

# Access Free Aim High 4 Test Answer Free Download Pdf

**Everybody Up 3 Teacher's Book + Test Center Cd-rom** *Aim High, Level 4* **Efficient Test Methodologies for High-Speed Serial Links** *Lets Go, Level 2* **Test Method for the Evaluation of the Penetration Resistance of High-security Glazing Subjected to a Combined Attack of Heat and Mechanical Impact** Analysis of the Test Methods for High Modulus Fibers and Composites Addressing Test Anxiety in a High-Stakes Environment High-Voltage Test and Measuring Techniques **Analysis of the Test Methods for High Modulus Fibers and Composites** Let's Go **Everybody Up 6 Teacher's Book + Test Center Cd-rom** **High Quality Test Pattern Generation and Boolean Satisfiability** **High Voltage Test Techniques** Accelerating Test, Validation and Debug of High Speed Serial Interfaces **Design Patterns for High-Quality Automated Tests** **Hsk4 Vocabulary Book: Practice Test Hsk 4 Workbook** **Mandarin Chinese Character with Flash Cards Plus Dictionary. This Complete 600 Hsk Vocabu** *Everybody Up, Level 3* IELTS Listening Practice Tests **Value of the High-pressure Steam Test of Portland Cements** Psychometric Analysis of the NLS and the High School and Beyond Test Batteries *Total Health: Test & quiz master book* **Commercial Wireless Circuits and Components Handbook** Metropolitan Achievement Tests: Advanced battery, High school battery, Language arts, Mathematics, Science, Social science **Words For Smart Test Takers** **Flight Test of the X-29A at High Angle of Attack: Flight Dynamics and Controls** Test Facilities Handbook *High-Stakes Testing* **GED Test For Dummies** *Cracking the New York City Specialized High Schools Admissions Test* *University of Missouri-Columbia Bulletin* Use of English Administrator's Guide to Student Achievement & Higher Test Scores IELTS 5 Practice Tests, General Set 4 **Journal of Education and Learning (EduLearn)** **AI 2003: Advances in Artificial Intelligence** **Advanced Data Mining and Applications** *The Official DVSA Theory Test for Car Drivers* **Congress PASS THE TOEIC TEST NEW EDITION - INTERMEDIATE COURSE.** *Transactions of the National Research Institute for Metals*

*Lets Go, Level 2* Jul 31 2022 Success from the very beginning. Millions of children around the world have learned to speak English through the trusted methodology of Let's Go. Maximise children's talking time in class through dialogues, pair work and communicative games. This combined with the rhythm and melody of the acclaimed Carolyn Graham songs makes the language memorable.

**Value of the High-pressure Steam Test of Portland Cements** Apr 15 2021

*Everybody Up, Level 3* Jun 17 2021 Everybody Up is a seven-level course that motivates children by linking the English classroom to the wider world. Everybody Up encourages children to use language in a natural and meaningful way by connecting English to their own lives. Colorful cross-curricular lessons link English to other school subjects. Fun stories teach life lessons such as being kind and polite. Great songs, and the special Everybody Up Friends, motivate children to practice English - even at home!

Psychometric Analysis of the NLS and the High School and Beyond Test Batteries Mar 15 2021

**AI 2003: Advances in Artificial Intelligence** Nov 30 2019 Consider the problem of a robot (algorithm, learning mechanism) moving along the real line attempting to locate a particular point  $? .$  To assist the mechanism, we assume that it can communicate with an Environment (“Oracle”) which guides it with information regarding the direction in which it should go. If the Environment is deterministic the problem is the “Deterministic Point - cation Problem” which has been studied rather thoroughly [1]. In its pioneering version [1] the problem was presented in the setting that the Environment could charge the robot a cost which was proportional to the distance it was from the point sought for. The question of having multiple communicating robots locate a point on the line has also been studied [1, 2]. In the stochastic version of this problem, we consider the scenario when the learning mechanism attempts to locate a point in an interval with stochastic (i. e. , possibly erroneous) instead of deterministic responses from the environment. Thus when it should really be moving to the “right” it may be advised to move to the “left” and vice versa. Apart from the problem being of importance in its own right, the stochastic pointlocationproblemalsohas potentialapplications insolvingoptimization problems. Inmanyoptimizationsolutions–forexampleinimageprocessing,p- tern recognition and neural computing [5, 9, 11, 12, 14, 16, 19], the algorithm worksits wayfromits currentsolutionto the optimal solutionbasedoninfor- tion that it currentlyhas. A crucialquestionis oneof determining the parameter whichtheoptimizationalgorithmshoulduse.

