

Second Grade, Quarter 1

Big Ideas/Key Concepts:

The Standards for Mathematical Practice describe how students should consistently engage with mathematical content. Mathematical operations are used in solving problems in which a new value is produced from one or more values. Algebraic thinking involves choosing, combining, and applying effective strategies for answering quantitative questions. Understanding place value leads to the development of number sense and efficient strategies for computing with numbers. Measurement processes are used in everyday life to describe and quantify the world. Data displays describe and represent data in alternative ways. Students will be able to fluently add and subtract and understand place value using the strategy “making 100.” Students will be able to tell whether a number is odd or even. Students will be able to relate a number line to a ruler. Students will be able to pose questions to gather data and create a bar graph or a pictograph. Students will be able to answer questions and solve problems using the data. Students will be able to show their mathematical thinking with writings, drawings, or equations that model the mathematical practices.

Mathematical Practices

All practices should be embedded in instruction throughout the 4 quarters.

- MP1.** Make sense of problems and persevere in solving them.
- MP2.** Reason abstractly and quantitatively.
- MP3.** Construct viable arguments and critique the reasoning of others.
- MP4.** Model with mathematics.
- MP5.** Use appropriate tools strategically.

Student Friendly “I Can” Statements

- I can** make a plan to solve a problem.
- I can** try different ways to solve a problem.
- I can** keep trying and not give up until the problem is solved.
- I can** use numbers and words to help me understand math problems.
- I can** explain and defend my answers and listen to my friends’ ideas, too.
- I can** use math tools, words, numbers, drawings, objects, and equations to solve a math problem.
- I can** decide which math tool will best help me

Resources

*May be purchased with individual or site-based money.

- [Read Tennessee MP.1](#)
- [Thinkfinity MP.1](#)
- [Read Tennessee MP.2](#)
- [Thinkfinity MP.2](#)
- [Read Tennessee MP.3](#)
- [Thinkfinity MP.3](#)
- [Read Tennessee MP.4](#)
- [Read Tennessee MP.5](#)

MP6. Attend to precision.
MP7. Look for and make use of structure.
MP8. Look for and express regularity in repeated reasoning.

solve a math problem.
I can use math vocabulary correctly.
I can accurately find the answer.
I can check my work to see if it is reasonable.
I can find and use patterns in numbers and shapes to help me solve problems.
I can use repeated patterns in numbers to find shortcuts when solving a problem.

[Read Tennessee MP.6](#)
[Read Tennessee MP.7](#)
[Read Tennessee MP.8](#)

