

Lesson	SLO	Teaching Strategies	Activities	Materials	Resources	Assessment
--------	-----	---------------------	------------	-----------	-----------	------------

Unit-Addition and Subtraction
Dates-April 8-May 3
Grade-Two

Strand: Number

General Outcome

Students will:

Develop number sense.

Specific Outcome

Students will:

2. Demonstrate if a number (up to 100) is even or odd. [C, CN, PS, R]
4. Represent and describe numbers to 100, concretely, pictorially and symbolically. [C, CN, V]
7. Illustrate, concretely and pictorially, the meaning of place value for numerals to 100. [C, CN, R, V]
9. Demonstrate an understanding of addition (limited to 1- and 2-digit numerals) with answers to 100 and the corresponding subtraction by:
 - using personal strategies for adding and subtracting with and without the support of manipulatives
 - creating and solving problems that involve addition and subtraction
 - using the commutative property of addition (the order in which numbers are added does not affect the sum)
 - using the associative property of addition (grouping a set of numbers in different ways does not affect the sum)
 - explaining that the order in which numbers are subtracted may affect the difference. [C, CN, ME, PS, R, V]

10. Apply mental mathematics strategies, such as:

- using doubles
- making 10
- one more, one less
- two more, two less
- building on a known double
- thinking addition for subtraction for basic addition facts and related subtraction facts to 18. [C, CN, ME, PS, R, V]

Strand: Patterns and Relations (Variables and Equations)

Lesson	SLO	Teaching Strategies	Activities	Materials	Resources	Assessment
--------	-----	---------------------	------------	-----------	-----------	------------

General Outcome Students will: Represent algebraic expressions in multiple ways.						
Lesson	SLO	Teaching Strategies	Activities	Materials	Resources	Assessment
Lesson 1- Adding and Subtracting Tens	-Use personal strategies for adding and subtracting tens with manipulatives.	-whole class instruction and discussion	-Students will participate in class discussion -Students will work on a word problem using 10-Frames and a 100-Chart -Students will complete Activity 8.2	For each student: -Student Book, pp. 68-69: "Look at the Picture: At the Picnic" or coloured stickers or pictures (drawn) to represent picnic drinks -100 counters from number kit (see p. 5) -2 copies of Math Tool 8.3: Small 10-Frames (p. 62) from number kit (see p. 5) -Activity 8.2: Adding and Subtracting Tens (p. 48)	<i>MathFocus</i> -Teacher's Resource -Poster Pack -Student Book -Student Workbook -Math Jam 2 Audio CD -Website	-completion of Activity 8.2 Questions -If there were 90 drinks and people drank 30 of these drinks, how many would be left? Show me how to figure it out with 10-frames.
Lesson 2- Adding One-Digit Numbers to Two-Digit Numbers	-Use personal strategies to add a one-digit number to a two-digit number with manipulatives	-review of addition strategies -class questioning and discussion	-Students will work on word addition problems and show their work in 2 different ways -Students will complete Activity 8.3	-Poster 4A: <i>Addition Strategies</i> -Poster 2A: <i>100 Chart</i> -Poster 14A: <i>Adding Greater Numbers</i> -class number line to 100 -rekenrek For each pair of students: -number kit -Activity 8.3: The Readathon (p. 49)	<i>MathFocus</i> -Teacher's Resource -Poster Pack -Student Book -Student Workbook -Math Jam 2 Audio CD -Website	-completion of Activity 8.3 Questions -How can you use a number line/100 chart to add 33 + 7? How can you show 33 + 7 with base ten blocks?

Lesson	SLO	Teaching Strategies	Activities	Materials	Resources	Assessment
Lesson 3- Adding Two-Digit Numbers in Different Ways	-Use personal strategies to add two-digit numbers with manipulatives	-class discussion and participation -questioning -whole class instruction -group work	-Students will complete Activity 8.4 -Students will answer the question <i>'What two numbers could you toss to win each prize?'</i>	-Poster 14A: Adding Greater Numbers -class number line to 100 -2 counters For each pair of students: -Student Book, pp. 70-71: "Guess and Test to Solve the Problem" (optional) -number kit (see p. 5) -Activity 8.4: Toss and Win (p. 50)	<i>MathFocus</i> -Teacher's Resource -Poster Pack -Student Book -Student Workbook -Math Jam 2 -Audio CD -Website	-completion of Activity 8.4 Question -About how much would the total be if your first toss was 49 and your second toss was 33? How did you know that 45 + 48 would be enough to win a jumbo prize?
Lesson 4-Focus on Visualizing: Adding on a 100 Chart	-Use a 100 chart as a visual tool for adding two-digit numbers.	-class questioning, discussion and participation	-students will record 4 addition sentences in each section labeled Odd + Odd and Odd + Even	-Poster 2A: 100 Chart, with acetate overlay and marker -Poster 14A: <i>Adding Greater Numbers</i> For each student: -number kit (see p. 5)	<i>MathFocus</i> -Teacher's Resource -Poster Pack -Student Book -Student Workbook -Math Jam 2 -Audio CD -Website	Questions -What number is 10 more than 34? How do you know? -How can you use the 100 chart to add 42 + 35? Why did you start by hopping down three rows to 72? How many hops did you go to the right?
Lesson 5- Adding on a Place Value Mat	-Model addition with base ten blocks and visual representations, and record the process symbolically	-class questioning and discussion	-students will complete Activity 8.5 and 8.6	-Poster 10B: <i>Different Ways to Add</i> For each student: -number kit (see p. 5) -Activity 8.5: Collections (p. 51)	<i>MathFocus</i> -Teacher's Resource -Poster Pack -Student Book	-completion of Activities 8.5 & 8.6 Questions -Show me how to use blocks to add