**Flight Test of the X-29A at High Angle of Attack: Flight Dynamics and Controls** Oct 10 2020

**Advanced Data Mining and Applications** Oct 29 2019 This book constitutes the proceedings of the 10th International Conference on Advanced Data Mining and Applications, ADMA 2014, held in Guilin, China during December 2014. The 48 regular papers and 10 workshop papers presented in this volume were carefully reviewed and selected from 90 submissions. They deal with the following topics: data mining, social network and social media, recommend systems, database, dimensionality reduction, advance machine learning techniques, classification, big data and applications, clustering methods, machine learning, and data mining and database.

**Commercial Wireless Circuits and Components Handbook** Jan 13 2021 A comprehensive source for microwave and wireless circuit design, the Commercial Wireless Circuits and Components Handbook reviews the fundamentals of transmitters and receivers, then presents detailed chapters on individual circuit types. It also covers packaging, large and small signal characterization, and high volume testing techniques for both devices and circuits. This handbook not only provides important information for engineers working with wireless RF or microwave circuitry, it also serves as an excellent source for those requiring information outside of their area of expertise, such as managers, marketers, and technical support workers who need a better understanding of the fields driving their decisions.

Analysis of the Test Methods for High Modulus Fibers and Composites May 29 2022

**Journal of Education and Learning (EduLearn)** Jan 01 2020 Journal of Education and Learning (EduLearn) is an interdisciplinary international journal of original research and writing on education. The EduLearn aims to provide a forum for scholarly understanding of the field of education and plays an important role in promoting the process that accumulated knowledge, values, and skills are transmitted from one generation to another; and to make methods and contents of evaluation and research in education available to teachers, administrators and research workers. Breaking the Barriers of a "Silenced Identity": Teacher Trainees' Attitudes towards the Bilingual Presentation in Hebrew and Amharic Baratz Lea 87 Transformative Learning Model for Youth Life Skills Entrepreneurs in Poor Weavers Songket Palembang Ayi Olim, Bertha N 99 Computer Presentation Programs and Teaching Research Methodologies

Vahid Motamedi 111 Effects of Cooperative Integrated Reading and Composition Learning Model on the English Learning Skills Hadiwinarto Hadiwinarto, Novianti Novianti 117 Toward a Better Preparation of Student Teachers' Reading Skill: The SQ3R Strategy with Authentic and Simplified Texts on Reading Literacy and Vocabulary Mastery Robi Soma, Amirul Mukminin, Noprival Noprival 125 An Investigation on Organizational Charlatan Behaviour and Moral Identity as Predictors of Shame: Importance for Education Juneman Abraham, Rahma Putri Noka Berline 135 Effects of an Informal Energy Exhibit on Knowledge and Attitudes of Fourth Grade Students David Goodman 145 The Investigation of Critical Thinking Dispositions of Religious Culture and Ethics Teacher Candidates Abdulkadir Cekin 158 Factors Contributing to Examination Malpractices at Secondary School Level in Kohat Division, Pakistan Qaiser Suleman, Rizwana Gul, Sadia Ambrin, Farrukh Kamran 165

Let's Go Jan 25 2022 Success from the very beginning. Millions of children around the world have learned to speak English through the trusted methodology of Maximise children's talking time in class through dialogues, pair work and communicative games. This combined with the rhythm and melody of the acclaimed Carolyn Graham songs makes the language memorable. Metropolitan Achievement Tests: Advanced battery, High school battery, Language arts, Mathematics, Science, Social science Dec 12 2020

**High Voltage Test Techniques** Oct 22 2021 New insulating materials, computing methods and voltage levels pose problems or open up methods of solution; electromagnetic compatibility or components and systems also demand attention. This edition aims to bring the reader up-to-date with developments in high voltage and measurement technology.

