

BTAH SCIENCE Overview 2024-2025

| YR | AUTUMN 1 | AUTUMN 2 | SPRING 1 | SPRING 2 | SUMMER 1 | SUMMER 2 |
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| 7 | Chapter 1 Biology B1 Cells- -1.1 to 1.3 | Chapter 2 Biology B1 Cells--1.4 to 1.6 | Chapter 3 Chemistry C1--1.1 to 1.4 Particles and their behaviour | Chapter 4 Chemistry C1--1.5 to 1.7 Particles and their behaviour | Chapter 5 Physics P1 Light 3.1 to 3.3 | Chapter 5 Physics P1 Light 3.4 to 3.6 |
| | Sustainability- Sustainable lifestyles UNEP - UN Environment Programme PSHE- Therapeutic cloning (abpischools.org.uk) CAREERS Ecologist - Green Career Hub CAREERS- Cell Biology Jobs Profile jobs.ac.uk EDI- Cell Theory, Properties of Cells and their Diversity (eolss.net) | Sustainability- Sustainable lifestyles UNEP - UN Environment Programme PSHE- Physical health (pshe-association.org.uk) CAREERS- Microbiologist job profile Prospects.ac.uk EDI- Equality, Diversity and Inclusion - University of Birmingham | Sustainability- Change for climate (basf.com) PSHE- Acid Attacks PSHE Teaching Resources (tes.com) PSHE- PowerPoint Presentation (blueair.com) CAREERS- Secondary Science Teacher Job Description - Career Teachers EDI- Teaching Toolkit Faculty of Science (carleton.ca) | Sustainability- Change for climate (basf.com) PSHE- Acid Attacks PSHE Teaching Resources (tes.com) PSHE- Microsoft PowerPoint - KS2 Lesson Freedom to breathe (blueair.com) CAREERS Ecologist - Green Careers Hub EDI- Increasing the diversity of those doing ecology (britishecologicalsociety.org) | Sustainability- Physics, climate change and sustainability Institute of Physics (iop.org) PSHE- CAREERS- How To Become An Electrician (Career Path) Go Construct EDI- Empowering The Electrical Sector By Valuing Equality And Diversity (proactivetechnicaltraining.co.uk) | Sustainability- Physics, climate change and sustainability Institute of Physics (iop.org) PSHE- Electricity - KS2 Science - BBC Bitesize CAREERS- Careers - UK Photonics Leadership Group (photonicsuk.org) EDI- Equality, Diversity and Inclusion Statement - CDT in Applied Photonics (hw.ac.uk) |
| 8 | Chapter 1 Biology B2--1.1-1.9 Health and Lifestyle | Chapter 2 Biology B2 Ecosystem process--2.1- 2.10 | Chapter 3 Chemistry C2 Metals and Acids--3.1 to 3.9 | Chapter 4 Chemistry C2--2.1- 2.7 Separation techniques | Chapter 5 Physics P2 Energy--2.1- 2.9 | Chapter 6 Physics P2 Motion and pressure--3.1- 3.7 |
| | Sustainability- Sustainable lifestyles UNEP - UN Environment Programme PSHE- Secondary-PSHE-Lesson-Plans.pdf (reading.ac.uk) CAREERS- Dietitian Jobs & Dietician Careers in Greater London (bmj.com) EDI- Reflections on diversity, food and farming in Britain • Open Food Network | Sustainability- Sustainability (rsb.org.uk) PSHE- Lesson: Biodiversity and ecosystems KS2 RSHE (PSHE) Oak National Academy (the national.academy) CAREERS- Careers in research (lse.ac.uk) EDI- UKRI-020920-EDI-EvidenceReviewUK.pdf | Sustainability- Change for climate (basf.com) PSHE- Acid Attacks PSHE Teaching Resources (tes.com) CAREERS Metallurgist Jobs, Careers & Recruitment - Updated Daily (careerstructure.com) EDI- Estimated daily intake (EDI) of metals for adults and children via the... Download Scientific Diagram (researchgate.net) | Sustainability- Change for climate (basf.com) PSHE- Separation techniques - Separating mixtures - GCSE Chemistry (Single Science) Revision - WJEC - BBC Bitesize CAREERS- Career PCG – Career in PCG Pharmacy (pearlchemistgroup.co.uk) EDI- Equality, Diversity & Inclusion (EDI) Chemistry - UCL – University College London | Sustainability- Physics, climate change and sustainability Institute of Physics (iop.org) PSHE- PSHE One World Lesson 3: UKS2 Human Energy Use Lesson (twinkl.co.uk) CAREERS- Conservation Careers: Conservation Jobs & Careers Advice (conservation-careers.com) EDI- Our commitment to Equality, Diversity & Inclusion (EDI) The Wildlife Trusts | Sustainability- Physics, climate change and sustainability Institute of Physics (iop.org) PSHE- Pressure & PSHE (pshestaffs.com) CAREERS- Register for Automotive Jobs Autotech Recruit EDI- EDI Engine report: equality, diversity and inclusion in engineering (raeng.org.uk) |
