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| **GCSE Combined Science: Biology and GCSE Biology: Specification topics with video links and exam Qs** |  |

* Cognito playlist: <https://youtube.com/playlist?list=PLidqqIGKox7X5UFT-expKIuR-i-BN3Q1g>
* FuseSchool playlist: <https://youtube.com/playlist?list=PLW0gavSzhMlQYSpKryVcEr3ERup5SxHl0>
* Malmesbury Education playlist for Required Practicals: <https://youtube.com/playlist?list=PLAd0MSIZBSsHv1pioWRdg-pZCWTo84cdP>

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|  | Video links | Exam questions |
| B1 | **Cell Biology**   * Eukaryotes and prokaryotes - [GCSE Biology - Cell Types and Cell Structure #1 - Bing video](https://www.bing.com/videos/search?q=youtube+cognito&qpvt=youtube+cognito&view=detail&mid=B583E926130905A18C60B583E926130905A18C60&&FORM=VRDGAR&ru=%2Fvideos%2Fsearch%3Fq%3Dyoutube%2Bcognito%26qpvt%3Dyoutube%2Bcognito%26FORM%3DVDRE) * Animal and plant cells - [Animal and Plant Cells - GCSE Biology (9-1) - Bing video](https://www.bing.com/videos/search?q=gcse+biology+animal+and+plant+cells&&view=detail&mid=8023D88FB6360535D2A28023D88FB6360535D2A2&&FORM=VRDGAR&ru=%2Fvideos%2Fsearch%3Fq%3Dgcse%2520biology%2520animal%2520and%2520plant%2520cells%26qs%3Dn%26form%3DQBVDMH%26sp%3D-1%26pq%3Dgcse%2520biology%2520animal%2520and%2520plant%2520cells%26sc%3D1-35%26sk%3D%26cvid%3DBFF946A6AC2A47E4B84C90CA69509F1B) * Microscopy - [GCSE Biology - Microscopy #2 - YouTube](https://www.youtube.com/watch?v=--dIBinUdeU&list=PLidqqIGKox7X5UFT-expKIuR-i-BN3Q1g&index=4) * Required practical 1 – microscopy - [Microscopy - How to use a microscope - GCSE Science Required Practical - YouTube](https://www.youtube.com/watch?v=SX6mow1AExI) * Culturing microorganisms (GCSE Biology only) - [Biology - What is Binary fission? #5 - YouTube](https://www.youtube.com/watch?v=OAcz-tFGY0Y) * Required practical 2 – Microbiology (GCSE Biology only) - [Microbiology - GCSE Science Required Practical (Triple) - YouTube](https://www.youtube.com/watch?v=sI2Dp5fNdDY) * Cell division – chromosomes, mitosis and the cell cycle   [GCSE Biology - Cell cycles, Chromosomes & Mitosis #4 - YouTube](https://www.youtube.com/watch?v=RHyZVmbiA78)   * Cell specialisation, cell differentiation and stem cells   [GCSE Biology - Cell Differentiation, Specialisation & Stem Cells #3 - YouTube](https://www.youtube.com/watch?v=X0GMp8oM_2E)   * Transport in cells – diffusion - [GCSE Biology - Diffusion #6 - Bing video](https://www.bing.com/videos/search?q=cognito+video+diffusionbiology&&view=detail&mid=D7A6BF697C9C401B763DD7A6BF697C9C401B763D&&FORM=VRDGAR) and [GCSE Biology - How are Exchange Surfaces Adapted to Their Function? #9 - YouTube](https://www.youtube.com/watch?v=dVNr8IwaGqQ) * Transport in cells – osmosis - [GCSE Biology - Osmosis #7 - Bing video](https://www.bing.com/videos/search?q=cognito+video+diffusion+biology&ru=%2fvideos%2fsearch%3fq%3dcognito%2520video%2520diffusion%2520biology%26qs%3dn%26form%3dQBVR%26sp%3d-1%26pq%3dcognito%2520video%2520diffusion%2520biology%26sc%3d0-31%26sk%3d%26cvid%3d861EE90486244F43A2D58709F3E9BA48&view=detail&mid=CC90AD1BA28A4E7E8900CC90AD1BA28A4E7E8900&rvsmid=D7A6BF697C9C401B763DD7A6BF697C9C401B763D&FORM=VDRVRV) * Required