

Bakers

NOC 6252

Introduction

Bakers prepare breads, rolls, muffins, pies, pastries, cakes and cookies in retail and wholesale bakeries and dining establishments. They are employed in bakeries, supermarkets, catering companies, hotels, restaurants, hospitals and other institutions, or they may be self-employed. Bakers who are supervisors are included in this unit group.

The most important Essential Skills for Bakers are:

- Reading Text
- Document Use
- Oral Communication

Document Sections

- Reading Text
- Document Use
- Writing
- Numeracy
- Oral Communication
- Thinking Skills
 - Problem Solving
 - Decision Making
 - Critical Thinking
 - Job Task Planning and Organizing
 - Significant Use of Memory
 - Finding Information
- Working with Others
- Digital
- Continuous Learning
- Notes

A. Reading Text

Reading Text

Tasks	Complexity Level	Examples
<u>Typical</u>	1 to 3	<p>Bakers</p> <ul style="list-style-type: none"> • read instructions and other text on product labels. For example, they read instructions for storing and mixing concentrated colour and flavour extracts. (1) • read logbook entries and short notes from co-workers. For example, they read comments in daily logbooks about outstanding work, special orders, equipment malfunctions and supply deliveries. They read notes from managers about job tasks and baking priorities. They read brief decorating instructions and ingredient requests on bake orders. (1) • read instructions in recipes, bakers' sheets and production sheets. For example, they follow instructions in production sheets and recipes to create products such as bread, cookies and speciality Christmas logs. In addition, they read recipes to determine the number and complexity of steps for baked goods. (2)
Most Complex	3	<ul style="list-style-type: none"> • read memos and bulletins from within their own organizations and from agencies such as health departments and the Canadian Food Inspection Agency. For example, they may read memos about upcoming events, new products, allergy alerts and changes to food handling regulations. (2) • may read requests for seasonal bakery samples for various organizations. They read details about themes and tastes to determine what samples to create and recommend. (2) • read about taste and flavour trends, blending techniques, decorating tips and industry highlights in trade publications such as Baker's Journal . They use the information to enhance their baking knowledge. For example, they may read about the food science involved in new flavour blends and suggestions for refreshing fresh fruit desserts. (3) • • read food handling and food importing regulations, acts and codes. For example, they read provincial food handling

		regulations to determine cleaning requirements for working surfaces. Self-employed and head bakers may read federal guidelines for importing food products commercially to determine which acts and regulations apply to the food and what labelling and declaration procedures to follow. (3)
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Reading Summary

The symbol √ is explained in the [Use of Symbols](#) section.

<u>Type of Text</u>	<u>Purpose for Reading</u>			
	To scan for specific information/To locate information	To skim for overall meaning, to get the 'gist'	To read the full text to understand or to learn	To read the full text to critique or to evaluate
Forms	√		√	
Labels	√		√	
Notes, Letters, Memos	√		√	
Manuals, Specifications, Regulations	√	√	√	
Reports, Books, Journals	√		√	

B. Document Use

Document Use		
Tasks	Complexity Level	Examples
<u>Typical</u>	1 to 2	Bakers <ul style="list-style-type: none">scan product labels and warning signs. For example, they locate colour codes and names of dyes and concentration levels of flavour extracts on product labels. They observe hazard warnings on equipment and container labels. (1)enter data into label templates. For example, they complete product labels by listing ingredients and entering instructions for storage and reheating. (1)locate codes on colour swatches. They use these codes to locate mixing ratios for custom cake icing colours. (1)locate data in recipes, production sheets, bake orders and quality control forms. For examples, they locate baking quantities, product sizes, decorating details, due dates and customers' names in bake orders. They locate ingredients and quantities in recipes and production sheets. (2)
<u>Most Complex</u>	2	<ul style="list-style-type: none">locate data in lists and tables. For example, they locate colours and mixing ratios on colour sheets. They locate baking data such as product types and quantities in baking and production schedules. They may also locate sales data in daily, weekly and monthly sales sheets. (2)complete bake orders and tracking and quality control forms. For example, they enter times, bake order numbers and production details in timesheets. They record customer contact information, product details and brief decorating details in bake orders. They may enter sales data into sales tables to track daily sales of different products. (2)

Examples

- create recipes. For example, bakers create recipes that list ingredients and provide instructions to prepare, cook, assemble and decorate bakery items.

