

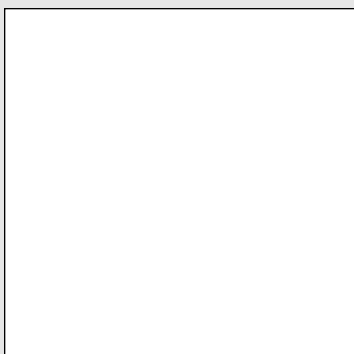
Overview of the Concept: Introduction to Addition and Subtraction

Book Summaries

Title	Level	Summary
Join Us	C	This photographed informational text features two children who use addition to gather some everyday items together for a tea party.
My Take-Away Day	E	In this photographed realistic narrative, a boy gets practice in subtraction as he encounters daily events, like losing buttons, and even losing his tooth.
A Day at the Pond	H	In rhyme, a girl applies addition and subtraction as she observes the animals in and around a pond.

Target Outcomes

WNCP	Ontario	APEF
<p>Number (Number Operations)</p> <ul style="list-style-type: none"> Use manipulatives and diagrams to demonstrate and describe the processes of addition and subtraction of numbers to 18. 	<ul style="list-style-type: none"> Solve simple problems involving counting, joining, and taking one group away from another (e.g., how many buttons are on the table?), and describe and explain the strategies used. Demonstrate that addition involves joining and that subtraction involves taking one group away from another. 	<p>Number Concepts/Number and Relationship Operations:</p> <ul style="list-style-type: none"> Demonstrate an understanding of the connection between relevant, concrete experiences and the mathematical language and symbolism of addition and subtraction. Create and model problem situations involving whole numbers, using addition and subtraction. <p>B1 Recognize that addition is used to represent the joining of two groups</p> <p>B2 Recognize that subtraction is used to represent separating situations</p>



Level C

Text Type

informational text

Word Count

47

High Frequency Words

a, and

Content Words

one, makes, two, children, three, teddy bears, five, plates, mugs, six, spoons, ten, cookies, nine, flowers, tea party

Text Features

- 16-page book
- 1 line per page
- photographs
- strong picture clues
- varying text placement
- patterned text
- labels
- numerals within text
- number stories

Working with Words

Number Words

Cross-Curricular Links

Health

Physical Education

Language Arts/Mathematics

Join Us

Before Reading

Bring in actual items from the text (e.g., teddy bear, plate, mug) to show to the students. Have the students name each item, then brainstorm the kinds of things they might play if they were to put all of the items together. You may want to write the names of the items on chart paper.

Previewing the Text

- Show the cover of the book and read the title. Ask, *How do you think the title and the photograph are connected?*
- Say, *This is a story about two children who join some things together for a make-believe game.*
- Support the students in a book walk. Discuss the pictures to help students access the meaning of the text, and introduce any unfamiliar vocabulary, expressions, and language structures.

Pages 2–3: Ask, *How many girls do you see? How many boys? How many children are there altogether?* Introduce the pattern by reading the text to the students.

Pages 4–5: Ask, *How many teddy bears are light brown? How many are dark brown? How many are there altogether?* Reinforce the sentence form by saying, *Yes, one and two makes three teddy bears.*

Pages 6–15: Continue as above, first asking the students to count the sets of items, then the total. Continue reinforcing the sentence form in your discussions, to familiarize the students with it. On page 15, ask, *What do you think the children are going to have when they put the teddy bears, plates, mugs, spoons, cookies, and flowers together?*

Page 16: Confirm the students' predictions. Read aloud, *"It's a _____,"* and have the students complete the sentence using picture clues and beginning sound clues.

Reading the Text

Encourage students to read the book independently, at their own pace. Remember that subvocalizing (reading softly out loud) by early readers is to be expected and is often helpful. Observe and assist individual students as necessary. Give specific praise to students you observe using reading strategies.

Revisiting the Text

You may choose to do only some of these activities, over several days.