*High-Stakes Testing* Aug 08 2020 The federal government's No Child Left Behind Act has thrust high-stakes testing - its goals, methods, and consequences - into the educational limelight. The four-fold purpose of this book is to: describe the nature of high-stakes testing; identify types of collateral damage that have attended the testing programs; analyze methods different groups of people have chosen for coping with the damage and suggest lessons to be learned from the high-stakes-testing experience. The six groups of people whose coping strategies are inspected include: politicians and their staffs; educational administrators and their staffs; parents and the public; test makers and test administrators; teachers and students. Importantly, the author avoids aligning himself with the test-bashing rhetoric of those who oppose high-stakes testing, especially the No Child Left Behind Act. Key features of this outstanding new book include: illustrative cases. The book offers more than 350 cases of collateral damage from high-stakes testing--and people's coping strategies--as reported in newspapers over the 2002-2004 period. background perspectives. Part I examines the influence of high-stakes testing on: 1) what schools teach; 2) how student progress is evaluated; 3) how achievement standards are set; and 4) how test results are used. participant responses. Part II, which is the heart of the book, devotes a separate chapter to the coping strategies of each of the major participants in the high-stakes testing movement: politicians and their staffs, educational administrators and their staffs, parents and the public, test-makers and test-givers, teachers, and students. summary chapter. The last chapter (Lessons to Learn) offers suggestions for minimizing collateral damage by adopting alternative approaches not used in the creation of our current high-stakes testing programs, particularly the federal government's No Child Left Behind Act. This book is appropriate for any of the following audiences: students taking evaluation or administration courses in schools of education, inservice administrators and teachers, policy makers, and those members of the general public who are concerned about the fate of schooling in America.

**Test Method for the Evaluation of the Penetration Resistance of High-security Glazing Subjected to a Combined Attack of Heat and Mechanical Impact** Jun 29 2022

**Analysis of the Test Methods for High Modulus Fibers and Composites** Feb 23 2022

**Everybody Up 3 Teacher's Book + Test Center Cd-rom** Nov 03 2022 Everybody Up is a seven-level course that motivates children by linking the English classroom to the wider world. Everybody Up encourages children to use language in a natural and meaningful way by connecting English to their own lives. Colorful cross-curricular lessons link English to other school subjects. Fun stories teach life lessons such as being kind and polite. Great songs, and the special Everybody Up Friends, motivate children to practice English - even at home!

*The Official DVSA Theory Test for Car Drivers* Sep 28 2019 This publication is the official theory test book for car drivers, compiled by the Driver and Vehicle Standards Agency. It contains multiple choice questions from the whole theory test question bank, with answers and explanations, dealing with topics such as: alertness and attitude, vehicle safety and handling, safety margins, hazard awareness, vulnerable road users, motorway rules and rules of the road, road and traffic signs, documents, accidents, and vehicle loading.

High-Voltage Test and Measuring Techniques Mar 27 2022 The new edition of this book incorporates the recent remarkable changes in electric power generation, transmission and distribution. The consequences of the latest development to High Voltage (HV) test and measuring techniques result in new chapters on Partial Discharge measurements, Measurements of Dielectric Properties, and some new thoughts on the Shannon Theorem and Impuls current measurements. This standard reference of the international high-voltage community combines high voltage engineering with HV testing techniques and HV measuring methods. Based on long-term experience gained by the authors the book reflects the state of the art as well as the future trends in testing and diagnostics of HV equipment. It ensures a reliable generation, transmission and distribution of electrical energy. The book is intended not only for experts but also for students in electrical engineering and high-voltage engineering.

**High Quality Test Pattern Generation and Boolean Satisfiability** Nov 22 2021 This book provides an overview of automatic test pattern generation (ATPG) and introduces novel techniques to complement classical ATPG, based on Boolean Satisfiability (SAT). A fast and highly fault efficient SAT-based ATPG framework is presented which is also able to generate high-quality delay tests such as robust path delay tests, as well as tests with long propagation paths to detect small delay defects. The aim of the techniques and methodologies presented in this book is to improve SAT-based ATPG, in order to make it applicable in industrial practice. Readers will learn to improve the performance and robustness of the overall test generation process, so that the ATPG algorithm reliably will generate test patterns for most targeted faults in acceptable run time to meet the high fault coverage demands of industry. The techniques and improvements presented in this book provide the following advantages: Provides a comprehensive introduction to test generation and Boolean Satisfiability (SAT); Describes a highly fault efficient SAT-based ATPG framework; Introduces circuit-oriented SAT solving techniques, which make use of structural information and are able to accelerate the search process significantly; Provides SAT formulations for the prevalent delay faults models, in addition to the classical stuck-at fault model; Includes an industrial perspective on the state-of-the-art in the testing, along with SAT; two topics typically distinguished from each other.