practical 3 – effect of range of concentrations of salt/sugar solutions on mass of plant tissue - Osmosis - [Osmosis - GCSE Science Required Practical - YouTube](https://www.youtube.com/watch?v=oieXYuQm_xE&list=PLAd0MSIZBSsHv1pioWRdg-pZCWTo84cdP&index=2) * Transport in cells – active transport - [GCSE Biology - Active Transport #8 - YouTube](https://www.youtube.com/watch?v=AxXN-j6UzOY&list=PLidqqIGKox7X5UFT-expKIuR-i-BN3Q1g&index=10)   Primrose Kitten B1 Summary: [The whole of CELL STRUCTURE. AQA Biology or combined science 9-1 revision for paper 1 - Bing video](https://www.bing.com/videos/search?q=primrose+kitten+youtube+B1+gcse+biology&&view=detail&mid=478A0ACD8EEC943FF75C478A0ACD8EEC943FF75C&rvsmid=519C35891AFB6BADD1BE519C35891AFB6BADD1BE&FORM=VDRVRV) | Cell structure Qs:  <https://luoylim.exampro.net/>    Culturing microorganisms Qs (GCSE Biology only):  <https://tofijuh.exampro.net/>    Cell division and stem cells Qs:  <https://mafitog.exampro.net/>    Transport in cells Qs:  <https://cubaxuk.exampro.net/> |
| B2 | **Organisation**   * Principles of organisation - [GCSE Biology - Levels of Organisation - Cells, Tissues, Organs and Organ Systems #10 - YouTube](https://www.youtube.com/watch?v=VO2QkpwAG9o&list=PLidqqIGKox7X5UFT-expKIuR-i-BN3Q1g&index=12) * Animal tissues, organs and organ systems – the digestive systems - [GCSE Biology - Digestive System #13 - YouTube](https://www.youtube.com/watch?v=vMI46qGQMDw&list=PLidqqIGKox7X5UFT-expKIuR-i-BN3Q1g&index=15) and [GCSE Biology - How Enzymes Work #11 - YouTube](https://www.youtube.com/watch?v=VNX9UQ08fZ4&list=PLidqqIGKox7X5UFT-expKIuR-i-BN3Q1g&index=13) and [GCSE Biology - Factors that Affect Enzymes #12 - YouTube](https://www.youtube.com/watch?v=qq1foXnvJao&list=PLidqqIGKox7X5UFT-expKIuR-i-BN3Q1g&index=14) and [GCSE Biology - Digestive Enzymes #14 - YouTube](https://www.youtube.com/watch?v=6jz9WvfKDVc&list=PLidqqIGKox7X5UFT-expKIuR-i-BN3Q1g&index=16) * Required practical 4 – food tests - [Food Tests - GCSE Science Required Practical - YouTube](https://www.youtube.com/watch?v=akMLGbNA0gE&t=4s) and [GCSE Biology - Food Tests Practicals #15 - YouTube](https://www.youtube.com/watch?v=13H1urX3gxI&list=PLidqqIGKox7X5UFT-expKIuR-i-BN3Q1g&index=17) * Required practical 5 – affect of pH on amylase activity - [Enzymes - GCSE Science Required Practical - YouTube](https://www.youtube.com/watch?v=8Yqbu56ImXk) * Animal tissues, organs and organ systems – the lungs and gas exchange - [GCSE Biology - Gas Exchange and Lungs #16 - YouTube](https://www.youtube.com/watch?v=B44n2SMLv-s&list=PLidqqIGKox7X5UFT-expKIuR-i-BN3Q1g&index=18) * Animal tissues, organs and organ systems – the heart and blood vessels - [GCSE Biology - Gas Exchange and Lungs #16 - Bing video](https://www.bing.com/videos/search?q=cognito+video+16+biology+&&view=detail&mid=CC73CB519C29F5BC6126CC73CB519C29F5BC6126&&FORM=VRDGAR&ru=%2Fvideos%2Fsearch%3Fq%3Dcognito%2520video%252016%2520biology%2520%26qs%3Dn%26form%3DQBVDMH%26sp%3D-1%26pq%3Dcognito%2520video%252016%2520biology%2520%26sc%3D0-25%26sk%3D%26cvid%3D6E6264F13A5643308CC516431CE459EB) and [GCSE Biology - The Heart #17 - Bing video](https://www.bing.com/videos/search?q=cognito+video+17+biology+&&view=detail&mid=84F0653F787456D7EE2784F0653F787456D7EE27&&FORM=VRDGAR&ru=%2Fvideos%2Fsearch%3Fq%3Dcognito%2520video%252017%2520biology%2520%26qs%3Dn%26form%3DQBVDMH%26sp%3D-1%26pq%3Dcognito%2520video%252017%2520biology%2520%26sc%3D0-25%26sk%3D%26cvid%3D5F883277702342308AE8146B98E2811C) * Animal tissues, organs and organ systems – blood - [GCSE Biology - Blood Vessels #18 - Bing video](https://www.bing.com/videos/search?q=cognito+video+18+biology+&&view=detail&mid=6059DC1F3C678756FC9B6059DC1F3C678756FC9B&&FORM=VRDGAR&ru=%2Fvideos%2Fsearch%3Fq%3Dcognito%2520video%252018%2520biology%2520%26qs%3Dn%26form%3DQBVDMH%26sp%3D-1%26pq%3Dcognito%2520video%252018%2520biology%2520%26sc%3D0-25%26sk%3D%26cvid%3DF293B3D472914729805AA51F18CF9550) and [GCSE Biology - What Is Blood Made of? / What Does Blood Do? #19 - Bing video](https://www.bing.com/videos/search?q=cognito+video+19+biology+&&view=detail&mid=236BCFBD8046309CEC70236BCFBD8046309CEC70&&FORM=VRDGAR&ru=%2Fvideos%2Fsearch%3Fq%3Dcognito%2520video%252019%2520biology%2520%26qs%3Dn%26form%3DQBVDMH%26sp%3D-1%26pq%3Dcognito%2520video%252019%2520biology%2520%26sc%3D0-25%26sk%3D%26cvid%3DEDE30F74D9914204AEA7E29F907A21A1) * Animal tissues, organs and organ systems – coronary heart disease: a non-communicable disease - [GCSE Biology - Why Do We Get Heart Disease and How to Treat It? - Cardiovascular Disease (CVD) #20 - YouTube](https://www.youtube.com/watch?v=UN5BlPfMUkg&list=PLidqqIGKox7X5UFT-expKIuR-i-BN3Q1g&index=22) * Animal tissues, organs and organ systems – health issues - [GCSE Biology - Health and Disease #21 - YouTube](https://www.youtube.com/watch?v=thAyrNpD77A&list=PLidqqIGKox7X5UFT-expKIuR-i-BN3Q1g&index=23) * Animal tissues, organs and organ systems – the effect of lifestyle on some non-communicable diseases - [GCSE Biology - Is Your Lifestyle Really a Personal Choice? - Lifestyle & Risk Factors #22 - YouTube](https://www.youtube.com/watch?v=iy-47a68P60&list=PLidqqIGKox7X5UFT-expKIuR-i-BN3Q1g&index=24) * Animal tissues, organs and organ systems – cancer - [GCSE Biology - What is Cancer? 'Benign' and 'Malignant' Tumours Explained #23 - YouTube](https://www.youtube.com/watch?v=B5VHRKBI4PY&list=PLidqqIGKox7X5UFT-expKIuR-i-BN3Q1g&index=25) * Plant tissues, organs and systems – plant tissues - [GCSE Biology - Structure of a Leaf and Stomata # 24 - YouTube](https://www.youtube.com/watch?v=oT4jvKRYBjA&list=PLidqqIGKox7X5UFT-expKIuR-i-BN3Q1g&index=26) * Plant tissues, organs and systems – plant organ system - [GCSE Biology - Transport in plants - Translocation (Phloem) and Transpiration (Xylem) #25 - YouTube](https://www.youtube.com/watch?v=9FTafxnbwHQ&list=PLidqqIGKox7X5UFT-expKIuR-i-BN3Q1g&index=27)   Primrose Kitten B2 Summary: [The whole of ORGANISATION. AQA 9-1 GCSE Biology or combined science for paper 1 - Bing video](https://www.bing.com/videos/search?q=primrose+kitten+youtube+B1+gcse+biology&&view=detail&mid=C97B408B2E9FEEE5A70EC97B408B2E9FEEE5A70E&rvsmid=519C35891AFB6BADD1BE519C35891AFB6BADD1BE&FORM=VDRVRV) | Enzymes and the digestive system Qs: <https://ginocua.exampro.net/>    Respiratory system and gas exchange Qs:  <https://eooegui.exampro.net/>    Circulatory system, CHD and cancer Qs:  <https://koeojyw.exampro.net/>    Plant tissues, organs and systems Qs  <https://meloiin.exampro.net/> |
