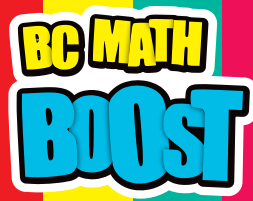


**SAMPLE
MATERIAL
INSIDE**

BC

MATH

BOOST

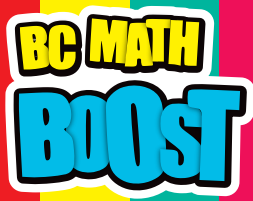


About BC Math Boost

BC Math Boost are supplemental materials that support your current math resources and ensure complete coverage of the redesigned BC mathematics curriculum. Students will continue to learn and develop Core and Curricular Competencies in mathematics through new, customized lessons developed to fill the gaps in existing resources. Nelson developed these materials to ensure seamless integration by providing teachers with detailed direction and guidance on to how use BC Math Boost in combination with current resources, lessons, and classroom teaching plans.

Key Features

- Includes all the lessons, masters, and teaching notes you need to fill the gaps in your current math resources
- Includes a *Summary Chart* showing where these new lessons fit with current math resources and what lessons from current resources can be omitted
- Identifies the *Learning Standards* addressed for each lesson, including the Curricular Competencies and Content
- Financial literacy and First Peoples perspectives and knowledge are embedded throughout the series



Resource Component Overview

For Students

Kindergarten–Grade 2	Grades 3–7
Activity Blackline Masters <ul style="list-style-type: none">■ Activity Blackline Masters included in the Teacher’s Resource	Student Resource <ul style="list-style-type: none">■ 1 Student Resource per grade■ Each lesson includes worked examples and solutions; as well as reflecting, checking, and practising questions

For Teachers

Kindergarten–Grade 2	Grades 3–7
Teacher’s Resource <ul style="list-style-type: none">■ Summary Charts:<ul style="list-style-type: none">○ <i>Summary Charts</i> show where BC Math Boost lessons integrate with <i>Math Focus</i> and <i>Math Makes Sense</i><ul style="list-style-type: none">– Identifies where new lessons fit– Identifies when an existing lesson can be omitted– Identifies Core Competencies, Curricular Competencies, and Content <i>Learning Standards</i> addressed by each chapter and lesson■ Assessment includes <i>What to Look For</i> and <i>What to Do</i> charts with each lesson Online Teacher’s Resource <ul style="list-style-type: none">■ Online access to the Teacher’s Resource and Activity Blackline Masters■ <i>Summary Charts</i> correlate to <i>Nelson Math Focus</i> and <i>Math Makes Sense</i>■ Math activities related to First Peoples Principles of Learning, including background information	Teacher’s Resource <ul style="list-style-type: none">■ Summary Charts:<ul style="list-style-type: none">○ <i>Summary Charts</i> show where BC Math Boost lessons integrate with <i>Math Focus</i> and <i>Math Makes Sense</i><ul style="list-style-type: none">– Identifies where new lessons fit– Identifies when an existing lesson can be omitted– Identifies Core Competencies, Curricular Competencies, and Content <i>Learning Standards</i> addressed by each chapter and lesson■ <i>Assessment for Learning</i> chart includes misconceptions and differentiated instruction suggestions■ <i>Preparation and Planning</i> charts and <i>Math Background</i> Online Teacher’s Resource <ul style="list-style-type: none">■ Online access to the Teacher’s Resource and Student Module for Grades 3–7■ <i>Summary Charts</i> correlate to <i>Nelson Math Focus</i> and <i>Math Makes Sense</i>■ Math activities related to First Peoples Principles of Learning, including background information

Teacher's Resource

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Sample Masters included in this sampler

Sample Lesson included in this sampler

Teacher's Resource

Summary Chart

Unit 2: Number Section C: Number to 10 Summary Chart

Core Competencies Focus

- ▲ Students acquire **social responsibility** as they communicate their reasoning about numbers and hear their classmates' reasoning. Sharing their thinking with a positive attitude leads to **building relationships** for work and for socializing.
- ▲ Students can develop **critical thinking** strategies for dealing with numbers as they learn about decomposing numbers. They **question and investigate** representations of decomposed numbers and connections among the numerical values of the parts and the whole.
- **Big Idea:** Numbers represent quantities that can be decomposed into smaller parts.
- **Big Idea:** One-to-one correspondence and a sense of 5 and 10 are essential for fluency with numbers.

