

Third Grade
Trailblazers Unit 2

“Strategies: An Assessment Unit”

North Carolina Standard Course of Study

<http://www.ncpublicschools.org/curriculum/mathematics/scos/2003/k-8/21grade3>

MTB Correlation to NCSCOS

<http://www.kendallhunt.com/uploads/2/CORR-NC-MTB2.pdf>

Unit Activities

- Students partition numbers, rearrange addends, and use strategies with addition facts.
- Students spin two spinners to randomly generate addition sentences. They record these facts in a data table and graph the number of times they spin each sum.
- Students read a story in the Adventure Book that introduces Lo-shu, a pattern on the back of a turtle. This pattern was the first magic square.
- Students solve magic squares to develop problem-solving and addition skills.
- Students begin a review of subtraction facts through the use of strategies.
- Students complete an assessment activity. They spin two spinners and randomly generate subtraction sentences to find the most common difference.
- Students are introduced to the *Subtraction Flash Cards* and the *Subtraction Facts I Know* chart as a means of self-assessment.
- Students solve word problems given a list of items and prices.

Unit Vocabulary

Addend	Keystrokes	Sum	Least common	Most common
Sum	Turn-around facts	Magic square	Difference	Rubric

Third grade glossary link: <http://www.kendallhunt.com/index.cfm?PID=234&PGI=0>

Unit Manipulatives/Supplies

40 connecting cubes/pair of students	Calculators	Clear plastic spinners - 1/student group	scissors	Envelopes (1/student for storing flash cards)
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Unit Assessment Indicators

- Can students use strategies to add and subtract?
- Can students make and interpret bar graphs?
- Can students collect, organize, graph, and analyze data?
- Can students use patterns in data in tables and graphs to make predictions and solve problems?
- Do students communicate mathematical reasoning verbally and in writing?

Unit Literature

- *The Straw, the Coal, and the Bean* from the *Complete Grimm's Fairy Tales*

Unit Software

- *Graphers* is a graphing tool appropriate for young students.
- *Ice Cream Truck* develops problem solving, money skills, and arithmetic operations.
- *Math Concepts One...Two...Three!* Provides practice estimating and measuring time, money, length, and mass.
- *Mighty Math Calculating Crew* poses short answer questions about number operations, 3-dimensional shapes, and money skills.
- *Money Challenge* provides practice with money.
- *Number Facts Fire Zapper* provides practice with number facts in an arcade-like game.
- *Numbers Recovered* provides practice with bar graphs.
- *The Penny Plot* provides practice with counting coins.

Websites to Explore

- Rainforest Math – Click on level C or D and choose “Operations and Calculations: Addition or Subtraction” on the top row of the menu.
<http://www.rainforestmaths.com/>
- AAA Math – Review of basic addition facts
http://www.aaaknow.com/g3_26ax1.htm
- AAA Math – Review of basic subtraction facts
http://www.aaaknow.com/g3_26bx1.htm

You Can Help Your Child

- In this unit, your child's work on the subtraction facts includes discussions of strategies, work with flash cards, and a game.
- As you work with your child on the math facts, ask him/her to describe the strategies that were used to find the answers.
- Encourage problem solving with a calculator by practicing addition and subtraction.
- Take your child with you to the grocery store. Encourage them to add your expenses on a calculator while shopping. They can also estimate your total bill.