc.co.uk/bitesize/guides/zs4mk2p/revision/1</a>	<a href="https://www.youtube.com/watch?v=rAJGnS_ktk4">https://www.youtube.com/watch?v=rAJGnS_ktk4</a>
4.4.1 Photosynthesis	<ul style="list-style-type: none"> <li>- State the word and symbol equation</li> <li>- Explain how light intensity, CO<sub>2</sub> concentration, chlorophyll and temperature affect the rate of photosynthesis</li> <li>- Measure rate of photosynthesis, plot a graph including scale to show rate of photosynthesis</li> </ul>	57-58	<a href="https://www.bbc.co.uk/bitesize/guides/zs4mk2p/revision/1">https://www.bbc.co.uk/bitesize/guides/zs4mk2p/revision/1</a>	<a href="https://youtu.be/X81OIkeuHJw">https://youtu.be/X81OIkeuHJw</a>  <a href="https://youtu.be/J0KxRX3fyol">https://youtu.be/J0KxRX3fyol</a>
<b>Required practical</b> investigate the effect of light intensity on the rate of photosynthesis	<ul style="list-style-type: none"> <li>- Required practical activity 6: investigate the effect of light intensity on the rate of photosynthesis using an aquatic organism such as pondweed.</li> </ul>	59	<a href="https://www.bbc.co.uk/bitesize/guides/zs4mk2p/revision/5">https://www.bbc.co.uk/bitesize/guides/zs4mk2p/revision/5</a>	<a href="https://youtu.be/id0aO_OdFwA">https://youtu.be/id0aO_OdFwA</a>

# Triple Biology Paper 1

Exam date: 17<sup>th</sup> May

These specification points will **not be assessed** on this paper.

Spec point
4.1.1.4 Cell differentiation
4.2.1 Principles of organisation
4.2.2.3 Blood
4.2.2.7 Cancer
4.3.1.5 Protist diseases
4.4.1.3 Uses of glucose from photosynthesis
4.4.2.2 Response to exercise
4.4.2.3 Metabolism

# Triple Biology Paper 2

These specification points will be the **major focus** of this paper.

**Exam date: 15<sup>th</sup> June**

All other specification points from B2, other those on the [next slide](#) that are not explicitly omitted, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
<b>4.5.2</b> The human nervous system	<ul style="list-style-type: none"> <li>- Function of the NS</li> <li>- Control of body temperature</li> <li>- Response to high/ low temperatures</li> </ul>	72	<a href="#">Controlling body temperature.</a>	<a href="https://www.youtube.com/watch?v=WoMPARSQPZw">https://www.youtube.com/watch?v=WoMPARSQPZw</a>
<b>4.5.3</b> Hormonal control in humans	<ul style="list-style-type: none"> <li>- The endocrine system</li> <li>- Function of hormones within the endocrine system</li> <li>- Control of blood glucose</li> <li>- Diabetes</li> <li>- Kidneys and the role of ADH</li> <li>- Adrenaline and thyroxine</li> </ul>	73 – 76, 80	<a href="https://www.bbc.co.uk/bitesize/guides/zttqfcw/revision/1">https://www.bbc.co.uk/bitesize/guides/zttqfcw/revision/1</a>	<a href="#">Endocrine system</a>
<b>4.5.4</b> Plant hormones	<ul style="list-style-type: none"> <li>- Site of auxin production</li> <li>- Role of auxin in producing phototropism / gravitropism</li> </ul>	81	<a href="https://www.bbc.co.uk/bitesize/guides/zc6cqh/revision/1">https://www.bbc.co.uk/bitesize/guides/zc6cqh/revision/1</a>	<a href="https://www.youtube.com/watch?v=Bf5WKEMB5o">https://www.youtube.com/watch?v=Bf5WKEMB5o</a>
<b>Required practical 8</b> – Investigate the effect of light on the growth of newly germinated seedlings	<ul style="list-style-type: none"> <li>- identify independent, dependent and control variables</li> <li>- Describe how variables can be controlled</li> </ul>	81	<a href="https://www.bbc.co.uk/bitesize/guides/zc6cqh/revision/3">https://www.bbc.co.uk/bitesize/guides/zc6cqh/revision/3</a>	<a href="https://www.youtube.com/watch?v=fEo21LbnJJM">https://www.youtube.com/watch?v=fEo21LbnJJM</a>

**Continued on next slide...**

# Triple Biology Paper 2

These specification points will be the **major focus** of this paper.