Resources	Learning Standards	
<i>Math Focus Kindergarten</i> <i>Math Boost Kindergarten</i>	Curricular Competencies Focus	Content
Jump In <i>Math Focus Teacher's Resource</i> , pages 180–181	Reasoning and analyzing: Model mathematical concepts in contextualized experiences	
1: Main Circle Activity Counting by 1s, <i>Math Focus Teacher's Resource</i> , page 182	Connecting and reflecting: Connect mathematical concepts to each other and to other areas and personal interests	• number concepts to 10
2: Main Circle Activity Ten Fish, <i>Math Focus Teacher's Resource</i> , page 183	Connecting and reflecting: Connect mathematical concepts to each other and to other areas and personal interests	• number concepts to 10 Pennies are used as materials to focus on counting. Discussion about the poster includes talking about how First Peoples who fished the Pacific Northwest provided food not just for themselves but for their whole community. Rather than only using spears and hooks, they also used nets and traps to catch more fish.
2: Circle Activity Show This Many, <i>Math Focus Teacher's Resource</i> , page 184	Connecting and reflecting: Reflect on mathematical thinking	• number concepts to 10 • ways to make 5 • decomposition of numbers to 10
2: Tabletop Activity Telling Number Stories, <i>Math Focus Teacher's Resource</i> , page 185	Communicating and representing: Represent mathematical ideas in concrete, pictorial, and symbolic forms	• number concepts to 10 • ways to make 5
2: Tabletop Activity Ten Apples, <i>Math Focus Teacher's Resource</i> , page 186	Communicating and representing: Represent mathematical ideas in concrete, pictorial, and symbolic forms	• number concepts to 10 • ways to make 5 • change in quantity to 10, using concrete materials
2: Tabletop Activity Colour Cube Towers, <i>Math Focus Teacher's Resource</i> , page 187	Reasoning and analyzing: Estimate reasonably	• number concepts to 10 • ways to make 5
Activity D: Main Circle Activity How Many Bees?, <i>Math Boost Teacher's Resource</i> , page 36	Reasoning and analyzing: Estimate reasonably	• number concepts to 10 • decomposition of numbers to 10

Summary Charts show how *BC Math Boost* lessons can be integrated with existing resources to ensure 100% alignment to the new BC curriculum

Identifies Core Competencies, Big Ideas, Curricular Competencies, and Content *Learning Standards*

Identifies when to use lessons from existing resources and when to use *BC Math Boost* lessons

Identifies lessons in existing resources that no longer address *Learning Standards* and can be omitted

Teacher's Resource

Activity H: Main Circle Activity: What Do You Really Need?

H Focus on Financial Literacy

O Main Circle Activity

WHAT DO YOU REALLY NEED?

Math Note

In this activity, students learn that spending money is about more than buying what they want. This lesson introduces them to money choices that involve needs and wants. Students **connect** these choices to their own needs and wants.

Observe to Promote Learning

Listen for students' understanding of needs and wants. Can they connect situations in their lives to the distinction between needs and wants? Can they **describe** their **reasoning** when deciding if something is a need or a want?

Teaching Tip

Karla's story is about her grandfather. In First Peoples cultures, family is highly valued. Children are taught to respect their grandparents and elders first, before themselves. These beliefs build a strong and united community that works for the benefit of all. Invite discussion about the importance of family and community.



Learning Goal

Describe the difference between a need and a want.

Curricular Competencies

Connecting and reflecting: Connect mathematical concepts to each other and to other areas and personal interests
• I can decide if I need something I want to buy.

Content

• financial literacy—attributes of coins and financial role-play

Materials

storybook that incorporates needs and wants (optional)

Introduce the lesson by telling a story about needs and wants. For example, **Karla had money to buy a small toy for herself and a present for her grandfather. She saw a toy she wanted and bought it. Then she found out that she had no money left to buy the present. Why did Karla buy the toy?** Invite students to share their ideas with a partner and then with the class. **What did she need to buy with the money? Was buying the toy a good idea? Why not?**

Invite students to **reflect** on their lives and **share** their thoughts about what they might need or want. **Do you need bubble gum? Do you need running shoes? Why do you need [running shoes]?** Discuss the idea that someone might need new running shoes but want, not need, the more expensive running shoes with lights; or someone might already have running shoes and need a hat instead.

Circle back to the story about Karla. **How could Karla make sure that she had enough money to buy her grandfather's present?** (She could have kept some of her money for the present and not spent all of it on the toy.)

