**North Penn School District**

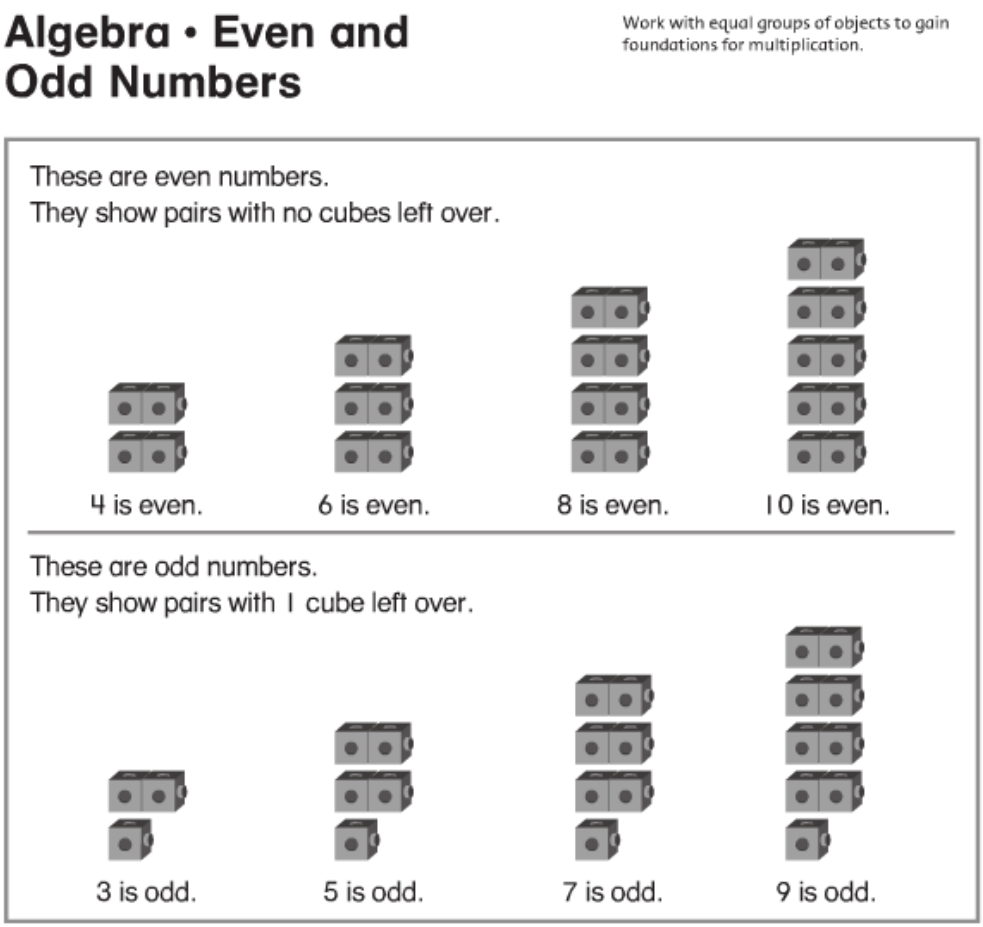
**Elementary Math Parent Letter**

**Grade 2**

**Unit 1 – Chapter 1: Number Concepts**

**Examples for each lesson:**

**Lesson 1.1**




More information on this strategy is available on Animated Math Model #1.

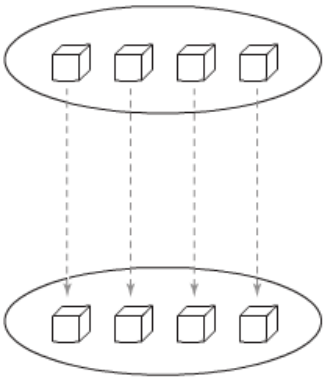
**Lesson 1.2**

## Algebra • Represent Even Numbers

Work with equal groups of objects to gain foundations for multiplication.

An even number of cubes will make two equal groups.