Document Use Summary

- Read signs, labels or lists.
- Complete forms by marking check boxes, recording numerical information or entering words, phrases, sentences or text of a paragraph or more. The list of specific tasks varies depending on what was reported.
- Read completed forms containing check boxes, numerical entries, phrases, addresses, sentences or text of a paragraph or more. The list of specific tasks varies depending on what was reported.
- Read tables, schedules or other table-like text (e.g., read work shift schedules).
- Create tables, schedules or other table-like text.
- Enter information on tables, schedules or other table-like text.
- Obtain information from sketches, pictures or icons (e.g., computer toolbars).

C. Writing

Writing		
Tasks	<u>Complexity Level</u>	<u>Examples</u>
<u>Typical</u>	1 to 2	Bakers <ul style="list-style-type: none"> write brief notes in production logs, text entries in forms and comments on recipes, bake orders and production sheets. For example, they write notes on bulletin boards about low inventory and late supply deliveries. They explain changes to ingredients and decorations for baked goods on recipes and production sheets. They write instructions for preparing, baking and decorating baked goods on recipes, bake orders and productions sheets. (1)
<u>Most Complex</u>	3	<ul style="list-style-type: none"> may write memos and bulletins. For example, self-employed bakers and head bakers may write memos outlining changes to baking priorities and bulletins describing new food preparation and storage procedures. (2) may prepare job quotes and proposals. For example, self-employed bakers and head bakers write job proposals that describe baked products, quality standards and service guarantees. (3)

Writing Summary

The symbol √ is explained in the [Use of Symbols](#) section.

<u>Length</u>	<u>Purpose for Writing</u>						
	To organize/to remember	To keep a record/to document	To inform/to request information	To persuade/to justify a request	To present an analysis or comparison	To present an evaluation or critique	To entertain
Text requiring less than one paragraph of new text	√	√	√				
Text rarely requiring more than one paragraph		√	√				
Longer text			√				

D. Numeracy

The symbol $\sqrt{\quad}$ is explained in the [Use of Symbols](#) section.

Numeracy		
Tasks	<u>Complexity Level</u>	<u>Examples</u>
$\sqrt{\quad}$ Money Math	3	Bakers
$\sqrt{\quad}$ Scheduling, Budgeting & Accounting Math	3	<ul style="list-style-type: none"> may prepare customers' bills and complete cash sales. Bakers in retail locations total customers' bills for baked goods, calculate taxes if necessary, take payments and give change. In addition, they may calculate markups and discounts. (Money Math), (3)
$\sqrt{\quad}$ Measurement and Calculation Math	1 to 2	<ul style="list-style-type: none"> may calculate costs for baked goods. For example, bakers employed in retail locations calculate estimated and actual costs for ingredients used and hours required to prepare products. (Scheduling, Budgeting & Accounting Math), (3)
$\sqrt{\quad}$ Data Analysis Math	1 to 3	<ul style="list-style-type: none"> may schedule sequences of activities and tasks. For example, head bakers establish production timelines and staffing requirements to meet weekly and seasonal baking orders. In addition, they may also schedule daily sequences of activities for baking and sales staff. (Scheduling, Budgeting & Accounting Math), (3) may develop budgets and prepare financial statements. For example, self-employed and head bakers may develop annual budgets by allocating money to capital, staffing, leasing and inventory costs, operating expenses, insurance and supplies. (Scheduling, Budgeting & Accounting Math), (3)
$\sqrt{\quad}$ Numerical Estimation	2	<ul style="list-style-type: none"> take measurements using weigh scales, graduated containers, tapes and digital displays. They measure ingredient amounts when preparing baked goods. They measure depths, heights, widths and lengths of finished products such as cookies and cakes. They monitor and set temperatures and timers using digital displays. (Measurement and Calculation Math), (1) calculate ingredient quantities when modifying recipes. For example, bakers calculate amounts of ingredients for double and triple recipe yields. They calculate adjusted liquid quantities when substituting sugar for honey to maintain proportions of wet and dry ingredients. (Measurement and Calculation Math), (3) compare the weights and dimensions of bakery products to specifications to verify that baked goods meet quality standards. (Data Analysis Math), (1)

- manage inventories of baking supplies. They determine how much inventory to stock and when to reorder. (Data Analysis Math), (2)
- analyze sales data in order to examine purchasing trends. For example, head bakers and self-employed bakers calculate average daily, weekly and seasonal sales. They use the data to identify popular items and to determine quantities of baked goods to produce. (Data Analysis Math), (3)
- estimate the time to complete baking tasks. They depend on their experience with similar baking tasks to estimate times. Complex decorating and multi-stepped activities such as developing and placing tiers on uncommon shapes for cakes can affect preparing and decorating times. (Numerical Estimation), (2)

Math Skills Summary

a. Mathematical Foundations Used

The symbol \checkmark is explained in the [Use of Symbols](#) section.