**Exam date: 15<sup>th</sup> June**

All other specification points from B2, other those on the [next slide](#) that are not explicitly omitted, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
<b>4.6.1</b> Reproduction	<ul style="list-style-type: none"> <li>- Sexual and asexual reproduction</li> <li>- Gametes</li> <li>- Meiosis</li> </ul>	87-89	<a href="https://www.bbc.co.uk/bitesize/guides/z9pkmsg/revision/1">https://www.bbc.co.uk/bitesize/guides/z9pkmsg/revision/1</a>	<a href="https://www.youtube.com/watch?v=Fh9b6a-3DLQ">https://www.youtube.com/watch?v=Fh9b6a-3DLQ</a>
<b>4.6.3</b> The development of understanding of genetics and evolution	<ul style="list-style-type: none"> <li>-Natural Selection, survival of the fittest</li> <li>-Selective breeding</li> <li>-Charles Darwin- Why his work was originally challenged</li> <li>-Lamarck – Why his work is not accepted</li> <li>-Mendel</li> </ul>	96,97,98,101 94	<a href="https://www.bbc.co.uk/bitesize/guides/zcqbdxs/revision/1">https://www.bbc.co.uk/bitesize/guides/zcqbdxs/revision/1</a>  <a href="https://www.bbc.co.uk/bitesize/guides/zg8f4qt/revision/9">https://www.bbc.co.uk/bitesize/guides/zg8f4qt/revision/9</a>	<a href="https://www.youtube.com/watch?v=VjIE5Qzl1S0">https://www.youtube.com/watch?v=VjIE5Qzl1S0</a>  <a href="https://youtu.be/SOgVM904cPc">https://youtu.be/SOgVM904cPc</a>
<b>Required Practical 7:</b> Measure the population size of a common species in a habitat. Use sampling techniques to investigate the effect of a factor on the distribution of this species	<ul style="list-style-type: none"> <li>-Using transects and quadrats are used by ecologists to determine the distribution and abundance of species in an ecosystem.</li> <li>-Understand the terms mean, mode and median</li> <li>-Calculate arithmetic means</li> </ul>	110-111	<a href="https://www.bbc.co.uk/bitesize/guides/zqskv9q/revision/3">https://www.bbc.co.uk/bitesize/guides/zqskv9q/revision/3</a>	<a href="https://www.youtube.com/watch?v=2MW6nwf80XM">https://www.youtube.com/watch?v=2MW6nwf80XM</a>  <a href="https://www.youtube.com/watch?v=RhMOCxXcDrQ">https://www.youtube.com/watch?v=RhMOCxXcDrQ</a>  <a href="https://www.youtube.com/watch?v=yLHz2Ea10Mg&amp;t=2s">https://www.youtube.com/watch?v=yLHz2Ea10Mg&amp;t=2s</a>

*Continued on next slide...*

# Triple Biology Paper 2

Exam date: 15<sup>th</sup> June

These specification points will **not be assessed** on this paper.

Spec point
• 4.5.2.2 The brain
• 4.5.2.3 The eye
• 4.5.2.3 The eye
• 4.6.1.3 Advantages and disadvantages of sexual and asexual reproduction
• 4.6.1.5 DNA structure
• 4.6.1.8 Sex determination
• 4.6.2 Variation and evolution
• 4.6.3.1 Theory of evolution
• 4.6.3.2 Speciation
• 4.6.3.3 The understanding of genetic
• 4.6.3.7 Resistant bacteria
• 4.7.1.4 Adaptations
• 4.7.2.2 How materials are cycled
• 4.7.2.3 Decomposition
• 4.7.3.1 Biodiversity

# Triple Biology Paper 2

Exam date: 15<sup>th</sup> June

These specification points will **not be assessed** on this paper.

Spec point
• 4.7.3.3 Land use
4.7.3.4 Deforestation
4.7.3.5 Global warming
4.7.3.6 Maintaining biodiversity
4.7.4 Trophic levels in an ecosystem
4.7.5 Food production