General Resources:
Math Practices Poster
Math Vocabulary List

Mathematical Content Standards

Student Friendly "I Can" Statements

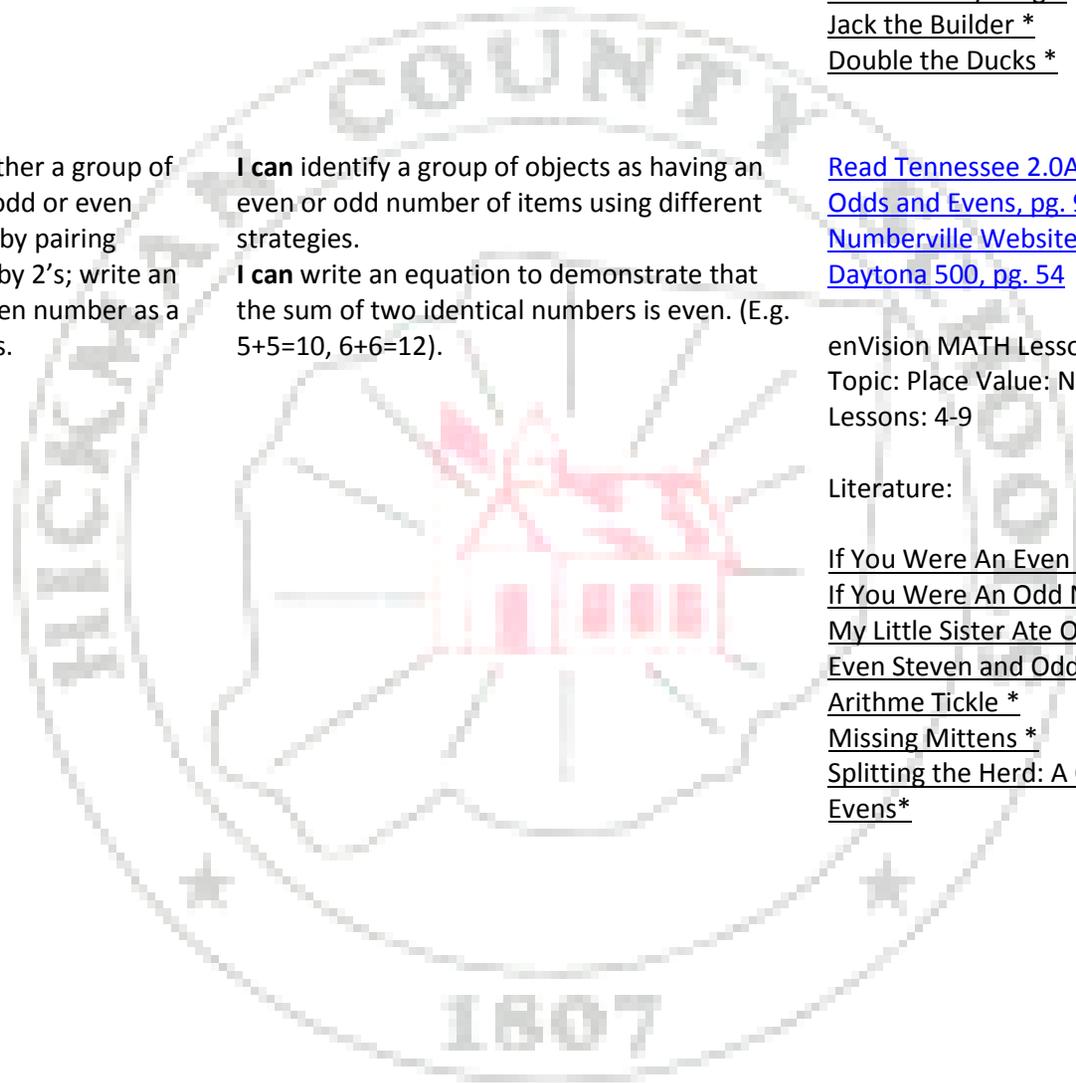
Resources

2. OA.B.2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one digit numbers.

I can use mental math strategies (e.g., count on, make a ten) to add or subtract numbers within 20 with ease.
I can recall from memory all the sums of 2 one-digit numbers within 20.

[Dot Card and Ten Frame Activities](#)
[Addition/Subtraction I Have, Who Has game](#)
[Read Tennessee 2.OA.B2](#)
[Easy as Pie](#)
[Watch Out Addition Website](#)
[Picking Grapes Website Weeks, pg. 60](#)
[Moove It Subtraction Website, pg. 98](#)
[Magic Triangle Website, pg. 155](#)

enVision Math Lessons:
Topic: Addition Strategies
Lessons: 2-1, 2-2, 2-3, 3-1,3-2,3-3,3-4



2. OA.C.3 Determine whether a group of objects (up to 20) has an odd or even number of members, e.g, by pairing objects or counting them by 2's; write an equation to express an even number as a sum of two equal addends.

I can identify a group of objects as having an even or odd number of items using different strategies.

I can write an equation to demonstrate that the sum of two identical numbers is even. (E.g. $5+5=10$, $6+6=12$).

Literature:

Two Of Everything *

Jack the Builder *

Double the Ducks *

[Read Tennessee 2.OA. C.3](#)

[Odds and Evens, pg. 90](#)

[Numberville Website, pg. 50](#)

[Daytona 500, pg. 54](#)

enVision MATH Lessons:

Topic: Place Value: Numbers to 100

Lessons: 4-9

Literature:

If You Were An Even Number *

If You Were An Odd Number *

My Little Sister Ate One Hare

Even Steven and Odd Todd *

Arithme Tickle *

Missing Mittens *

Splitting the Herd: A Corral of Odds and Evens*

2. NBT.A. FOCUS CLUSTER: Understand Place Value

2.NBT.A.1 Understand that the three digits of a three digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:

1a. 100 can be thought of as a bundle of ten tens — called a “hundred.”

1b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).

I can represent each digit in a 3 digit number using hundreds, tens, and ones.

I can relate the value of each digit in a three-digit number to the place it holds in the number. (place value)

I can represent a hundred as 10 groups of 10.

I can interpret the value of the zeros in a given hundred as zero tens and zero ones.

I can create a number line with whole number intervals within 100 (equal spacing).

I can relate each point on a number line to the number it represents.

I can compute sums and differences within 100 using a number line.

[Place Value Match, pg. 142-147](#)

[Read Tennessee, 2.NBT.1](#)

[Race to 100, pg. 159-161](#)

[Bone Up Website, pg. 138](#)

[Closest to 100, pg. 134](#)

enVision Lessons:

Topic: Numbers and Patterns to 100

Lessons: 17-1, 17-2, 17-3

Literature:

[Two Ways To Count To Ten *](#)

[Sir Cumference and All the Kings Tens *](#)

[A Place for Zero *](#)

[One Grain of Rice *](#)

[112 Ants on Sullivan Street *](#)

2.MD.B FOCUS CLUSTER: Relate Addition and Subtraction to length

2. MD.B.6 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2,..., and represent whole-number sums and differences within 100 on a number line diagram

[Read Tennessee, 2.MD.B.6](#)

enVision MATH Lessons:

Topic: Addition/Subtraction of 2-digit numbers

Lessons: 8-6, 9-6

Literature:

[Follow the Line *](#)

[Rock it, Sock it Number Lines *](#)

2. MD.D.10 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.

I can draw a picture graph and a bar graph to represent a data set with up to four categories.

I can solve addition and subtraction problems using data from a picture or bar graph.

I can compare data on a bar graph.

[Read Tennessee, 2.MD.D.10](#)

enVision MATH Lessons:

Topic: Graphs and Probability/
3-digit addition and subtraction
Lessons: 16-1, 16-2, 16-3, 16-7, 18-9

Literature:

[Tally O'Mally *](#)

[The Great Graph Contest *](#)

[The Best Vacation Ever *](#)

General Resources:

[Family Math Website Tennessee Department](#)

[North Carolina Common Core Tools Website](#)

<http://illuminations.nctm.org/>

<http://mathwire.com/index.html>

[Teacher Math Toolkit-several resources](#)