Mathematical Foundations Used		
Code	Tasks	Examples
<u>Number Concepts</u>		
\checkmark	Whole Numbers	Read and write, count, round off, add or subtract, multiply or divide whole numbers. For example, calculating material and supply quantities and ingredient amounts; counting baked goods and supplies.
\checkmark	Rational Numbers - Fractions	Read and write, add or subtract fractions, multiply or divide by a fraction, multiply or divide fractions. For example, reading, writing and calculating dry and liquid ingredients in fractions of cups; calculating time intervals in fractions of hours.
\checkmark	Rational Numbers - Decimals	Read and write, round off, add or subtract decimals, multiply or divide by a decimal, multiply or divide decimals. For example, reading, writing and calculating weights of ingredients grams and kilograms; completing calculations using dollar amounts.
\checkmark	Rational Numbers - Percent	Read and write percents, calculate the percent one number is of another, calculate a percent of a number. For example, calculating taxes; calculating ingredient amounts specified as percentages; calculating markups.
\checkmark	Equivalent Rational Numbers	Convert between fractions and decimals or percentages. For example, converting ingredient amounts expressed as fractions to percentages of mix yield.

<u>Patterns and Relations</u>		
√	Equations and Formulae	Solve problems by constructing and solving equations with one unknown. For example, constructing equations to calculate ingredient amounts for adjusted yields in recipes.
√	Use of Rate, Ratio and Proportion	Use a rate showing comparison between two quantities with different units. Use a ratio showing comparison between two quantities with the same units. Use a proportion showing comparison between two ratios or rates in order to solve problems. For example, reading and writing production and cost rates; reading and writing mixture ratios; preparing syrups and icings using ratios; using ratios to dilute concentrated flavour extracts.
<u>Shape and Spatial Sense</u>		
√	Measurement Conversions	Perform measurement conversions. For example, converting ounces and pounds to grams and kilograms; converting teaspoons and cups to fluid ounces; converting fluid ounces to litres and millilitres.
<u>Statistics and Probability</u>		
√	Summary Calculations	Calculate averages. Calculate rates other than percentages. For example, calculating average production times for different baked goods; calculating average daily, weekly and seasonal sales for baked goods; establishing work rates such as cookies baked and petit fours decorated per hour.
√	Statistics and Probability	Use descriptive statistics (e.g. collecting, classifying, analyzing and interpreting data). For example, analyze sales data to draw conclusions about the types and quantities of baked items to produce and inventory to stock.
		Using tables, schedules or other table-like text.

b. How Calculations are Performed

- In their heads.
- Using a pen and paper.
- Using a calculator.
- Using a computer.

c. Measurement Instruments Used

- Time. For example, using clocks and timers.
- Weight or mass. For example, using weigh scales.
- Distance or dimension. For example, using rulers and measuring sticks.
- Liquid volume. For example, using measuring cups and spoons.
- Temperature. For example, using temperature gauges and thermometers.

E. Oral Communication

Oral Communication		
Tasks	<u>Complexity Level</u>	<u>Examples</u>
<u>Typical</u>	1 to 3	<p>Bakers</p> <ul style="list-style-type: none"> • discuss baking supplies such as flour, dyes, flavour extracts and fresh fruit with suppliers. (1) , (weekly) • discuss baking order details with customers. For example, they may ask customers about cake decorating specifications and delivery dates. They provide advice and present different choices for types of bakery goods, ingredients and decorations. (2) , (daily) • discuss current work assignments and products with co-workers. For example, throughout their shifts they speak with other bakers about current assignments to coordinate the use of equipment and space and to integrate baking tasks. They advise sales staffs about flavours and ingredients for new products. They may discuss new products, health and safety regulations, work procedures and bakery operations during staff meetings. Self-employed and head bakers may lead staff meetings. (2) , (daily)
<u>Most Complex</u>	3	<ul style="list-style-type: none"> • instruct apprentice bakers and new sales staffs. For example, they explain preparation and decorating procedures while demonstrating tasks. They give reasons for sequencing tasks and preparing mixtures in certain ways. They offer apprentices suggestions for decorating cakes and improving workflow. (2) • make product suggestions and participate in product development meetings. Bakers may offer suggestions and give opinions about types, flavours and design features of baked goods. They may discuss the development of products for a variety of settings and organizations. (3) • may negotiate contracts with clients and suppliers. For example, self-employed bakers negotiate terms for equipment purchases such as ovens. They may negotiate prices with regular clients for ongoing purchases of baked goods. (3) , (monthly)

Modes of Communication Used

- In person.
- Using a telephone.