| 9 | Chapter 1 1.1-1.10 (B1.1/1.2) <u>Cell level systems</u> *Cell structures *What happens in cells? | Chapter 1 1.11-1.19 (B 1.3/1.4) <u>Cell level systems</u> *Respiration *Photosynthesis | Chapter 2 2.1- 2.8-(B2.1) <u>Scaling up</u> *Supplying the cell | Chapter 2 2.9- 2.17(B2.2) <u>Scaling up</u> *The challenges of size | Chapter 2-2.18- 2.20 (B2.2) Chapter 3-3.1- 3.7(B3.1) <u>Organisms level systems</u> Coordination and control *Nervous system | Chapter 3 3.8- 3.15(B3.2) <u>Organisms level systems</u> Coordination and control *Endocrine system |
| | Sustainability- Environmental Sustainability in Respiratory Care: An Overview of the healthCARE-Based environmental Cost of Treatment (CARBON) Programme - PMC (nih.gov) PSHE- Therapeutic cloning (abpischools.org.uk) CAREERS Ecologist - Green Careers Hub EDI- On the importance of diversity in ecological research - Brunn - PLANTS, PEOPLE, PLANET - Wiley Online Library | Sustainability- Environmental Sustainability in Respiratory Care: An Overview of the healthCARE-Based environmental Cost of Treatment (CARBON) Programme - PMC (nih.gov) PSHE- What is the breathing system and why is it so important? (abpischools.org.uk) CAREERS- Cell Biology Jobs Profile - jobs.ac.uk EDI- Diversity, Equity and Inclusion in the Laboratory: Strategies to Enhance Inclusive Laboratory Culture: Molecular Cell | Sustainability- Stem cells might be key to more sustainable animal agriculture, researchers say - Boston University News Service (bunewsservice.com) PSHE- Exploring Donation - NHS Blood and Transplant (nhsbt.nhs.uk) CAREERS- Microbiologist job profile Prospects.ac.uk EDI- Meaningful steps toward equity, diversity, and inclusion: A call to action: Stem Cell Reports | Sustainability- Stem cells might be key to more sustainable animal agriculture, researchers say - Boston University News Service (bunewsservice.com) PSHE- Donation and Choices - NHS Blood and Transplant (nhsbt.nhs.uk) CAREERS- Microbiologist job profile Prospects.ac.uk EDI- Equality, diversity and inclusion (EDI) - BHF | Sustainability- Sustainable development demands brain health - The Lancet Neurology PSHE- Resources for schools - PSHE, emotional wellbeing, support for SEND pupils - Beacon Family Services (beaconservices.org.uk) CAREERS Explore a Career in Neurology: Medical Student Resources AAN EDI- Key Things to know about Gender Equity in Eye Health - The International Agency for the Prevention of Blindness (iapb.org) | Sustainability- Sustainable development demands brain health - The Lancet Neurology PSHE- Hormones and nerves - Coordination and control - The human endocrine system - AQA - GCSE Biology (Single Science) Revision - AQA - BBC Bitesize CAREERS- Endocrinology and diabetes Health Careers Edi- Our new report issues recommendations to tackle diabetes inequality in the UK Diabetes UK |

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| 10 | <p>Chapter 3--3.1-3.27(B3.3) <u>Organisms level systems</u> *Endocrine System *Maintaining internal environment</p> | <p>Chapter 4--4.1- 4.10 (B4.1) <u>Community level systems</u> *Ecosystems</p> | <p>Chapter 5--5.1 -5.9 (B5.1) <u>Genes inheritance and selection</u> *Inheritance</p> | <p>Chapter 5--5.10 -5.18 (B5.2) <u>Genes inheritance and selection</u> *Natural selection and evolution *</p> | <p>Chapter 5--5.19-5.22 (B5.2) <u>Chapter 1--1.1-1.4, (B 1.1)</u> <u>Cell level systems</u> *Cell structures</p> | <p><u>Chapter 1--1.5-1.14 (B 1.2/1.3)</u> *What happens in cells? *Respiration</p> |
