

IB biology past essay questions HL and SL all units and mark scheme

2023 (A+)

Outline what is meant by the trophic level of an organism with three examples from one named habitat. (4 max) - Answer-feeding level for an organism in a food chain

naming of habitat (1 mark)

naming three trophic levels correctly (1 mark)

three examples forming a food chain from the named habitat (1 mark)

2. Compare the ways in which autotrophic, heterotrophic and saprotrophic organisms obtain energy. (6 max) - Answer-autotrophs use an external / non-organic energy source

(reject statements suggestion that energy is made)

(some) autotrophs use light / (some) autotrophs use photosynthesis

(some) autotrophs use inorganic chemical reactions / (some) autotrophs use chemosynthesis

heterotrophs obtain energy from other organisms

heterotrophs (usually) ingest food / consume food

saprotrophs obtain energy from non-living matter / dead organisms

saprotrophs digest organic matter extracellularly

3. Draw a labelled sigmoid population growth curve. 4 marks - Answer-x-axis (time) and y-axis (number in population/of individuals) correctly labelled; (do not accept growth on y-axis)

S curve correctly drawn;

lag phase;

exponential/log phase;

population growth slowing down / transitional phase / environmental resistance;

plateau phase;

To award marks phases must be labelled not just drawn. Award 3 max if no axes shown.

4. Explain the factors that cause a population to follow the sigmoid (S-shaped) growth curve. (8 max) - Answer-during exponential growth the population grows at an increasing rate

all / most / many offspring survive / birth rate higher than death rate

all / most / many offspring reproduce

each generation produces more offspring than the last

plateau reached eventually / population levels off / birth rate equals death rate

when carrying capacity of environment is reached

e.g. when no more food / nutrients / resources available

e.g. when no more space for nesting / space for another purpose is available

e.g. when numbers of predators have increased

All Past Papers Biology Ib Hl

Andrew Allott



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Biology for the IB Diploma Exam Preparation Guide Brenda Walpole, 2015-06-25 Biology for the IB Diploma Second edition covers in full the requirements of the IB syllabus for Biology for first examination in 2016 **Learning and Understanding** National Research Council, Division of Behavioral and Social Sciences and Education, Center for Education, Committee on Programs for Advanced Study of Mathematics and Science in American High Schools, 2002-08-06 This book takes a fresh look at programs for advanced studies for high school students in the United States with a particular focus on the Advanced Placement and the International Baccalaureate programs and asks how advanced studies can be significantly improved in general It also examines two of the core issues surrounding these programs they can have a profound impact on other components of the education system and participation in the programs has become key to admission at selective institutions of higher education By looking at what could enhance the quality of high school advanced study programs as well as what precedes and comes after these programs this report provides teachers parents curriculum developers administrators college science and mathematics faculty and the educational research community with a detailed assessment that can be used to guide change within advanced study programs **Oxford Resources for IB Diploma Programme: IB Prepared: Biology 2023 Edition eBook** Debora M. Primrose, 2025-03-13 Please note this title is suitable for any student studying Exam Board International Baccalaureate Level and subject Diploma Programme Biology First teaching 2023 First exams 2025 IB Prepared resources are developed directly with the IB to provide the most up to date authentic and authoritative guidance on DP assessment IB Prepared Biology 2023 Edition combines a concise review of course content with strategic guidance past paper material and exam style practice opportunities allowing learners to consolidate the knowledge and skills that are essential to success Biology for the IB Diploma Andrew Allott, 2001 This concise guide provides all the content you need for the IB Diploma in Biology at both Standard and Higher Level Follows the structure of the IB Programme exactly and include all the options Each topic is presented on its own page for clarity Standard and Higher Level material clearly indicated Plenty of practice questions Written with an awareness that English may not be the reader's first language Introducing the IB Diploma Programme Marc Abrioux, Jill Rutherford, 2013-02-14 Schools wishing to introduce the IB diploma programme are faced with major investment in terms of time effort and money in order to become authorised This manual is a resource for schools already offering the diploma as well as for prospective diploma schools **IB World Schools Yearbook 2012**, 2012 **Quick Reference for Counselors**, 2011 **Biology for the IB Diploma Coursebook with Free Online Material** Brenda Walpole, Ashby Merson-Davies, Leighton Dann, Peter Hoebe, Mark Headlee, 2014-03-13 Biology for the IB Diploma Second edition covers in full the requirements of the IB syllabus for Biology for first examination in 2016 The second edition of this well received Coursebook is fully updated for the IB Biology syllabus for first examination in 2016 comprehensively covering all requirements Get the best coverage of the

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Marwa Bkerat,2019-07-25 Directly linked to Oxford s bestselling DP Science resources this new Course Preparation resource thoroughly prepares students to meet the demands of IB Diploma Programme Biology Ideal for students who have studied non IB courses at pre 16 level the text introduces learners to the IB approach terminology and skills **IB World Schools**