IELTS 5 Practice Tests, General Set 4 Jan 31 2020 General Set 4 from 'High Scorer's Choice' series contains 5 full length IELTS practice tests (no. 16-20) and is a must-have study tool to achieve a high band score in IELTS. These tests feel as authentic as the real IELTS papers, and doing them at home is a great way to estimate your real IELTS score. Being a demanding test, IELTS requires a thorough preparation and these tests will help you master exam strategies, polish your techniques and raise your confidence. \* 5 full-length General Training IELTS

practice tests with answers \* Listening recordings (downloadable mp3) with transcripts, locations of answers in sentences are underlined \* Sample speaking test recordings (downloadable mp3) with examiner's report on every student's performance and an approximate Band score \* Reading Answer Help chapter shows why correct answers are the right ones and where they are located in the passages \* All writing tasks have model answers provided

Accelerating Test, Validation and Debug of High Speed Serial Interfaces Sep 20 2021 High-Speed Serial Interface (HSSI) devices have become widespread in communications, from the embedded to high-performance computing systems, and from on-chip to a wide haul. Testing of HSSIs has been a challenging topic because of signal integrity issues, long test time and the need of expensive instruments. *Accelerating Test, Validation and Debug of High Speed Serial Interfaces* provides innovative test and debug approaches and detailed instructions on how to arrive to practical test of modern high-speed interfaces. *Accelerating Test, Validation and Debug of High Speed Serial Interfaces* first proposes a new algorithm that enables us to perform receiver test more than 1000 times faster. Then an under-sampling based transmitter test scheme is presented. The scheme can accurately extract the transmitter jitter and finish the whole transmitter test within 100ms, while the test usually takes seconds. The book also presents an external loopback-based testing scheme, where an FPGA-based BER tester and a novel jitter injection technique are proposed. These schemes can be applied to validate, test and debug HSSIs with data rate up to 12.5Gbps at a lower test cost than pure ATE solutions. In addition, the book introduces an efficient scheme to implement high performance Gaussian noise generators, suitable for evaluating BER performance under noise conditions.

**Efficient Test Methodologies for High-Speed Serial Links** Sep 01 2022 *Efficient Test Methodologies for High-Speed Serial Links* describes in detail several new and promising techniques for cost-effectively testing high-speed interfaces with a high test coverage. One primary focus of *Efficient Test Methodologies for High-Speed Serial Links* is on efficient testing methods for jitter and bit-error-rate (BER), which are widely used for quantifying the quality of a communication system. Various analysis as well as experimental results are presented to demonstrate the validity of the presented techniques.

**Hsk4 Vocabulary Book: Practice Test Hsk 4 Workbook Mandarin Chinese Character with Flash Cards Plus Dictionary. This Complete 600 Hsk Vocabu** Jul 19 2021 This HSK vocabulary list is a complete Chinese word book for HSK level 4 test prep. This workbook provides 6 Chinese words with pinyin and translation in English on 1 page. There are totally complete 600 words! You can fold the paper as per dot line in order to test yourself for reading and translation. This book aims at the fourth level of HSK and also to improve your Chinese language skills effectively and systematically.

*Use of English* Apr 03 2020 Ten new *Use of English* practice tests for the Cambridge B2 (previously the Cambridge First). Answers included. Perfect for students preparing for this important exam. For use in the classroom or for practice at home. This second edition of sample tests has been written to closely replicate the Cambridge exam experience, and has undergone rigorous expert and peer review. It comprises: Ten *Use of English* tests, 40 texts, 300 individual assessments with answer keys, write-in answer sheets and a marking scheme, providing a large bank of high-quality practice material for students preparing for the Cambridge B2 First. Each print-ready test comprises: Part 1: Multiple choice cloze Part 2: Open close Part 3: Word formation Part 4: Key word transformations The content in this volume is also available in the FCE Academy mobile app, part of a suite of critically acclaimed, test-practice learning tools geared towards the Cambridge B2 First and C1 Advanced *Use of English* and Listening exams. Michael Macdonald is the Director of Studies for Prosperity English Madrid, an English-

language teaching academy focused on preparing candidates of Cambridge B2, C1 and C2 examinations.