Lesson	SLO	Teaching Strategies	Activities	Materials	Resources	Assessment
Lesson 6- Subtracting One-Digit Numbers from Two-Digit Numbers	-Use personal strategies to subtract a one-digit number from a two-digit number with manipulatives	-class review of basic subtraction strategies -whole class problem solving with examples and modeling of correct use of subtraction strategies	-students will solve problems in class -students will complete Activity 8.7	-Activity 8.6: Glossary Words (p. 52) -Poster 5A: <i>Subtraction Strategies</i> -Poster 2A: <i>100 Chart</i> -Poster 15A: <i>Subtracting Greater Numbers</i> -class number line to 100 -rekenrek For each student: -number kit (see p. 5) -Activity 8.7: Check These (p. 53)	-Student Workbook -Math Jam 2 Audio CD -Website <i>MathFocus</i> -Teacher's Resource -Poster Pack -Student Book -Student Workbook -Math Jam 2 Audio CD -Website	38 + 43. Why might you want to regroup 10 of these ones as a ten? Show me how to regroup? How can you write $38 + 43 = 81$ in two different ways? -completion of Activity 8.7 Questions -How can you use a number line/100-Chart to subtract $56 - 8$?
Lesson 7- Subtracting Two-Digit Numbers in Different Ways	-Use personal strategies to subtract two-digit numbers with manipulatives	-whole class instruction and questioning -problem solving/modeling of problem solving	-students will work through subtraction questions	-class number line to 100 -rekenrek -Poster 2A: <i>100 Chart</i> -Poster 15A: <i>Subtracting Greater Numbers</i> For each student: -number kit (see p. 5)	<i>MathFocus</i> -Teacher's Resource -Poster Pack -Student Book -Student Workbook -Math Jam 2 Audio CD -Website	-completion of word problems Questions -How can you use a 100-Chart to figure out $72 - 48$? -How can you show $72 - 48$ with 10-Frames?

Lesson	SLO	Teaching Strategies	Activities	Materials	Resources	Assessment
<p>Lesson 8- Solving Comparison Problems</p>	<p>-Solve comparison problems by adding and subtracting -Use personal strategies to add and subtract with manipulatives</p>	<p>-demonstration -whole class discussion and problem solving</p>	<p>-students will work through a problem during class discussion -students will complete Activity 8.8 using their own strategies</p>	<p>-class number line to 100 -Poster 11B: <i>Comparing Heights</i> -Poster 4A: <i>Addition Strategies</i> -Poster 15A: <i>Subtracting Greater Numbers</i> For each student: -Student Book, pp. 72-73: "Draw a Picture to Solve the Problem" (optional) -Activity 8.8: <i>Comparing Heights</i> (p. 54) -number kit (see p. 5)</p>	<p><i>MathFocus</i> -Teacher's Resource -Poster Pack -Student Book -Student Workbook -Math Jam 2 Audio CD -Website</p>	<p>-completion of Activity 8.8 Questions -Which part of your picture shows Eve's height? -Which part shows her cousin's height? -Which part shows the difference between their heights?</p>
<p>Lesson 9- Solving Missing-Part Problems</p>	<p>-Solve problems that involve a missing addend, subtrahend, or minuend.</p>	<p>-whole class instruction -detective game</p>	<p>-students will problem solve in a whole class setting -students will complete Activity 8.9</p>	<p>-10 dimes -small box with a magnet taped inside -pennies in a container -rekenrek For each student: -number kit (see p. 5) -Activity 8.9: <i>Be a Number Detective</i> (p. 55)</p>	<p><i>MathFocus</i> -Teacher's Resource -Poster Pack -Student Book -Student Workbook -Math Jam 2 Audio CD -Website</p>	<p>-completion of Activity 8.9 Questions -Did you have to figure out the whole amount or one of the parts? -How did you figure it out?</p>