| | <p>Sustainability-Environmental Endocrinology - Environmental Science - Oxford Bibliographies PSHE- Homeostasis STEM CAREERS -The Complete Guide To Becoming A Diabetology or Endocrinology Doctor BMJ Careers EDI- Promoting diversity and inclusion in neuroscience and neuroethics – eBio Medicine (thelancet.com)</p> | <p>Sustainability-Principles of Ecosystem Sustainability The American Naturalist: Vol 148, No 6 (uchicago.edu) CAREERS- Conservation Careers: Conservation Jobs & Careers Advice (conservation-careers.com) EDI- Tree diversity increases robustness of multi-trophic interactions Proceedings of the Royal Society B: Biological Sciences (royalsocietypublishing.org)</p> | <p>Sustainability-Genetic modifications associated with sustainability aspects for sustainable developments - PMC (nih.gov) PSHE- Lesson: Biodiversity and ecosystems KS2 RSHE (PSHE) Oak National Academy (thenational.academy) Careers- Genetic engineers: About - Vault EDI- Microsoft Word - universal access for pdf.doc (publishing.service.gov.uk)</p> | <p>Sustainability-Genetic modifications associated with sustainability aspects for sustainable developments - PMC (nih.gov) PSHE- Relationships and Sex Education (RSE) KS3-4 lesson pack (pshe-association.org.uk) CAREERS- Genetic Engineering (genome.gov) EDI- Diversity and inclusion: a look back at the key events over the last 120 years — Blind recruiting within your ATS (mevtae.com)</p> | <p>Sustainability-Evolution and sustainability: gathering the strands for an Anthropocene synthesis Philosophical Transactions of the Royal Society B: Biological Sciences (royalsocietypublishing.org) PSHE- DNA and Meiosis (abpschools.org.uk) EDI- A Framework for Promoting Diversity, Equity, and Inclusion in Genetics and Genomics Research - PMC (nih.gov)</p> | <p>Sustainability-Environmental Sustainability in Respiratory Care: An Overview of the healthCARE-Based environmental Cost of Treatment (CARBON) Programme - PMC (nih.gov) PSHE- Smoking and Tobacco PSHE schools briefing.pdf (barnet.gov.uk) EDI- Improving health equity by embracing diversity Respiratory Futures</p> |
| 11 | <p>Chapter 6 6.1-6.9(B6.1) Global challenges</p> | <p>Chapter 6 6.10-6.17 (B6.2) Feeding human race</p> | <p>Chapter 6 6.18-6.28(B6.3) Monitoring and maintaining health</p> | <p>Chapter 6 6.29-6.37 (B6.3) Monitoring and maintaining health</p> | <p>Chapter 6 6.38-6.42(B6.3) Revision - Chapter 1 1.1-1.10 (B1.1/1.2)</p> | |
| | <p>Sustainability-Global challenges – Sustainability (embl.org) PSHE- Model Lung Bowlee Park Community Primary School CAREERS- EDI-Why inclusive education is important for all students United Nations</p> | <p>Sustainability-Examples of Environmental Sustainability SNHU PSHE- Diet and Nutrition (pshestaffs.com) CAREERS- Becoming a Nutritionist - Association for Nutrition EDI- The Right to Education - UNICEF UK</p> | <p>Sustainability-Sustainability and Health McKinsey & Company PSHE- Physical health (psheassociation.org.uk) CAREERS- Alternative Careers for Doctors: Salaries and Descriptions Indeed.com UK EDI- NHS England » NHS equality, diversity, and inclusion improvement plan</p> | <p>Sustainability-Sustainability and Health McKinsey & Company PSHE- Physical health (pshe-association.org.uk) CAREERS- Nursing careers Health Careers EBI- The Importance of Diversity in Immunology The Journal of Immunology American Association of Immunologists (aai.org)</p> | <p>Sustainability-Sustainable Cancer Care (esmo.org) PSHE- Physical health (pshe-association.org.uk) CAREERS- Doctors Health Careers EDI- Equality, diversity and inclusion in research Cancer Research UK</p> | |