**Administrator's Guide to Student Achievement & Higher Test Scores** Mar 03 2020 This "how-to" resource gives K-12 school principals and other supervisory personnel a comprehensive action plan for improving teaching, student achievement, and student test scores. Step-by-step, the author shows the reader all aspects of teaching standards that make students achieve and be successful, how to organize professional development that impacts school achievement, and how to match the curriculum to student achievement. Included are over 80 full-page forms, checklists and handouts that can be used as is or readily adapted to fit the user's needs.

**Design Patterns for High-Quality Automated Tests** Aug 20 2021 About This Book Achieving high-quality test automation that brings value- you need to understand core programming concepts such as SOLID and the usage of design patterns. After you master them, the usual career transition is into more architecture roles, such as choosing the best possible approaches for solving particular test automation challenges. You will get an access to more than 20000+ lines of real-world code examples. Who This Book Is For The book is NOT a getting started guide! If you don't have any prior programming experience in writing automated tests through WebDriver, I suggest you to first start with some book about basic programming and basic WebDriver usage. I believe it might be invaluable for the readers that have a couple of years of experience and whose job is to create/maintain test automation frameworks, or to write high-quality reliable automated tests. The book is written in C#. However, I think that you can use the approaches and practices in every OOP language. If you have a Java background (or similar), you will get everything you need, don't worry. Even if you don't get all the concepts from the first read, try to use and incorporate some of them, later you can return and reread them. I believe with the accumulation of experience using high-quality practices- you will become a hard-core test automation ninja! What You Will Learn Learn how to optimize and stabilize your flaky tests. Learn how to handle asynchronous web pages in your tests. Automatically deal with AJAX and jQuery. Improve Test Readability, Maintainability, Reusability, Extensibility by incorporating 10+ design patterns: Page Object Model, Facade, Decorator, Observer, Strategy, Singleton, Fluent Interface, Template Method, Abstract Factory, Factory Method, Repository, Lazy Load. Learn what are the SOLID principles and how they can improve your test code. We will also discuss other essential programming principles such as composition, DRY, KISS and others. Learn how to assess and choose the best possible design for your framework or library. Learn how the benchmarking your code can help you to speed up your tests. Learn how to design and build your framework to handle test data and different test environments. Learn about high quality code practices and naming convention so that your code get much more understandable.

*Aim High, Level 4* Oct 02 2022 Aim High will help your students succeed as language learners in the classroom, with their homework and also in exams. How will it do this? It builds students vocabulary knowledge through a structured and progressive approach. What does this mean? There are over 50 active vocabulary items in each unit, including words from the Oxford 3000TM. Students learn the meaning of new words but they also learn how and when to use them for themselves. And these are not just useful, everyday words. They're also introduced to expressions, idioms, phrasal verbs, and so on. Essential language for communicating well in English. As a teacher you'll want to help your students become autonomous learners. In Aim High there are lots of opportunities to prepare for this. In the Student's Book there's a 'Dictionary Corner', with exercises to help them towards learner autonomy. There's also a Literacy Corner to extend their vocabulary, focusing on selected readers of the right level. With the self-check and

review boxes they can see how they're progressing for themselves. A Grammar Reference and Grammar Builder bring together all the grammar and vocabulary for the unit. These allow students to look back over grammar points and review what they have learned.

*Addressing Test Anxiety in a High-Stakes Environment* Apr 27 2022 "This fascinating, well-researched book makes a wonderful contribution to the field. It provides helpful information on what test anxiety is and what we can do about it. This topic is as important today than ever due to education reform initiatives across the country." -James Kelleher, Assistant Superintendent Scituate Public Schools, MA "The book offers answers to the most important question of all: If test anxiety can hinder our ability to make accurate inferences and good decisions for kids, what can we do to ease students' fears? As it turns out, researchers have answers, and the authors present helpful ideas for all of us-parents, educators, and students themselves." -Linda Wacyk, Trustee Grand Ledge Board of Education, MTWhat can we do about test anxiety that will help our students? Testing is expanding at every level of education and into every corner of social and vocational enterprise, and test anxiety can have devastating effects on students' test scores, confidence, and motivation to learn. Testing has become more extensive and more consequential at every level. The higher the stakes on tests, the greater the concern about the presence and effects of test anxiety. *Addressing Test Anxiety in a High-Stakes Environment* provides straightforward explanations, practical suggestions, and reasonable recommendations for addressing test anxiety. This practical resource offers: An overview of the concept of test anxiety A glossary of assessment and measurement terms Current research findings on test anxiety and which students it is most likely to affect Information on the prevalence, correlations, and effects of test anxiety Situations in which test anxiety can be helpful Suggestions for preventing and reducing the effects of test anxiety