- Ask the students individually to retell the story in their own words. They may use the pictures as a reference, and/or the actual items (e.g., teddy bears, plates, mugs) that were presented in the Before Reading activity.
- Have the students reread alternate pages of the text with a partner. One student reads the number sentence and the other student reads the caption. Then they can switch roles and reread.
- Have the students find the pages in the book that match the descriptions you give. You could use an “I spy...” introduction, such as, *I spy nine of these*. Students find the nine flowers on page 15.
- Have the students match the pictures to the text using **BLM 4-1: A Tea Party**.
- Encourage students to reread the book individually or in pairs.

Working with Words: number words

Print the number words from the text on individual index cards. Give each student a whiteboard, chalkboard, or piece of paper. Have one student pick a word, say it, and spell it aloud while the other students write. They may then check their spelling with the word card. Have another student choose the next word to spell aloud. Have the students complete **BLM 4-2: Fill in the Number Word** by filling in the missing number word.

Extending Activities

Illustrate the Number Stories

Write out enough number sentences from the book on separate strips of paper so each student gets one. Have each student choose a strip, read it, and copy it or glue it onto the left side of a piece of paper. On the right side, the student illustrates the number sentence, using his or her choice of items. Have them write a caption beneath the illustration, as in the book.

Write a Different Version

Using the same format as the book, students can write a story similar to *Join Us*, by showing and writing about groups of different items that “add up” to a special event or activity, such as a birthday party, a picnic, a sleepover.

Create a Number Story

Have the students create and illustrate their own number stories using the addition sentences in the text, or others of their own choosing. Then, have the students tell their number story to a partner.

Cross-Curricular Links

Health

As a group, decide on a healthy alternative snack to cookies that you could have at your tea party. List and compile the ingredients and prepare the snack together.

Physical Education

Play “Join Us” tag. Start with three students who are “it.” These students can either hold each others’ waists to form a chain, or throw Nerf balls, in order to “tag” others. When one or more students have been tagged, the original three shout “join us!” The teacher may stop the action at any point in the game to discuss how many people are “it” and how many are joining that number. The game may continue until all of the students are joined up.

Language Arts/Mathematics

Help the students to plan their own tea party. Use shared or interactive writing to record the steps involved in planning the tea party. Have the students count how many people will be attending, then brainstorm and record the number of items they will need to collect. Have the students create their own invitations to the tea party using pictures and words. Remind them to include the date, time, and location. Culminate the activity with a class or group tea party.

My Take-Away Day

Before Reading

Have a variety of easily countable, appealing items, in groups of ten or fewer. Display one group of items, for example, nine racing cars. Ask a student to take some away. Then ask how many are left. Retell the story, e.g., “I had nine racing cars. You took six. I have three left. 9 take away 6 is 3.” Repeat with other items. Ask volunteers to relate the number story for each.

Previewing the Text

- Show the cover of the book and read the title. Ask the students to predict, based on the title and the cover photo, what the story will be about.
- Say, *This is a story about a boy who not only loses his tooth but he has many other things taken away, all in the same day.*
- Support the students in a book walk. Discuss the pictures to help students access the meaning of the text, and introduce any unfamiliar vocabulary, expressions, and language structures.

Page 2: Ask, *How many scoops of ice cream does the boy have? What flavour do you think he loves best?* Have the students say the word “chocolate” slowly and ask, *What do you hear at the beginning?* Elicit the “ch” sound, then have the students locate the word “chocolate” on the page.

Page 3: Ask, *What does the boy say when his ice cream falls? How many scoops does he have left?* Point out the number sentence “2 take away 1 is 1,” and explain or discuss which scoops of ice cream on pages 2 and 3 are represented by each of the numbers.

Pages 4–15: Continue through the rest of the text in a similar manner, allowing time for the students to see what is happening in the photographs and asking questions to elicit key words, particularly the number words. Also, address words that may be unfamiliar to the students in their reading (e.g., left, round, only, bowling pins), either by integrating them into your conversation, or by having the students say them slowly (to hear and predict sounds) and locate them on the page. You may ask volunteers to read the number sentences screened in blue.

