

Planning a Unit

Each unit module in your Teacher Guide starts with several pages to support your planning for the unit. You'll see **Mathematics Background**, **Curriculum across the Grades**, and a **Curriculum Overview**.

Planning Charts provide overviews of lessons, materials requirements, assessment opportunities, and suggested times.

Planning for Instruction Suggested Unit Time: 4 weeks						
Lesson	Time	Lesson Materials	Activity Bank	Time	Activity Bank Materials	Program Resources
Launch Demonstrate prior knowledge of numbers	20-30 min	collection of small classroom objects (counters, keys, shells, buttons)				Big Math Book, page 6: Count to Ten Student page 17: Number Relationships Student page 18: Deer Family Student page 19: Count the Fish
Curriculum Cluster 1: Counting, Reading, and Recording Numbers Suggested Time: 4 to 6 days						
Lesson 1: Count to Ten Count forwards and backwards from zero to ten	60-90 min	0 to 10 numeral and number word cards, bingo counters, Snap Cubes, lego, marbles, blocks	<ul style="list-style-type: none"> Number Match Listen to the Penguins! Make 3 Match Counting to Zero 	20-100 min	numeral cards, number word cards, dot cards 10 pennies, glass jar numeral cards (0 to 7), number word cards (zero to seven), pocket chart number cubes labelled 1 to 6, small objects (e.g. keys, counters, buttons, shells), small boxes (tin or other containers)	Big Math Book, page 7: Count Forwards, Count Backwards Student page 20: At the Pond Student page 21: Count the Birds LM 12: Numbers to 5 LM 13: Numbers 6 to 10
Lesson 2: Using a Calculator Display numerals on a calculator	45-60 min	calculators, numeral cards (1 to 10), number word cards (one to ten)				Big Math Book, page 8: The Calculator Student page 22: My Calculator
Lesson 3: Number Search Identify and order groups of numbers from 1 to 10	60-90 min	numeral cards, number word cards, stamps, stamp pot, stickers, paper	<ul style="list-style-type: none"> What is the Number? How Many Are Missing? What's My Number? Number Hunt! 	20-100 min	small box and various counting materials (e.g., counting pencils, paper clips) sets of objects (e.g., 9 calculators, 3 erasers, 8 crayons), tag or label, cloth or paper, optional overhead projector dot cards, counters or Snap Cubes numeral cards (0 to 10), number word cards (zero to ten), dot cards (0 to 10)	Big Math Book, page 9: What is in the Fridge? Student page 23: Number Search Student page 24: Number Pictures LM 14: Numbers 0 to 2 LM 15: Numbers 3 to 6 LM 16: Numbers 7 to 10
Curriculum Cluster 2: Number Meanings and Relationships to 10 Suggested Time: 5 to 7 days						
Lesson 4: Number Arrangements Recognize numbers in different arrangements	60-90 min	counters (beads, toothpicks, buttons, stickers)	<ul style="list-style-type: none"> Make Your Own Dot Cards Ways to Show Number 8! Bean Number Stories! Building 9! 	20-100 min	blank cards, bingo dabbers or stickers Snap Cubes tricoloured bases or hexagonal counters, plastic cups, cardboard or plastic placement glue, toothpicks, heavy paper (manila, light cardboard), markers	Big Math Book, page 10: Number Arrangements Student page 25: I Can Build Numbers Student page 26: Fishes of 6 Student page 27: Ways to Show 7
Lesson 5: One and Two More, One and Two Less Identify numbers that are one/two more and one/two less	60-90 min	counters or concrete objects, optional: overhead projector	<ul style="list-style-type: none"> Card Matching One More and One Less! More or Less Number Chart! 	20-100 min	dot cards, chart showing numerals 1 to 10 dot cards, counters dot cards (1 to 6), pocket chart or chart paper	Student page 28: More or Less Student page 29: Number Challenge
Lesson 6: Fantastic Five Investigate number meanings using a five-frame	45-60 min	counters, optional: overhead projector				Student page 30: Fantastic Five! LM 17: Five-Frame
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In grades 1 and 2, one of your planning pages describes **Mathematics Centres** that you can set up in advance for use at various points through the unit. Lesson notes reference centres for support in individualizing instruction.

In grades 3 and up, one of your planning pages describes **Additional Activities** that you can organize for use at various points through the unit. Each **Additional Activity** comes with an accompanying activity **Master**, provided at the end of the module.

Grade 1

Mathematics Centres

Same Number, Different Ways
(Appropriate for use after Lesson 2)
Materials: LM 2 in 10, 17 and 18, heavy paper, plastic bags with zip seals

- Have children use numeral cards, number word cards, dot cards, base ten blocks to represent numbers in different ways.

Visual | Logical

Numbers Everywhere!
(Appropriate for use after Lesson 1)
Materials: downward-stamp program, paper, compass

- Children use a computer draw-and-stamp program to create a number page. Have them divide their page into 2 or 4 parts using the line tool. Then they select the letter, stamp tool (below the answer tool on the toolbar), and click on the down arrow (to the right of the alphabet area) to find the number stamps.
- Children choose a number and click it in. The computer will display the number. They can then stamp their number on the page and illustrate it using stamps or other graphics. They will enjoy changing the background colour and letter colour for their "Numbers Everywhere!" page.

Visual | Logical

Calculator Fun
(Appropriate for use after Lesson 2)
Materials: calculator, paper and pencils, 10 to 12 small objects (e.g., toys, counters, shells)

- Place several calculators and countable objects at the Centre.
- Have children work in pairs. One child counts and records a number of objects using pictures, numbers, or words. The other child presses the corresponding numeral on the calculator keypad, pressing the [=] button between numbers.
- Children take turns recording a number of objects, reading the number, and displaying it on the calculator.

Visual | Kinesthetic

Which Number Wins?
(Appropriate for use after Lesson 4)
Resources and Materials: LM 11, number cubes labelled 0 to 5, erasers

- Have children work in pairs. Each child numbers the columns from 0 to 5 on the grid paper.
- Children take turns rolling a number cube. After each roll, they colour in one square in the column that matches the number on the cube.
- The activity continues until an entire column is coloured in.
- To vary the activity, use a number cube labelled 2 to 10 and have children record rolls on appropriately labelled grid paper.

Visual | Social

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Grade 4

LESSON 3

Measuring in Decimetres

LESSON ORGANIZER (Class period)

Curriculum Focus: Length and measure in decimetres.	Practice:
Student Material:	• centimetre ruler
Equipment:	• centimetre cube
Assessment Matters:	• centimetre
1-1 Chipping Opportunities:	

Who's the Math?
A decimetre is a unit of length equal to 10 cm and 100 mm.

BEFORE Get Started

Show students a Base Ten rod or an orange Cuisinart rod. Invite a volunteer to measure its length. Tell students that a length of 10 cm is called one decimetre.

Have students slide their fingers along metre sticks, starting at the 0 mark and counting decimetres as they reach the 10 cm mark, the 20 cm mark, and so on, to the 100 cm mark.

Invite volunteers to estimate and measure the length of a table in decimetres.

Present the Explore. Remind students to note which linear dimension they chose to measure on their charts and stress that they should round their measurements to the nearest decimetre. Since students are rounding, their measurements are approximate, not exact.

DURING Explore

Opening Assessment: Observe and Listen

As students work, ask questions, such as:

- Which dimension of the cube are you measuring to estimate its width?
- How did you estimate its width?
- How will you know which decimetre to round to?
- Can you see that this desk is about 90 cm wide? How many decimetres is that? (9 dm)

Watch students to see if they choose objects with a dimension long enough to be measured in decimetres.

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