



ONTARIO CURRICULUM CHECKLISTS

GRADES 1 - 8

GRADE BY GRADE CHECKLISTS BASED ON THE GOVERNMENT LEARNING OUTCOMES

Math • Language Arts • Science • Social Studies • Phys Ed & Health • French

Curriculum Guidelines Ontario

J Spring



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Curriculum Guidelines : Primary and Junior Divisions Ontario. Department of Education, 1971 **International Handbook of Technology Education** Marc J. de Vries, Ilja Mottier, 2006 **International Handbook of Technology Education** *The Ontario Curriculum, Grades 9 to 12*, 2015 *Resources in Education*, 1994-07 *The Ontario Curriculum, Grades 1-8*, 2015 **Canadiana**, 1991 **Journal - Association Canadienne Pour la Santé, L'éducation Physique Et Le Loisir**, 1992 *The Ontario Curriculum, Grades 1 to 12. Native Languages : a Support Document for the Teaching of Language Patterns : Ojibwe and Cree* Ontario. Ministry of Education, 2002 This guide is intended for teachers of Ontario Ojibwe Cree Its purpose is to organize extend reinforce teachers knowledge of the language patterns that occur in these Native languages and to clarify explain the structure function of the various language elements that make up these patterns Chapters cover the following parts of speech inflection derivation nouns pronouns noun phrases verbless sentences verbs and stem formation Includes index *Papers of the First International Federation for Information Processing (IFIP) World Conference on Computer Education, Held August 24-28, 1970 in Amsterdam, The Netherlands* B. Scheepmaker, Karl L. Zinn, 1970 The Ontario Curriculum, Grade 1-8. English as a Second Language and English Literacy Development :ba Resource Guide Ontario. Ministry of Education, 2002 **Teaching and Learning English Worldwide** James Britton, Robert Eugene Shafer, Ken Watson, 1990 This book explores English teaching in 13 countries where English is a mother tongue language or a significant second or third language It focuses on the place of English in a particular society and examines how the teaching of English exists in the social and political context of that society **The Evaluation Syllabus** Alison D'Anglejan-Chatillon, Birgit Harley, Stanley M. Shapson, 1990 In addition to being an essential component of program evaluation student evaluation of a systematic nature is considered to be an integral part of language teaching methodology The purpose of this document is to provide a brief review of some options in student evaluation and to consider their relevance for monitoring student learning and perceptions in the context of a multidimensional curriculum for core French programs It examines some important basic concepts in evaluation and considers evaluation methods in three general categories language tests observation and record keeping and self report evaluation techniques Multiculturalism and American Democracy Symposium on Science, Reason, and Modern Democracy, 1998 The fourteen essays in this volume address the pros and cons of multiculturalism and explore its relationship with liberal democracy *Current Index to Journals in Education*, 2001 **Canadian Books in Print**, 1977 **A guide to the medical profession, ed. and with intr. chapter by L.F. Winslow** Edwin Wooton, 1883 Standards for the English Language Arts National Council of Teachers of English, 1996 This book describes standards for the English language arts and defines what K 12 students should know about language and be able to do with language The book presents the current consensus among literacy teachers and researchers about what students should learn in the English language arts reading writing listening speaking viewing and

visually representing The first chapter of the book Setting Standards in the English Language Arts addresses defining the standards and the need for standards The second chapter Perspectives Informing the English Language Arts Standards discusses the content purpose development and context of the standards The third chapter presents the 12 standards in detail The fourth chapter Standards in the Classroom presents elementary middle school and high school vignettes which illustrate how the standards might be implemented in the classroom The book concludes that these standards represent not an end but a beginning a starting point for discussion and action A glossary containing more than 100 terms a list of participants a history of the standards project an overview of standards projects state and international English language arts standards a 115 item annotated list of resources for teachers and a comment form are attached RS *The Primary School and Equal Opportunities* Gaby Weiner,1990 *American Medical Directory* ,1912 **An Assessment of Resource Studies in Canadian Schools** Michael John Fox,1997

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for the nitration 4.01 ml of nitric acid 4.00 ml of sulfuric acid and 4.56 ml bromobenzene were used to complete the reaction with these measurements bromobenzene was found to be the limiting reagent since only 4.56 ml of bromobenzene was used the amount of product predicted to be recovered was 8.7533 g