Level E

Text Type

narrative (realistic)

Word Count

139

High Frequency Words

a, all, and, are, away, big, can, going, good, has, have, here, I, is, it, look, made, no, now, of, see, the, there, they, to

Content Words

two, scoops, ice cream, chocolate, one, left, take away, seven, buttons, round, four, six, tooth, loose, five, teeth, balloons, nine, blocks, tower, ten, bowling pins, roll, wow, pins, strawberries, three, yummy

Text Features

- 16-page book
- 2–3 lines per page
- photographs
- strong picture clues
- numerals within text
- screened number stories

Working with Words

Plurals

Cross-Curricular Links

Mathematics

Music

Page 16: Say, *He ate all of the strawberries.* Ask, *Do you think he enjoyed them? How do you know?* (picture and text) Discuss the word “Yummy!” and ask the students to read it with expression. Ask, *If you take away all of something, how many are left?* (elicit “zero” and have the students locate the number on the page)

Reading the Text

Encourage students to read the book independently, at their own pace. Remember that subvocalizing (reading softly out loud) by early readers is to be expected and is often helpful. Observe and assist individual students as necessary. Give specific praise to students you observe using reading strategies.

Revisiting the Text

You may choose to do only some of these activities, over several days.

- Using the pictures as a guide, have individual students retell the story in their own words.
- Use the story to model how to add interest and expression by directing the students’ attention to the exclamation marks. Have the students reread the book to a partner with expression.
- Have students use the book to answer questions such as the following:
What did the boy have ten of? How many was he left with?
What is he talking about when he says, “I love chocolate best”?
What is he talking about when he says, “6 take away 1 is 5”?
When he lost five red things, what did he have left?
What did he have none left of? Why did that make him happy?
- Model asking riddles about the story, then have volunteers continue. For example, model the riddle form by saying, *I had six. I lost one. What are they?* (teeth)

Working with Words: plurals

Discuss or review the plural form with the students. Have the students search the text to locate words that appear in singular as well as plural form (scoop/scoops, balloon/balloons) and those that appear as plurals only (buttons, blocks, bowling pins, strawberries). Use the words “tooth” and “teeth” to explain exceptions to the rule.

Extending Activities

Pattern Book

Using the text as a model, have the students create their own number stories in a “My Take-away Day” pattern book. Have the students write “I have _____,” on one page, and on the following page they write “Now I have _____ left. _____ take away _____ is _____.” Have the students fill in the blanks and illustrate their number stories.

Take-away Number Stories

Write the subtraction sentences from the text, or new ones, on sentence strips. Have the students use manipulatives to recreate the number stories. Distribute **BLM 4-3: Illustrate the Number Sentences**, and have students illustrate each number sentence, drawing items from the story, or of their own choosing. Note how they show the “take away” action in their illustrations.

Cross-Curricular Links

Mathematics

Create a class chart to record the number of teeth that students lose throughout the school year.

Music

Have the students sing and act out familiar songs that involve the concept of subtraction (e.g., “Five Little Pumpkins,” “Ten Little Monkeys”). Then, adapt the songs to include number stories from the book. For example, to demonstrate “9 take away 4 is 5” (page 11), change the “Ten Little Monkeys” song to:

Nine little monkeys jumping on the bed
Four fell off and bumped their heads
Mama called the doctor, the doctor said,
“How many monkeys are left on the bed?”

Have the students respond with the correct answer. (5)

A Day at the Pond

Before Reading

Begin a web of “pond critters,” as you brainstorm with the students about different kinds of living creatures they might see in and around a pond. Keep the web to refer to after reading the story.

Previewing the Text

- Show the cover of the book and read the title. Ask, What kinds of things will the girl see at the pond?
- Say, *This is a rhyming story about a little girl who practises adding and subtracting while she watches creatures at the pond.*
- Support the students in a book walk. Discuss the pictures to help students access the meaning of the text, and introduce any unfamiliar vocabulary, expressions, and language structures.

Pages 2–3: Say, *The girl likes to add and take away, and she wants us to join her. Find the words that tell us to join her in doing some math.* (“So come on everyone”) You may also wish to discuss the number word “one” within the word “everyone.”

Pages 4–5: Ask, *How many birds are in the tree? How many are being added? How many altogether?* Ask the students how they found their answers and, if they refer only to the picture, say, *Good, you checked the picture.* Ask, *Where else can you check?* (text) Have the students locate the number words within the text and briefly discuss the bold print used to highlight them. Then say, *Find two places that tell us the colours of the birds’ feathers.* (picture and text)

Pages 6–7: Say, *Now she sees some ants crawling down a stem.* Ask, *How many ants are there altogether?* (ten) Ask the students to find and read the question that is asked in the story, and then answer the question.

