

**SAMPLE
MATERIAL
INSIDE**

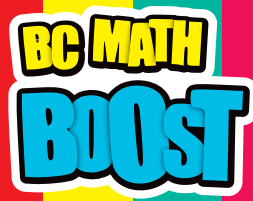
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BC



MATH

BOOST

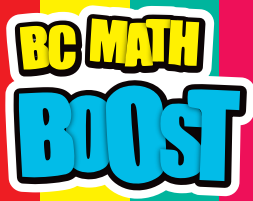


About BC Math Boost

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 Activity included in this sampler

Sample Lesson included in this sampler

Sample Math Tool included in this sampler

Teacher's Resource

Summary Chart

Chapter 10: Dividing Multi-Digit Numbers

Summary Chart for Using Math Boost 4 and Math Focus 4

Core Competencies

- ▲ Students gain **communication** experience as they represent and solve problems that involve dividing 3-digit numbers by 1-digit numbers using concrete materials, drawings, and numbers. They use pictures and number sentences, as well as oral and written descriptions, to **explain/reflect** and **reflect on experiences and accomplishments**.
- ▲ Students develop their **critical thinking** skills as they use basic multiplication and division facts to help them estimate quotients of 2-digit and 3-digit numbers. They learn to solve a problem using the strategy started in an example and then **analyze and critique** this strategy as they identify other ways to estimate the same quotient and think about how to apply these strategies in new situations.
- ▲ Students develop a **positive personal and cultural identity** as they solve problems in contexts that may relate to their own life, such as participating in walk-a-thons, sharing objects equally among groups, catching fish with a fish wheel, collecting food for a food bank, and picking berries. These connections help students appreciate how we use numbers in our lives and how mathematics can be part of **relationships and cultural contexts**.
- **Big Idea:** Development of computational fluency and multiplicative thinking requires analysis of patterns and relations in multiplication and division.

Resources	Learning Standards	
<i>Math Focus 4</i> <i>Math Boost 4</i>	Curricular Competencies Focus	Content
Chapter Opener: <i>Math Focus</i> Student Book, pages 346–347, <i>Math Focus</i> Teacher's Resource, Chapter 10, page 8	Reasoning and analyzing: mathematics in contextualized experiences	
Getting Started: Planning a Play Day, <i>Math Focus</i> Student Book, pages 348–349, <i>Math Focus</i> Teacher's Resource, Chapter 10, pages 9–11	Communicating and representing: Use mathematical vocabulary and language to contribute to mathematical discussions	
10.1: Exploring Division, <i>Math Focus</i> Student Book, page 350, <i>Math Focus</i> Teacher's Resource, Chapter 10, pages 12–14	Understanding and solving: Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving	• multiplication and division facts to 100 (introductory computational strategies)
10.2: Relating Division to Multiplication, <i>Math Focus</i> Student Book, page 351, <i>Math Focus</i> Teacher's Resource, Chapter 10, pages 15–17	Connecting and reflecting: Connect mathematical concepts to each other and to other areas and personal interests	• multiplication and division facts to 100 (introductory computational strategies)
10.3: Using Subtraction to Divide, <i>Math Focus</i> Student Book, pages 352–355, <i>Math Focus</i> Teacher's Resource, Chapter 10, pages 18–21		This lesson does not address the British Columbia Grade 4 Learning Standards Content because the division involves remainders.
10.4: Dividing by Renaming, <i>Math Focus</i> Student Book, pages 356–357, <i>Math Focus</i> Teacher's Resource, Chapter 10, pages 22–24		This lesson does not address the British Columbia Grade 4 Learning Standards Content because the division involves remainders.
Lesson R: Using Subtraction to Divide, <i>Math Boost</i> Student Resource, pages 56–59, <i>Math Boost</i> Teacher's Resource, pages 95–98	Understanding and solving: Develop and use multiple strategies to engage in problem solving	• multiplication and division of two- or three-digit numbers by one-digit numbers

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

Lesson I: Making Decisions About Saving

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

Financial literacy focus

Lessons follow a 3-part lesson style: *Getting Started, Working On It, Reflect and Connect*

Making Decisions About Saving

Math Note

In this lesson, students think about a big item they would like to save for. They decide how much money to save for it and how much to spend at a classroom store. Ideas such as saving without the intent to spend and saving for a donation are discussed at the end of the lesson. Students may need to be introduced to \$5 and \$10 bills, since it may be their first time using these bills.

Learning Goal

Learn about spending and saving money.

Curricular Competencies

- Understanding and solving:** Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving
- I can role-play saving and spending and choose the money to use.
- Communicating and representing:** Communicate mathematical thinking in many ways
- I can tell, draw, or write what I'm buying and tell that I'm buying it because I need it or want it.

Content

- financial literacy—coin combinations to 100 cents, and spending and saving

Materials

small objects for a classroom store (suggestions given in margin) price tags

For each student:

- Activity I: Saving and Spending Money
- play money (loonies, toonies, \$5 bills, \$10 bills)
- or Math Tool 3: Play Money
- envelope

Math Tool 3: Play Money

Play Money

Circle the money you decided to save.

How much money did you decide to save? \$

Why?