Yearbook 2011 Wendy Bosberry-Scott,2011 This yearbook is the official guide to schools offering the International Baccalaureate Diploma Middle Years and Primary Years programmes It tells you where the schools are and what they offer and provides up to date information about the IB programmes and the International Baccalaureate Organization *Oxford*

IB Diploma Programme: Biology Course Companion Andrew Allott,David Mindorff,2014-03-06 The only DP Biology resource developed with the IB to accurately match the new 2014 syllabus for both SL and HL this completely revised edition gives you unparalleled support for the new concept based approach to learning the Nature of science Understanding applications and skills are integrated in every topic alongside TOK links and real world connections to drive inquiry and independent learning Assessment support directly from the IB includes practice questions and worked examples in each topic along with focused support for the Internal Assessment Truly aligned with the IB philosophy this Course Book gives unrivalled insight and support at every stage Accurately cover the new syllabus the most comprehensive match with support directly from the IB on the core AHL and all the options Fully integrate the new concept based approach holistically addressing understanding applications skills and the Nature of science Tangibly build assessment potential with assessment support str **IB**

IB I.Study Publishing Ltd,2020-09-15 IB IBDP IB IB DSE **Chemistry for the IB Diploma** Geoff Neuss,2001 This concise guide provides the content needed for the Chemistry IB diploma at both Standard and Higher Level It follows the structure of the IB Programme exactly and includes all the options Each topic is presented on its own page for clarity Higher Level material is clearly indicated and there are plenty of practice questions The text is written with an awareness that English might not be the reader s first language *Oxford IB Study Guides: Biology for the IB Diploma* Andrew

Allott,2014-10-02 This comprehensive Study Guide reinforces all the key concepts for the 2014 syllabus ensuring students develop a clear understanding of all the crucial topics at SL and HL Breaking concepts down into manageable sections and with diagrams and illustrations to cement understanding exam preparation material is integrated to build student confidence and assessment potential Directly linked to the Oxford Biology Course Book to extend and sharpen comprehension this book supports maximum achievement in the course and assessment Fully comprehensive and matched to the new 2014 syllabus Concise and focused approach simplifies complex ideas building truly confident understanding Clear and explanatory style

uses plenty of visuals to make each concept accessible easing comprehension Build a strong foundation of assessment skills strengthening potential with integrated exam questions Develop assessment confidence drawing on thorough assessment support and advice Clear and straightforward language Physics for the IB Diploma Tim Kirk,2003 Developed for the 2007 course outline This study guide for the IB Diploma Physics exam was expertly written by a chief examiner and covers all the Core and Optional materials at both Standard and Higher level Highly illustrated this guide contains clear concise review of processes terms and concepts with practice exercises modeled on exam question types This guide is perfect as both a study aide for coursework and as a review guide for the IB examination IB Biology Revision Workbook Roxanne Russo,2019-10-31 Based on the 2014 DP Biology course the IB Biology Revision Workbook is intended for use by students at any stage of the two year course The workbook includes a wide variety of revision tasks covering topics of the Standard Level Core Additional Higher Level and each of the four Options The tasks include skills and applications taken directly from the guide as well as activities aimed at consolidating learning A section on examination preparation and other useful tools is a part of this workbook IB World Schools Yearbook 2013 Jonathan Barnes,2012 There are currently more than 3600 IB World Schools and this number is growing annually The IB World Schools Yearbook is the official guide to schools authorised to offer the International Baccalaureate Primary Years Middle Years Diploma and Programmes It tells you where the schools are and what they offer and provides up to date information about the IB programmes and the International Baccalaureate This is an ideal reference for schools administration parents and education ministries worldwide as it provides a comprehensive reference of IB World Schools for quick and easy access raises the profile of schools within the IB World School community and beyond reinforces a sense of belonging to the IB World School community **Oxford Resources for IB DP Biology: Study Guide** Andrew Allott,2024-01-18 Please note this title is suitable for any student studying Exam Board International Baccalaureate IB Level and subject Diploma Programme DP Biology First teaching 2023 First exams 2025 The Oxford Resources for IB DP Biology Study Guide is an accessible student friendly resource fully aligned to and focused on the knowledge contents of the 2023 DP Biology subject guide It is designed to be used alongside the Course Book to help students focus on crucial concepts and skills to build confidence reinforce essential theory and cement understanding of SL and HL ideas in an easy to digest bitesize format Concise explanations diagrams and practical notes engage learners and provide a supportive framework for developing subject comprehension and encouraging a good approach to revision Clear and accessible language throughout supports EAL learners **Biology for the IB Diploma Third edition** C. J. Clegg,Andrew Davis,2023-05-05 Developed in cooperation with the International Baccalaureate Trust experienced and best selling authors to navigate the new syllabuses confidently with these coursebooks that implement inquiry based and conceptually focused teaching and learning Ensure a continuum approach to concept based learning through active student inquiry our authors are not only IB Diploma experienced teachers but are also experienced in teaching the IB MYP and have

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