VARIATION

Provide small groups of students with 2 sorting hoops, one for needs and one for wants, as well as magazines or flyers related to needs and wants in your local community. Have students cut out pictures of items that people in your community might need or want. For each picture, have students **communicate** to the group why they think the picture shows something a person might need or want, before placing the picture in the appropriate hoop.

Highlighted words focus on curricular competencies addressed in the lesson

First Peoples perspectives and knowledge embedded throughout

Teacher's Resource

Activity H: Identifying Coins

O Circle Activity

IDENTIFYING COINS

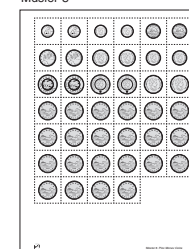
Math Note

In Kindergarten, the focus is on learning the names and attributes (picture, colour, size) of the coins, not the values of the coins. Students will likely have already seen coins, but they may not be familiar with the names and attributes.

Observe to Promote Learning

Are students able to identify and name the coins? Do students ask questions about the attributes of a coin their classmate is hiding as they guess the coin?

Master 8



Does the coin have a polar bear on it?



Learning Goal

Identify coins by name, and talk about their attributes.

Curricular Competencies

Connecting and reflecting: Connect mathematical concepts to each other and to other areas and personal interests
• I can name each coin and tell what it looks like.

Content

• financial literacy—attributes of coins and financial role-play

Materials

nickels, dimes, quarters, loonies, and toonies to show play money coins or Master 9 Play Money Coins document camera (optional)

Provide students with real or play money coins. As you introduce it, using a document camera (or other display that can show colour), if available. Show the tails side of a nickel. **What picture do you see? Show the heads side of the nickel. What picture do you see? What colour is the coin? What is the coin called?** Repeat with a dime, a quarter, a loonie, and a toonie. As you talk about the pictures on the coins, mention that the beaver, polar bear, loon, and caribou have important roles in different First Peoples cultures. Ask about the sizes of the coins. **Which coin is biggest? Which is smallest? What is the same about all the coins?** (You can see a picture of the Queen on all the coins.) **What are the differences?**

Provide small groups of students with play money coins. One student chooses a coin without revealing it to the other students. The other students guess the coin by asking "yes" or "no" questions. "Is the coin gold-coloured?" "Is the coin smaller than a quarter?" "Does the coin have a beaver on it?" Students may need to look at a set of coins to help them formulate their questions. Students take turns choosing a coin and making the group guess.

VARIATION

Students could sort coins on an interactive whiteboard, document camera, or sorting mat. Repeat the activity with different sorting rules (e.g., coins with animals on them, silver-coloured coins, coins bigger than a quarter).

Identifies the *Learning Standards* addressed for each lesson, including the Curricular Competencies and Content

Math Note provides background information on the topic to support teachers

Teacher's Resource

Activity H: Circle Activity: At the Grocery Store

Circle Activity

AT THE GROCERY STORE

Math Note

In this activity, students role-play financial transactions to practise their skills with money and their understanding of wants and needs. Students count to figure out how many loonies they need to pay. (Prices are limited to dollar amounts in loonies because combining and skip counting coins are learned in later grades.)

Learning Goal

Role-play financial transactions.

Curricular Competencies

Reasoning and analyzing: Model mathematics in contextualized experiences

- I can use coins to buy something from a pretend grocery store.

Content

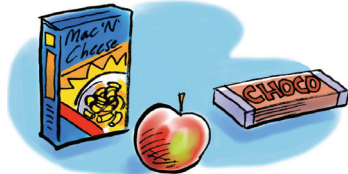
- financial literacy—attributes of coins and financial role-play

Materials

play money (loonies) or Master 8: Play Money Coins (loonies)
Master 9: Groceries

Let's pretend we're going to the grocery store. What might you need to buy at the grocery store? (e.g., fruit, vegetables, meat) What might you want to buy? (e.g., chips, pop, candy) Display Master 9. Explore the items for sale with the class. How much do the [apples] cost? How many loonies do you need to pay for them? How much does the [can of pop] cost? How many loonies do you need to pay for it?

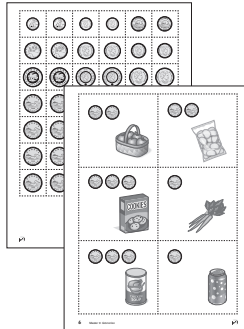
Give pairs of students 10 play money loonies and Master 9. Tell students they will role-play buying and selling things from the grocery store. Students choose who will be the buyer and who will be the seller. Ask the buyers to **explain** each purchase before they make it. **Why are you buying [soup]? Is it something you need or something you want?** The buyer pays and the seller checks the amount. Then students switch roles. Finish by asking students why it is important to make sure you have enough money to buy the things you need before buying things you want.