Environmental Factors Affecting Communication

Significant environmental factors affecting oral communication were not reported by job incumbents.

Oral Communication Summary

<u>Type</u>	<u>Purpose for Oral Communication (Part I)</u>					
	To greet	To take messages	To provide/receive information, explanation, direction	To seek, obtain information	To co-ordinate work with that of others	To reassure, comfort
Listening (little or no interaction)			√			
Speaking (little or no interaction)						
Interact with co-workers			√	√	√	
Interact with those you supervise or direct			√		√	
Interact with supervisor/manager			√	√		
Interact with peers and colleagues from other organization						
Interact with customers/clients/public			√			
Interact with suppliers, servicers			√			
Participate in group discussion			√			
Present information to a small group						
Present information to a large group						

The symbol √ is explained in the [Use of Symbols](#) section.

<u>Type</u>	<u>Purpose for Oral Communication (Part II)</u>					
	To discuss (exchange information, opinions)	To persuade	To facilitate, animate	To instruct, instill understanding, knowledge	To negotiate, resolve conflict	To entertain
Listening (little or no interaction)						
Speaking (little or no interaction)						
Interact with co- workers	√			√		
Interact with those you supervise or direct	√			√		
Interact with supervisor/manager	√	√		√		
Interact with peers and colleagues from other organization						
Interact with customers/clients/ public	√			√		
Interact with suppliers, servicers	√				√	
Participate in group discussion	√					
Present information to a small group						
Present information to a large group						

F. Thinking Skills

1. Problem Solving

Problem Solving		
Tasks	<u>Complexity Level</u>	<u>Examples</u>
<u>Typical</u>	1	Bakers <ul style="list-style-type: none">• find that there are not enough baking supplies to complete customers' orders. They pay retail prices at other bakeries and grocery stores until wholesale purchases are delivered. (1) , (monthly)• find that baked goods do not turn out as expected due to environmental conditions and substandard ingredients. They may adjust batch sizes, change ingredients and use alternate equipment. For example, bakers making bread in hot weather may reduce the amount of yeast to slow rising times. (1)• are unable to complete orders due to malfunctioning equipment. For example, bakers find that overheating ovens are burning baked goods. They adjust oven temperatures and may use oven thermometers to obtain correct temperature settings. They call appliance repairers to fix the equipment. They adjust their tasks to minimize the affect on daily productivity. (1)
<u>Most Complex</u>	2	<ul style="list-style-type: none">• encounter customers who do not pick up products they have ordered. They place these products on display as daily specials, sell them at reduced rates to recoup costs and freeze remaining items for later use. They may negotiate reduced prices with clients such as hotel and dining establishments for larger and pricier items. (2)• receive complaints about baked goods from customers. They review customers' specifications and the steps taken to meet them. They sample products to determine if there is merit to the complaints. If they feel that goods are substandard, they may offer customers free products and discounts on future purchases. (2)

2. Decision Making

Decision Making		
<u>Tasks</u>	<u>Complexity Level</u>	<u>Examples</u>
<u>Typical</u>	2	Bakers <ul style="list-style-type: none">• modify recipes to suit different circumstances. They use their experience with baking and product substitutions to guide their decisions. For example, bakers may add lemon juice to tart fillers to decrease the sweetness and enhance the flavour. Bakers may choose to substitute butter for shortening to enhance the taste and quality of tortes. (2) , (weekly)• choose items for daily and seasonal specials. They consider the latest dining and entertaining trends, the types of fruit that are in season and the amount of time needed to prepare each item. They review past sales statistics and recall what customers have said about specials and seasonal items offered in the past. (2) , (daily)
<u>Most Complex</u>	2 to 3	<ul style="list-style-type: none">• select decorating styles and products for cakes and pastries. They consider material and ingredient costs, transportability, availability of supplies, ripeness of fresh fruit and flavour combinations. (2)• may select equipment and suppliers. For example, self-employed bakers decide which brand and types of ovens to purchase. They consider prices, quality and their personal preferences. When selecting suppliers they consider the selection, quality and price of supplies. (3) , (annually)