Lesson	SLO	Teaching Strategies	Activities	Materials	Resources	Assessment
Lesson 10- Focus on Literature: Subtracting on a Place Value Mat	-Model subtraction with base ten blocks and visual representations, and record the process symbolically. -Create and solve subtraction story problems	-reading of a book -whole class instruction and discussion -questioning	-students will listen to a book about a class trip -students will complete Activity 8.10 and Glossary Words 8.6	- <i>Franklin's Class Trip</i> or another story about a class trip, such as <i>Albert's Field Trip</i> -Poster 13B: <i>Different Ways to Subtract</i> containers with two-digit numbers cut from Math Tool 8.2: 100 Chart (p. 61) For each student: -number kit (see p. 5) -Activity 8.10: My Subtraction Stories (p. 56) -Activity 8.6: Glossary Words (p. 52)	<i>MathFocus</i> -Teacher's Resource -Poster Pack -Student Book -Student Workbook -Math Jam 2 Audio CD -Website	-completion of Activity 8.10 and Glossary Words 8.6 Questions -What two numbers did you have? -How did you figure out which number to start with and which number to subtract?
Lesson 11- Creating Story Problems with Dimes and Pennies	-Model addition and subtraction using dimes and pennies -Create an addition story problem and a subtraction story problem for a given solution	-whole class questioning/problem solving/instruction	-students will solve problems using place value mats, dimes and pennies	For each student: -Student Book, pp. 74-75: "Your Choice" or objects with price tags to represent juice boxes -Math Tool 8.4: Place Value Mat (p. 63) -9 dimes and 20 pennies, or cut-outs from Math Tool 8.6: Dimes and Pennies (p. 65)	<i>MathFocus</i> -Teacher's Resource -Poster Pack -Student Book -Student Workbook -Math Jam 2 Audio CD -Website	Questions -How did you figure out which numbers to use in your addition story? -How did you know the answer to your addition story was correct?
Lesson 12- Equalities and Inequalities	-Model equalities and inequalities using concrete representations, and complete the	-class questioning and game play	-students will play a game with whole class instruction -students will	-10-sided number cube or Math Tool 8.7: Number Cards (p. 66) -chart paper For each pair of	<i>MathFocus</i> -Teacher's Resource -Poster Pack -Student	-completion of Activity 8.11 Questions -How did you add the numbers?

Lesson	SLO	Teaching Strategies	Activities	Materials	Resources	Assessment
	number sentences.		complete Activity 8.11	students: -Activity 8.11: Missing Numbers (p. 57) -Math Tool 8.7: Number Cards (p. 66) -number kit (see p. 5)	Book -Student Workbook -Math Jam 2 Audio CD -Website	-Which strategies did you use?
Chapter Task- Choosing an Ice-Cream Flavour	-Demonstrate an understanding of adding and subtracting two-digit numbers	-whole class review and instruction -problem solving	-students will complete Activities 8.12 & 8.13	-Assessment Tool 8.1: Chapter Task Rubric (p. 77) -Poster 14A: <i>Adding Greater Numbers</i> -Poster 15A: <i>Subtracting Greater Numbers</i> For each student: -Student Book, pp. 76-77: "Look at the Picture: Choosing an Ice-Cream Flavour" (optional) -Activity 8.12: Choosing an Ice-Cream Flavour (p. 58) -Activity 8.13: Thinking Back (p. 59)	<i>MathFocus</i> -Teacher's Resource -Poster Pack -Student Book -Student Workbook -Math Jam 2 Audio CD -Website	-completion of Activities 8.12 & 8.13 Questions -Why did you decide to add those numbers? -How did you figure out how many people chose strawberry?

Lesson	SLO	Teaching Strategies	Activities	Materials	Resources	Assessment
--------	-----	---------------------	------------	-----------	-----------	------------

Notes and Additional Resources

- Albert's Field Trip*, by Leslie Tryon
- Blast Off!*, by Lalie Harcourt and Ricki Wortzman
- Cats Add Up!*, by Dianne Ochiltree
- Franklin's Class Trip*, by Paulette Bourgeois and Sharon Jennings
- The Jellybean Jar*, by Brenda Stein Dzaldov and Cheryl Urback
- The Mission of Addition*, by Brian P. Cleary
- Mitchell's Readathon*, by Brenda Stein Dzaldov and Cheryl Urback
- Super Suzy*, by Jill Bever and Sheilah Currie
- That's One Dollar*, by Lalie Harcourt and Ricki Wortzman
- Two Tooth Fairies*, by Brenda Stein Dzaldov and Cheryl Urback