Count 8 cubes. Put the cubes into two equal groups. Do the two groups have equal numbers of cubes? To check, match one to one.



$8 = \underline{4} + \underline{4}$

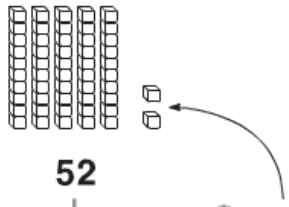
**Lesson 1.3**

## Understand Place Value

Understand place value.

0, 1, 2, 3, 4, 5, 6, 7, 8, and 9 are digits.
A digit's place in a number shows the value of the digit.

52 has two digits.



**52**

The digit 5 is in the tens place.
The digit 5 shows 5 tens.
Its value is 50.

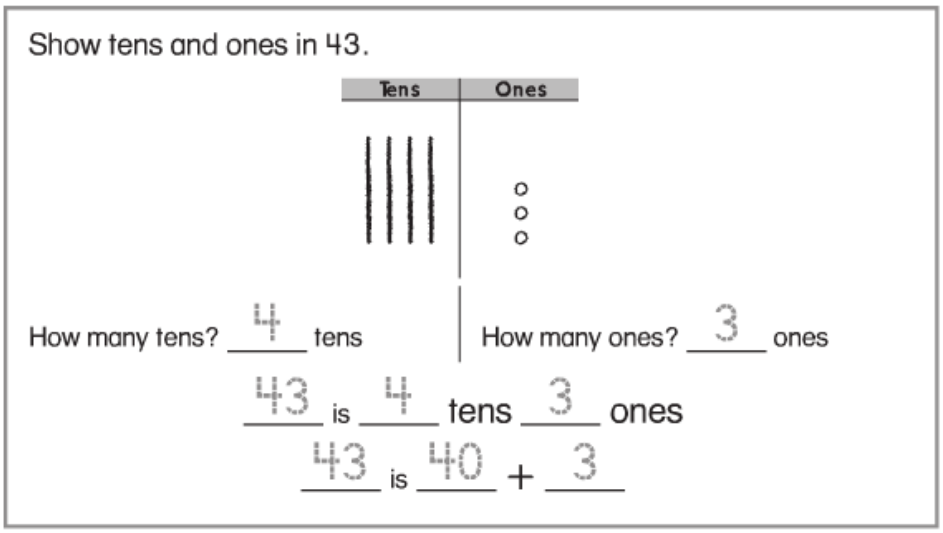
The digit 2 is in the ones place.
The digit 2 shows 2 ones.
Its value is 2.

More information on this strategy is available on Animated Math Model #2.

**Lesson 1.4**

## Expanded Form

Understand place value.