3. Critical Thinking

Critical Thinking		
<u>Tasks</u>	<u>Complexity Level</u>	<u>Examples</u>
<u>Typical</u>	2	Bakers <ul style="list-style-type: none"> • evaluate the quality of baking supplies such as fresh fruit, cream, fillers and chocolates using criteria such as freshness, lack of blemishes, taste, size and texture. (2) , (daily) • evaluate the quality of the baked goods they produce. They use their technical knowledge to assess how flavours combine and enhance each other. They apply established quality control criteria such as acceptable dimensions, finishes, detailing and textures. (2) , (daily)
<u>Most Complex</u>	2 to 3	<ul style="list-style-type: none"> • may evaluate the efficiency of baking operations. For example, self-employed bakers and head bakers assess the organization of job tasks and the placement of equipment. They determine how often space and equipment are used, estimate delay times between different tasks and judge the skills of workers. They use their evaluations to modify baking operations. (3)

4. Job Task Planning and Organizing

Job Task Planning and Organizing	
<u>Complexity Level</u>	<u>Description</u>
2	<p>Own job planning and organizing</p> <ul style="list-style-type: none"> • Bakers generally organize their own tasks. They take direction from managers of the bakeries, grocery stores, restaurants and other locations where they work. Bakers in retail locations sequence their job tasks to satisfy customers' requests. Job task planning is complicated by the need to coordinate the use of space and equipment with other bakers. <p>Planning and organizing for others</p> <ul style="list-style-type: none"> • Self-employed and head bakers are responsible for planning schedules and activities for other bakers, helpers and retail clerks.

5. Significant Use of Memory

Examples

- remember short lists of items to get from pantries and storerooms.
- remember small lists of what customers have ordered.

6. Finding Information

Finding Information		
<u>Tasks</u>	<u>Complexity Level</u>	<u>Examples</u>
<u>Typical</u>	1 to 2	Bakers
<u>Most Complex</u>	2	<ul style="list-style-type: none">• find information about new baking methods and products. For example, they find information about new desserts by reading recipes, magazine articles and cookbooks. They consult other bakers and read magazine articles and suppliers' fact sheets for information about products such as exotic nut blends. (2)

G. Working with Others

Working with Others	
<u>Complexity Level</u>	<u>Description</u>
2	Bakers work independently to prepare, bake, assemble and decorate baked goods. They coordinate and integrate tasks with other bakers in order to share resources such as ovens and workspaces.

Participation in Supervisory or Leadership Activities

- Participate in formal discussions about work processes or product improvement.
- Have opportunities to make suggestions on improving work processes.
- Monitor the work performance of others.
- Inform other workers or demonstrate to them how tasks are performed.

H. Digital

Digital		
Tasks	<u>Complexity Level</u>	<u>Examples</u>
<u>Typical</u>	2	Bakers
<u>Most Complex</u>	2	<ul style="list-style-type: none">• may use the Internet. For example, they may browse websites devoted to cooking and baking topics. They search for information about products and equipment at suppliers' websites. (2)

Digital Summary

- √ Use Internet

I. Continuous Learning

Continuous Learning	
<u>Complexity Level</u>	<u>Description</u>
2	Bakers need to learn continuously to keep abreast of new food and taste trends, to research new products and to improve their baking techniques. They learn through their daily work experiences, by observing other bakers and by reading cookbooks and industry publications such as Bakers' Journal. In addition, they may attend baking seminars and courses offered by colleges and specialty baking and cooking schools. For example, they may participate in training seminars about flavour blending and using organic products.

How Learning Occurs

Learning may be acquired:

- As part of regular work activity
- From co-workers
- Through reading or other forms of self-study
 - at work.
 - on worker's own time.
 - using materials available through work.
 - using materials obtained through a professional association or union.
 - using materials obtained on worker's own initiative.
- Through off-site training
 - with costs paid by the worker.

J. Other Information

In addition to collecting information for this Essential Skills Profile, our interviews with job incumbents also asked about the following topics.

Physical Aspects

Bakers stand to carry out most job tasks. They use upper limb coordination to decorate cakes and other baked goods. They require heavy strength to lift and move baking equipment and large containers of supplies. Bakers use sight, smell and taste to check the quality of ingredients and finished baked goods.

Attitudes

Bakers must be patient and detail-oriented. They need to be artistic to create appealing products.

Future Trends Affecting Essential Skills

Bakers will need increased reading and continuous learning skills to update and expand their product knowledge and baking and decorating skills to maintain current knowledge of consumer purchasing trends. In the future, self-employed bakers and head bakers will require improved computer skills to manage sales data and to conduct research into new products, baking trends and recipes.

K. Notes

This profile is based on interviews with job incumbents across Canada and validated through consultation with industry experts across the country.

For information on research, definitions, and scaling processes of Essential Skills Profiles, please consult the [Readers' Guide to Essential Skills Profiles](#).