| B3 | **Infection and response**   * Communicable diseases - [GCSE Biology - Characteristics of Living Things (Organisms) - YouTube](https://www.youtube.com/watch?v=aGDFNZApXXI&list=PLidqqIGKox7X5UFT-expKIuR-i-BN3Q1g&index=1) and [GCSE Biology - Communicable Disease #26 - YouTube](https://www.youtube.com/watch?v=dbd5iydu3EY&list=PLidqqIGKox7X5UFT-expKIuR-i-BN3Q1g&index=28) * Communicable diseases – viral diseases - [GCSE Biology - What Is a Virus? - Examples of Viral Disease (HIV, Measles & TMV) #27 - YouTube](https://www.youtube.com/watch?v=m0o8mhu9Arg&list=PLidqqIGKox7X5UFT-expKIuR-i-BN3Q1g&index=29) * Communicable diseases – bacterial diseases - [GCSE Biology - What Are Bacterial Diseases? - Treatment and Prevention #28 - Bing video](https://www.bing.com/videos/search?q=cognito+video+28+biology+++&&view=detail&mid=E9D1C953FCA0A5837153E9D1C953FCA0A5837153&&FORM=VRDGAR&ru=%2Fvideos%2Fsearch%3Fq%3Dcognito%2520video%252028%2520biology%2520%2520%2520%26qs%3Dn%26form%3DQBVDMH%26sp%3D-1%26pq%3Dcognito%2520video%252028%2520biology%2520%26sc%3D0-25%26sk%3D%26cvid%3D271D3085E0294B1485DBB4D7C929E390) * Communicable diseases – fungal and protist diseases - [GCSE Biology - How A Mushroom Can Kill You - Fungal and Protist Disease #29 - YouTube](https://www.youtube.com/watch?v=2Fh-2wpvhHQ&list=PLidqqIGKox7X5UFT-expKIuR-i-BN3Q1g&index=31) * Communicable diseases – human defence systems - [GCSE Biology - Immune System (Defences Against Pathogens) #30 - Bing video](https://www.bing.com/videos/search?q=cognito+video+30+biology+++&&view=detail&mid=A714D15F4A83D140F86EA714D15F4A83D140F86E&&FORM=VRDGAR&ru=%2Fvideos%2Fsearch%3Fq%3Dcognito%2520video%252030%2520biology%2520%2520%2520%26qs%3Dn%26form%3DQBVDMH%26sp%3D-1%26pq%3Dcognito%2520video%252030%2520biology%2520%26sc%3D0-25%26sk%3D%26cvid%3D1B25B90F30674547BD938E77B3550F70) * Communicable diseases – vaccination - [GCSE Biology - What Are Vaccines? Are They Safe? How Do They Work? Vaccines Explained #31 - Bing video](https://www.bing.com/videos/search?q=cognito+video+31+biology+++&&view=detail&mid=879D311E185DF8D5B2C8879D311E185DF8D5B2C8&&FORM=VRDGAR&ru=%2Fvideos%2Fsearch%3Fq%3Dcognito%2520video%252031%2520biology%2520%2520%2520%26qs%3Dn%26form%3DQBVR%26sp%3D-1%26pq%3Dcognito%2520video%252031%2520biology%2520%26sc%3D0-25%26sk%3D%26cvid%3DA7C559A64C4A4ED88455D0477FAAE421) * Communicable diseases – antibiotics and painkillers - [GCSE Biology - Drugs - Painkillers vs Antibiotics - Relief vs Treatment #32 - YouTube](https://www.youtube.com/watch?v=r_5GM3_u0Wo&list=PLidqqIGKox7X5UFT-expKIuR-i-BN3Q1g&index=34) * Communicable diseases – discovery and development of drugs - [GCSE Biology - Drug Development and Testing - Clinical Trials #33 - Bing video](https://www.bing.com/videos/search?q=cognito+video+33+biology+++&&view=detail&mid=BEE25B8C270B0DCFE3F7BEE25B8C270B0DCFE3F7&&FORM=VRDGAR) * Monoclonal antibodies (GCSE