Pages 8–9: Ask, *Do you think this page is about adding or taking away? Why?* (picture and text) *If it’s about adding, how many squirrels will there be altogether?*

Pages 10–11: Ask, *What are two of the frogs doing in this picture?* (jumping away) Have the students find the words to prove their answer. Read the first line of text to the

Level H

Text Type

interactive poetry

Word Count

177

High Frequency Words

a, all, and, are, at, away, be, by, came, can, come, day, did, do, down, have, how, in, is, like, little, me, of, on, see, so, some, that, the, them, there, they, to, was, we, when, will, with, you

Content Words

pond, add, take away, math, five, birds, feathers, three, altogether, ten, ants, crawling, stem, six, four, squirrels, one, eight, frogs, log, two, bees, hive, nine, fish, reeds, seven

Text Features

- 16-page book
- 4 lines per page
- illustrations
- moderate picture clues
- rhyme
- boldfaced number words

Working with Words

Rhyming Words

Cross-Curricular Links

Science

Art/Mathematics

students and discuss or model reading the phrases “on a log” and “by the tree” quickly. Invite the students to practise reading these phrases quickly, and then read the whole line of text, chorally or individually, with phrasing and fluency.

Pages 12–13: Ask, *How many bees are coming to join the three bees in the hive?* (five) *What’s the sound that bees make?* Have the students locate the word “buzz” on the page. Discuss or locate the word “another” and ask, *What’s the little part you know at the beginning?* (“a” or “an”) *Do you know any other words that end that way?* (e.g., mother, brother) You may wish to record these words on a small whiteboard and circle the word “other” to highlight it for the students.

Pages 14–15: Ask, *How many fish are in the reeds?* Say, *Two fish are staying near the girl.* Ask, *What are the other fish doing?* (elicit “swimming away”)

Page 16: Say, *It looks like our day at the pond is done!*

Reading the Text

Encourage students to read the book independently, at their own pace. Remember that subvocalizing (reading softly out loud) by early readers is to be expected and is often helpful. Observe and assist individual students as necessary. Give specific praise to students you observe using reading strategies.

Revisiting the Text

You may choose to do only some of these activities, over several days.

- Ask the students to write a number sentence for each operation (addition or subtraction) in the book. Alternatively, half of the students can focus on the addition number sentences, and half on the subtraction number sentences. Examples: “5 and 3 makes 8.” “9 take away 7 is 2.”
- Have small groups of students act out the joining and taking away of the animals on each page. Alternatively, the students may use counters of various kinds to represent the animals and solve the addition and subtraction problems.
- Reread the first ABAB stanza, emphasizing the rhyming word at the end of the second line and omitting the final word of the last line. Ask the students to chime in with the omitted rhyming word. Read the entire book in this manner. You can follow up this activity with a written cloze for selected stanzas. Have the students supply the missing word and encourage them to use the text to confirm their answers.
- Ask students to choose their favourite illustration in the book, and explain to the others what they like about it.
- Have the students reread the text together as a group, or one group may read the first two lines on each page, while a second group reads the last two.

Working with Words: rhyming words

Review rhyming words with the students. Have the students use the text as a reference to complete **BLM 4-4: Rhyme Time**. Rhyming words found in the text include day, away, today, play; tree, three, see, be, we, me; and fun, sun, done. Where there are extra spaces in each column, challenge the students to add other rhyming words.

Extending Activities

“A Day at the Pond” Journal Entry

Have the students write a journal entry as the girl in the book may have written about her day at the pond. Ask, *What plants and animals did she see? What did she do?*

Write a Number Story

Ask the students to write their own number stories, rhyming or otherwise. Have them illustrate their stories with appropriate pictures and write the corresponding number sentence below.