*Congress* Aug 27 2019

IELTS Listening Practice Tests May 17 2021 *IELTS Listening Practice Tests: IELTS Exam Preparation Book with 4 Practice Tests, Free mp3s and Tips for a High Score* by IELTS Success Group contains four complete IELTS practice listening tests. This book is an expanded edition of *IELTS Listening Practice Tests: IELTS Self-Study Exam Preparation Book for IELTS for Academic Purposes and General Training Modules* by IELTS Success Associates. The first 111 pages of the study guide have the same great material as IELTS Success Associates' original publication. Plus, there is a new IELTS listening practice test at the end of the book. Access to the mp3s is free when you purchase this publication. Each practice listening test in this book has four sections, just like the actual IELTS exam, so there are 16 listening passages. The practice exams have questions of all of the types that you will see on the real IELTS listening test, so the book has multiple choice questions, form and diagram completion, matching questions, short answers and sentence completion questions. The tips at the beginning of the book explain the format of the IELTS listening test and tell you what to expect on your exam day. Practice Listening Test 1 in the publication is in tutorial mode, so it includes tips and suggestions at the beginning of each section to give you strategies to help you answer all of the types of questions on the listening tests. There is a complete answer key with in-depth explanations for each answer, so that you can understand why each answer is the correct one. The explanations give you additional tips to help you improve your test-taking technique. The book also includes the complete scripts for each of the listening tests, which you should read after completing each of the practice tests, to help improve your knowledge of the vocabulary and idioms included on the IELTS exam. Get a high score on your IELTS listening test with this great study guide!?

**PASS THE TOEIC TEST NEW EDITION - INTERMEDIATE COURSE.** Jul 27 2019

Test Facilities Handbook Sep 08 2020

**GED Test For Dummies** Jul 07 2020 Score high on the GED Test In today's job environment, it's usually the better-educated person who gets the position, promotion, or raise. Scoring high on the GED Test can give you an edge over the competition—whether it's to get a brand-new job or advance in the one you already have. If you're preparing for the exam and want to increase your odds of scoring higher, GED Test For Dummies gets you up and running with everything you need to know for test day. Inside, you'll find valuable, easy-to-digest information for navigating your way through tests on Language Arts, Social Studies, Mathematical Reasoning, and Science. Whether you're looking to perfect your grammar and punctuation skills, put the social in your studies, take the fear out of math and science, get familiar with different types of fiction and nonfiction passages, or answer every multiple-choice question with confidence, GED Test For Dummies makes it not only possible, but easy for you to score high on this life-changing exam. Fully updated to reflect the latest version of the GED test Includes two full-length practice tests with answers and detailed explanations Provides vital information and test-taking tips to help maximize your score Includes special considerations for those whose first language isn't English Feel good about yourself knowing that you accomplished something amazing. Get GED Test For Dummies and put yourself on the road to greater success.

*Total Health: Test & quiz master book* Feb 11 2021

**Everybody Up 6 Teacher's Book + Test Center Cd-rom** Dec 24 2021 Everybody Up is a seven-level course that motivates children by linking the English classroom to the wider world. Everybody Up encourages children to use language in a natural and meaningful way by connecting English to their own lives. Colorful cross-curricular lessons link English to other school subjects. Fun stories teach life lessons such as being kind and polite. Great songs, and the special Everybody Up Friends, motivate children to practice English - even at home!

*Cracking the New York City Specialized High Schools Admissions Test* Jun 05 2020 Featuring practice tests and drill questions, this guide's second edition will help students prepare for the entrance exam for three of New York City's elite public high schools.

*Transactions of the National Research Institute for Metals* Jun 25 2019

**Words For Smart Test Takers** Nov 10 2020 Exercises help students preparing for standardized tests to improve their vocabulary.

*University of Missouri-Columbia Bulletin* May 05 2020