Biology only) - [GCSE Biology - Monoclonal Antibodies #67 - YouTube](https://www.youtube.com/watch?v=XrUW54Ea598) and [GCSE Biology - How do Pregnancy Tests Work? #68 - YouTube](https://www.youtube.com/watch?v=umRe7GBJ5GE) * Plant disease – detection, identification and plant defence responses (GCSE Biology only) - [GCSE Biology - Plant Disease and Defences #69 - YouTube](https://www.youtube.com/watch?v=oVg6ycY3eXQ)   Primrose Kitten B3 Summary and questions:  [The whole of INFECTION AND RESPONSE. AQA 9-1 GCSE Biology or combined science for paper 1 - Bing video](https://www.bing.com/videos/search?q=primrose+kitten+B3+video&docid=608011590776746565&mid=F99A8F1E10DB820837CBF99A8F1E10DB820837CB&view=detail&FORM=VIRE)  [INFECTION AND RESPONSE-AQA B1 Topic 3 Quick Fire Questions 9-1 GCSE Biology or Combined Science re - Bing video](https://www.bing.com/videos/search?q=primrose+kitten+B3+video+questions&&view=detail&mid=94E2638C7F892049362C94E2638C7F892049362C&&FORM=VRDGAR&ru=%2Fvideos%2Fsearch%3Fq%3Dprimrose%2520kitten%2520B3%2520video%2520questions%26qs%3Dn%26form%3DQBVDMH%26sp%3D-1%26pq%3Dprimrose%2520kitten%2520b3%2520video%2520questions%26sc%3D0-34%26sk%3D%26cvid%3DB4EF884AEE144600B3AE695CCD7E3C8E) | Communicable disease and human defence Qs:  <https://mumerij.exampro.net/>    Vaccines, drug trials and antibiotic Qs:  <https://sityzof.exampro.net/>    B3 GCSE Biology only Qs on monoclonal antibodies and plant disease:  <https://zihupow.exampro.net/> |
| B4 | **Bioenergetics (full playlist:**   * Photosynthesis – reaction, rate and uses of glucose - [GCSE Biology - Photosynthesis #34 - YouTube](https://www.youtube.com/watch?v=X81OIkeuHJw) and [GCSE Biology - Factors Affecting the Rate of Photosynthesis #35 - YouTube](https://www.youtube.com/watch?v=J0KxRX3fyoI) * Required practical 6 – effect of light intensity on the rate of photosynthesis - [Rates Of Photosynthesis - GCSE Science Required Practical - YouTube](https://www.youtube.com/watch?v=id0aO_OdFwA&t=329s) * Respiration – aerobic and anaerobic respiration - [GCSE Biology - Respiration #36 - YouTube](https://www.youtube.com/watch?v=U4WwWuVZSe4) * Respiration – response to exercise - [GCSE Biology - Exercise & Oxygen Debt #37 - YouTube](https://www.youtube.com/watch?v=PthdswsrM3Y) * Respiration – metabolism - [Metabolism - GCSE Biology - Bing video](https://www.bing.com/videos/search?q=gcse+video+metabolism+biology&view=detail&mid=AB1941ECA4E681F443F0AB1941ECA4E681F443F0&FORM=VIRE)   Primrose Kitten B4 Summary and questions:  [The whole AQA BIOENERGETICS. 9-1 GCSE Biology or combined science for paper 1 - Bing video](https://www.bing.com/videos/search?q=primrose+kitten+B4+bienergetics+youtube&docid=608020189299438298&mid=F3ECBA8DEB6B76BB3F54F3ECBA8DEB6B76BB3F54&view=detail&FORM=VIRE)  [BIOENERGETICS - AQA B1 Topic 4 Quick Fire Questions. 9-1 GCSE Biology or Combined Science Revision - Bing video](https://www.bing.com/videos/search?q=primrose+kitten+B4+bienergetics+youtube&&view=detail&mid=D3B6A3CC554772BBEED0D3B6A3CC554772BBEED0&&FORM=VDRVRV) | Photosynthesis Qs:  <https://mohipak.exampro.net/>    Respiration Qs:  <https://keoucyu.exampro.net/> |