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the aim of the experiment is to determine and study electrophilic aromatic substitution reaction especially nitration of methyl benzoate to give methyl m nitrobenzoate thus determine the weight melting point and percentage yield of the pure methyl m nitrobenzoate abstract

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in this experiment we will carry out the nitration of bromobenzene bromine substituted on an aromatic ring is an ortho para directing group it will direct an incoming electrophile to the ortho and para positions it is also deactivating meaning that its reactions will be slower than the identical reactions of benzene

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section 20711 lab experiment nitration of bromobenzene introduction the chemical reaction of nitration consists of a nitro group being added to or substituted in a molecule nitration can basically be carried out by a mixture of concentrated nitric acid and sulfuric acid this mixture is useful to obtain the active nitronium ion

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1 go to the restroom and wash the affected area with lots of soap and water the soap in the lab is not suitable for this purpose 2 return to the lab and apply mineral oil to the affected area 3 the summary to this warning is not to touch any part

of your body while performing this experiment if you must leave the lab for any reason 1

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in the nitration of bromobenzene a mixture of sulfuric acid and nitric acid react with one another nitric acid the weaker of the two acids will serve as base to form nitronium ion bromobenzene will attack the nitronium ion by nucleophilic attack

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then actual is your actual findings yield actual theoretical $\times 100$ what are the possible side reactions of nitration of bromobenzene dinitration can occur at ortho para or at both ortho positions occurs in overheating meta product happens very rarely because bromine is an ortho para director

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the soap in the lab is not suitable for this purpose 2 return to the lab and apply mineral oil to the affected area theory and explanation of the nitration of bromobenzene if the temperature of the reaction mixture exceeds 60 °C

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the bromine substituent in bromobenzene is an ortho para director the para position is favored due to steric effects in the reaction that takes place in this lab a nitro group is substituted onto bromobenzene at the para position to form 1-bromo-4-nitrobenzene

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study with quizlet and memorize flashcards containing terms like reacting sulfuric and nitric acid together produces the nitronium ion alone nitric acid is not a strong enough electrophile to react with bromobenzene sulfuric acid is added to the nitric acid the reverse rxn can overheat and boil easily includes a claisen adaptor and

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over 5 minutes slowly pipet this bromobenzene into the icy cold nitration mixture HNO_3 3 h 2 so 4 in the 125 ml flask and stir continue to stir the reaction mixture in the ice bath for 30 minutes do not heat in a new 250 ml erlenmeyer

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on the right the arenium cation has a nitro set with incredibly small 0.6 angstrom bond distances this will result in an optimization failure as the atoms are even close for the programme to accommodate their electrons demonstration of creating the p arenium cation by the nitration of bromobenzene

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the purpose of this lab was to observe where substituents are added on a benzene ring by way of electrophilic aromatic substitution the electrophilic source in the nitration of bromobenzene comes from a nitronium ion NO_2^+ which acts as the electrophilic species

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nitration of bromobenzene is an electrophilic aromatic substitution reaction the electrophile will be formed from 4 0ml of nitric acid and 4 0ml of sulfuric acid and will then react with 4 5ml of bromobenzene this will produce o bromonitrobenzene and p bromonitrobenzene

experiment 11 electrophilic aromatic substitution nitration - Feb 10 2022

experimental spectra reaction a fluorobenzene stock fluorobenzene 1 h 1 h 19 f 19 f 13 c nmr fid for reference only sample 1 h 1 h 19 f 19 f 13 c nmr eas nitration of fluorobenzene crude product not available for submission for credit

nitration of bromobenzene chem 154 gwu studocu - Mar 26 2023

lab writeup the purpose of this lab was to observe where substituents are added on benzene ring way of electrophilic aromatic substitution the electrophilic

5 nitration lab docx lab 5 nitration of bromobenzene - Aug 19 2022

chem 2261 lab 5 nitration of bromobenzene introduction an electrophilic aromatic substitution reaction is an important process that allows for intermediate chemical structures to be used as precursors to pharmaceuticals and other industrially produced chemicals by adding different functional groups into an aromatic ring

[lab report nitration of bromomobenzene ipl org](#) - Feb 22 2023

lab report 10 nitration of bromobenzene raekwon filmore cm 244 section 40 march 27 2018 introduction for this experiment nitration of bromobenzene was the focus of the lab the benzene is an aromatic compound and when it reacts with wither a mixture of sulfuric acid or nitric acid creates what is known as a nitro group