Making Binoculars

Bring in a pair of binoculars and invite the students to look through them. Point out that the girl in the story used binoculars to look for things at the pond. Discuss the purpose of binoculars (zooms in on a distant object or place and allows you to see details). Ask the students to imagine a special place where they would like to use binoculars. Provide materials for each student to make their own pair of binoculars. Have students draw on a circular piece of paper what they would see through their binoculars at their special place. Invite the students to share their drawings and ask classmates if they can identify their special place.

Cross-Curricular Links

Science

Have the students complete the chart in **BLM 4-5: Animals on the Move!** to identify animal habitat and movement. The students can use the book to complete the chart.

Science

Prepare a picture of an animal and write labels for the various body parts and features (e.g., head, body, tail, legs, mouth, beak, wings, fur, feathers, scales) on index cards. Show the students the picture and use the index cards to discuss and label the various body parts and features. For example ask, *Where is its head? How many legs does the animal have? Does this animal have fur, feathers, or scales?* Then, have the students choose one animal from the story. Have them draw a

picture of the animal and label its body parts using appropriate vocabulary. The labelling can be done orally or by using the prepared word cards for the students to paste or copy.

Art/Mathematics

Have the students use crayons to draw a number of fish playing in the reeds, and some that are swimming away (as in the book). When all of the fish are drawn with crayons, have the students paint over the picture with blue paint, to recreate a pond scene. The students may then attach their own number stories (written on a separate piece of paper and stapled to the bottom), describing how many fish they have and how many are swimming away. Alternatively, the students may wish to include a question at the end, similar to the one in the text, and then present their pictures with number problems for other students to solve.

Name: _____

Date: _____

A Tea Party

Cut and paste the pictures to match the correct caption.

3 teddy bears

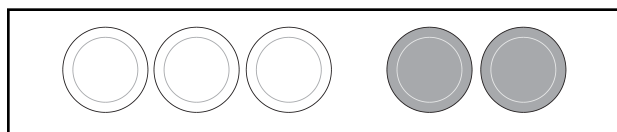
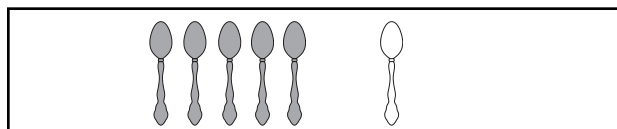
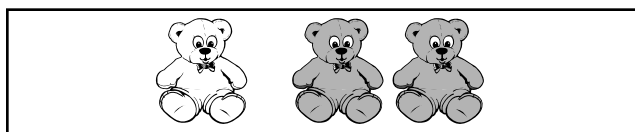
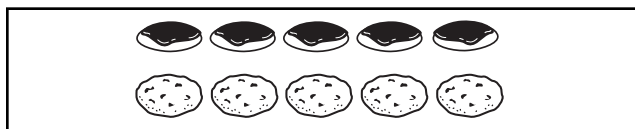
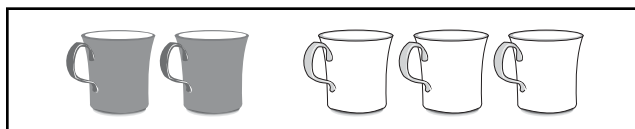
5 mugs

10 cookies

9 flowers

5 plates

6 spoons



Name: _____

Date: _____

Fill in the Number Word

Read and fill in the blank with the missing number word. Choose the words from the box below.

five	nine	six	ten
two	three	five	

1. One and one makes _____
2. Five and five makes _____
3. One and two makes _____
4. Six and three makes _____
5. Two and three makes _____
6. Three and two makes _____
7. Five and one makes _____

Name: _____

Date: _____

Illustrate the Number Sentences

Draw pictures to go with each number sentence.

10 take away 8 is 2.	
7 take away 3 is 4.	
6 take away 1 is 5.	
9 take away 4 is 5.	
2 take away 1 is 1.	
6 take away 5 is 1.	
5 take away 2 is 3.	

Name: _____

Date: _____

Rhyme Time

Find rhyming words from the book and write them in the chart below.
Add other words that rhyme.

day	tree	fun

Name: _____

Date: _____

Animals on the Move!

Complete the chart.

Animal	Habitat (land, air or water)	Movement (fly, jump, swim, crawl, run)
Bird		
Ant		
Squirrel		
Frog		
Bee		
Fish		