VARIATION

Students take turns role-playing the seller or the buyer in a situation familiar to them (e.g., going to a cultural event, a local museum, or a school event). Display pictures of the sale items. The seller gives the price as 1 coin. (e.g., The scarf costs 1 nickel.) The buyer pays and **communicates** whether the purchase was a need or a want, and why.

Masters 8 and 9



Financial literacy focus

Assessment opportunities are provided for every activity

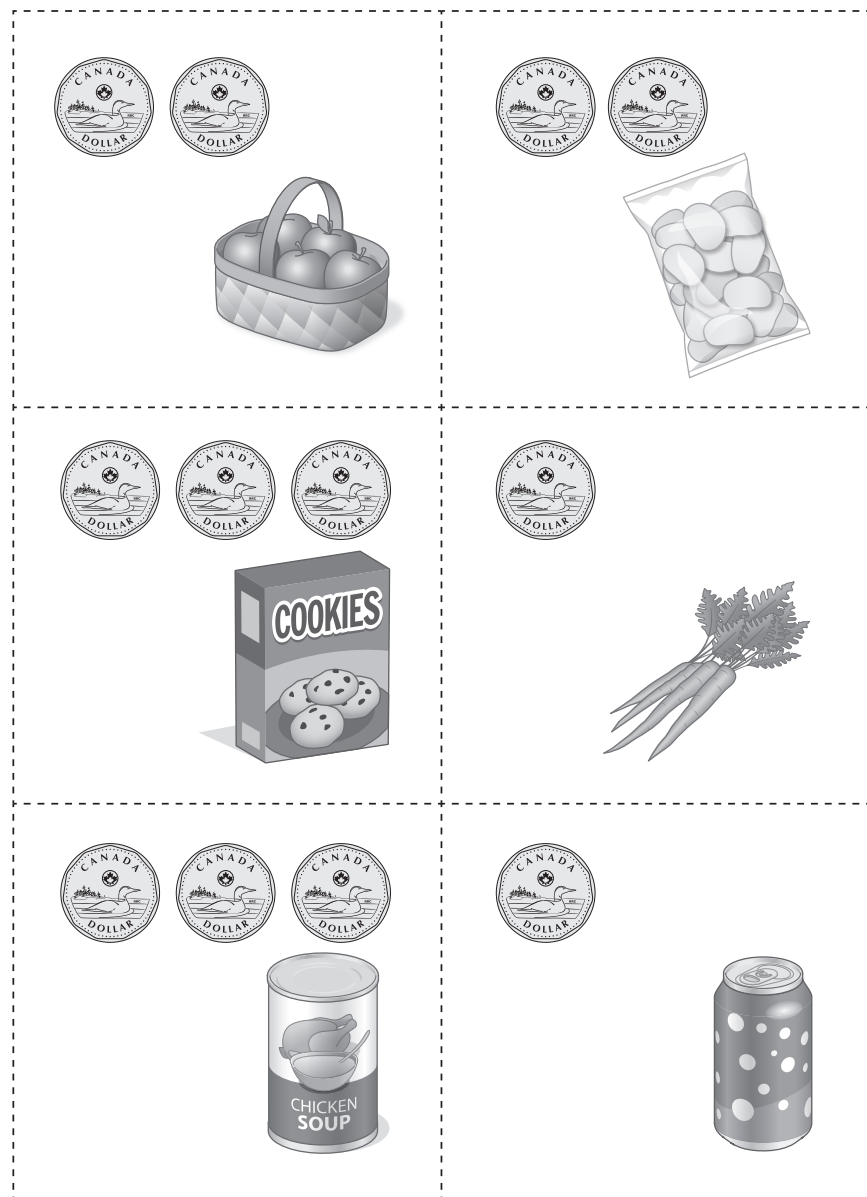
Teacher's Resource

Master 8: Play Money Coins



Math Tools support a hands-on approach to learning

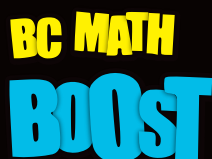
Master 9: Groceries



Notes

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Order Information



Kindergarten		
Classroom Set (Includes Teacher's Resource and Activity Blackline Masters)	9780176775100	
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