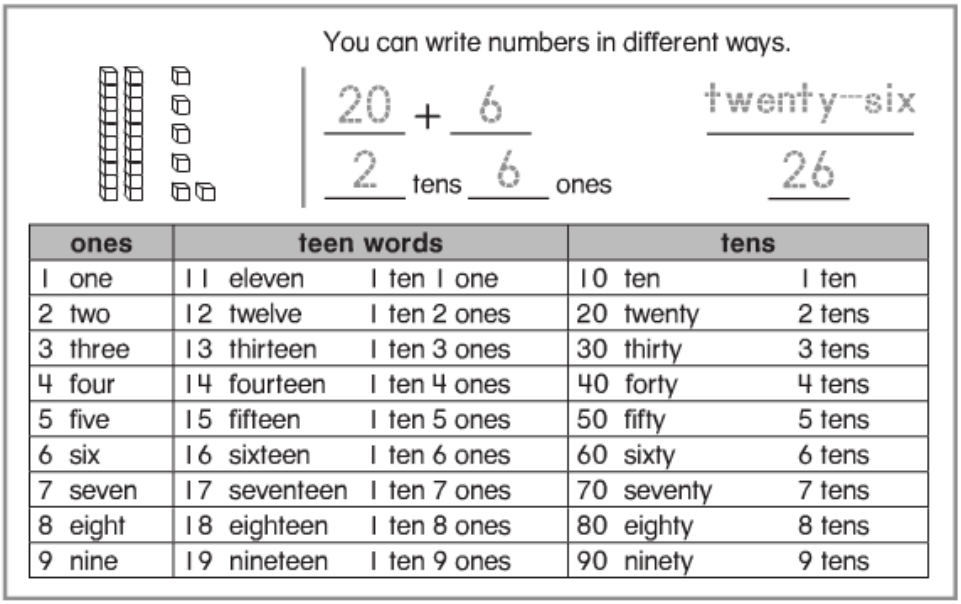



More information on this strategy is available on Animated Math Model #3.

**Lesson 1.5**

## Different Ways to Write Numbers

Understand place value.




| ones | teen words | | tens | |
|---|---|---|---|---|
| 1 one | 11 eleven | 1 ten 1 one | 10 ten | 1 ten |
| 2 two | 12 twelve | 1 ten 2 ones | 20 twenty | 2 tens |
| 3 three | 13 thirteen | 1 ten 3 ones | 30 thirty | 3 tens |
| 4 four | 14 fourteen | 1 ten 4 ones | 40 forty | 4 tens |
| 5 five | 15 fifteen | 1 ten 5 ones | 50 fifty | 5 tens |
| 6 six | 16 sixteen | 1 ten 6 ones | 60 sixty | 6 tens |
| 7 seven | 17 seventeen | 1 ten 7 ones | 70 seventy | 7 tens |
| 8 eight | 18 eighteen | 1 ten 8 ones | 80 eighty | 8 tens |
| 9 nine | 19 nineteen | 1 ten 9 ones | 90 ninety | 9 tens |

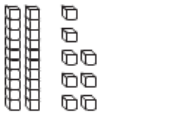
More information on this strategy is available on Animated Math Model #4.

**Lesson 1.6**

## Algebra • Different Names for Numbers

Understand place value.

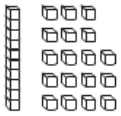
Here are some ways to show 28.



Describe the tens and ones with words and addition.

2 tens 8 ones

20 + 8



Describe the tens and ones with words and addition.

1 ten 18 ones

10 + 18

Describe the tens and ones with words and addition.

0 tens 28 ones

0 + 28

More information on this strategy is available on Animated Math Model #5.

**Lesson 1.7**

## Problem Solving • Tens and Ones

Understand place value.

Anya has 25 toys. She can put them away in boxes of 10 toys or as single toys. What are the different ways Anya can put away the toys?

### Unlock the Problem

**What do I need to find?**

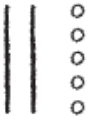
the different ways

Anya can put away the toys

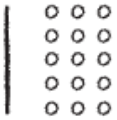
**What information do I need to use?**

She can put them away in boxes of 10 toys or as single toys.

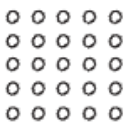
**Look for a pattern.**



2 tens + 5 ones



1 ten + 15 ones



0 tens + 25 ones

| Boxes of 10 toys | Single toys |
|---|---|
| 2 | 5 |
| 1 | 15 |
| | |

**Lesson 1.8**

## Counting Patterns Within 100

Understand place value.

You can count different ways.

Count by fives.

5, 10, 15, 20, 25, 30, 35

Count by tens.

10, 20, 30, 40, 50, 60

**Lesson 1.9**

## Counting Patterns Within 1,000

**COMMON CORE STANDARD CC.2.NBT.2**
Understand place value.

You can count in different ways.
Look for a pattern to use.

Count by tens.

500, 510, 520, 530, 540, 550

Count by hundreds.

300, 400, 500, 600, 700, 800

More information on this strategy is available on Animated Math Model #6.

**Vocabulary**

**Digits** – the symbols used in a numeration system: the ten digits used in our base-ten numeration system are 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9

**Even numbers** – whole numbers that when divided by 2 have a quotient that is a whole number

**Odd numbers** – whole numbers that when divided by 2 have a quotient that is not a whole number (or have a remainder)