- Store items**
- Baseball glove \$18
 - Game \$20
 - Stuffed animal \$17
 - Movie ticket \$13
 - Snack pack \$4
 - Trading cards \$3
 - Book \$5
 - Stickers \$1

GETTING STARTED

5–10 min

Introduce the lesson by asking questions about spending and saving. **Think of a time when you bought something you wanted. Did you need to save money to buy the [baseball glove]? Were there other things you wanted to buy when you were saving money for the [baseball glove], like [baseball cards]? Lead students to understand that if they choose to spend money instead of saving, it will take them longer to save for the item they want to buy. Invite students to provide examples and explain the concept in their own words to check their understanding. How did you choose whether or not to buy the [baseball cards]?**

WORKING ON IT

20–25 min

Display items with price tags in a classroom “store.” Give each student a copy of Activity I, an envelope, a \$10 bill, a \$5 bill, 2 toonies, and 1 loonie. Tell students that they have \$20. They can spend their money at the store, or they can choose to save all or some of their money to buy something big later.

Teacher's Resource

Lesson I: Making Decisions about Saving



Think of something big you'd like to buy. Maybe it's a game system or tickets to a sports event or an ice show. What's the big thing you'd like to buy? How much money will you save for it? Is it a need or a want? Maybe you'd like to buy something from the store, too. What would you buy? How would you decide to use your money? Why?

Ask students to draw or write the big thing they want to buy on the envelope and to place the money they want to save in the envelope. Then have students complete the first part of Activity I. Students may decide to save all their money or to spend all or part of it. Invite students to role-play their purchase(s) from the classroom store with a partner, taking turns as customer and cashier. Discuss how to communicate about their purchase(s) on the second part of Activity I. Students may choose to draw or write about what they bought.

Opportunities for Feedback

What to Look For

- Watch and listen for indications that students can
- count bills and coins to model amounts of money (**How do you know you're paying the right amount?**)
- explain the relationship between saving money and being able to buy something later (**How did saving money bring you closer to being able to buy the big thing you want? How did spending money in the class store mean you'll have to save more money later for the big thing?**)

What to Do

- Connect adding money to counting on. Students may need to write or model their additions using counters.
- Discuss why people save. Saving means having money to spend later on things we may want or need more. Ask students to talk about what they might save for, to buy later.

Highlighted words focus on curricular competencies addressed in the lesson

Assessment: *What to Look For* and *What to Do* charts with each lesson

Provides further activities for students who have completed their work

"I'm finished ..."

After students have completed the activity once, they could repeat it with different items. Students could choose not to save their money this time, if they saved it the first time.

REFLECT AND CONNECT

10–15 min

Discuss the activity and connect it to students' lives.

- What is something you want to save for? How could you save for it?**
- In real life, why might you decide to save your money instead of spending it?** (There's nothing I want. OR I want to save for something big.)
- How can saving your money now help you buy something you might need later?**
- Could it take a long time to save for something? Explain.**
- Are there things you could save for that aren't for you?** (a gift for someone else, a donation for a cause)

Keep Going

Students could think of another big thing they would like to buy and decide what bills and coins (loonies, toonies, \$5 bills, \$10 bills) they would need to save in order to buy it.

Teacher's Resource

Activity I: Saving and Spending Money

Name: _____ Date: _____

Saving and Spending Money

Circle the money you decided to save.



How much money did you decide to save? \$ _____

Why?

What did you decide to buy?

Circle the money you paid.



How much did you pay? \$ _____

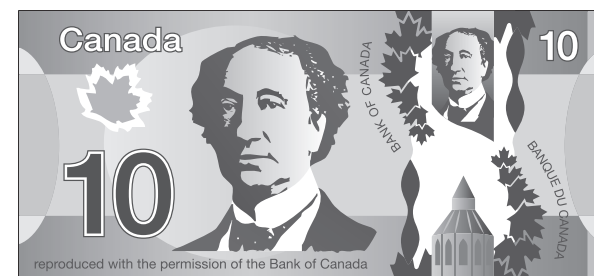
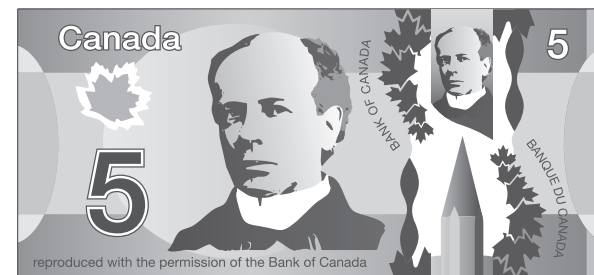
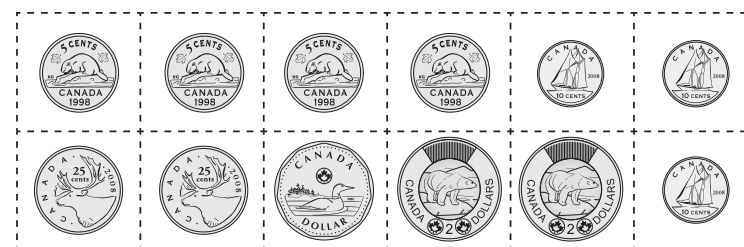
Was what you bought a want or a need? _____



Teacher's Resource

Math Tool 3: Play Money

Play Money



Math Tools support a hands-on approach to learning





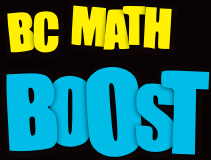
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Order Information



Kindergarten		
Classroom Set (Includes Teacher's Resource and Activity Blackline Masters)	9780176775100	
Grade 1		
Classroom Set (Includes Teacher's Resource and Activity Blackline Masters)	9780176775155	
Grade 2		
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