

# MATH NEWS

Grade 2, Unit 3, Topic D

Fall 2014

## 2<sup>nd</sup> Grade Math

Unit 3: Place Value, Counting, & Comparison on Numbers to 1000

### Math Parent Letter

This document is created to give parents and students a better understanding of the math concepts found in material taught in the classroom. Unit 3 material covers Place Value, Counting, & Comparison on Numbers to 1000. This newsletter will discuss Module 3, Topic D.

Topic D. Modeling Base Ten Numbers within 1,000 with Money

#### Words to know

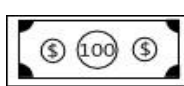
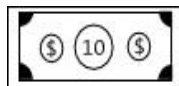
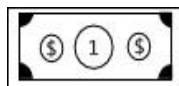
- Ones
- Tens
- Hundreds
- Thousands
- Place Value Chart
- Number Line
- Change

#### Things to remember!!!

There are 10 one dollar bills in \$10

There are 10 ten dollar bills in \$100

There are 10 hundred dollar bills in \$1,000



## OBJECTIVE OF TOPIC D

- 1 Count the total value of \$1, \$10, and \$100 up to \$1,000
- 2 Count from \$10 to \$1,000 on the place value chart and the empty number line
- 3 Explore \$1,000. How many \$10 can we for a thousand dollar bill?

## Focus Area– Topic D

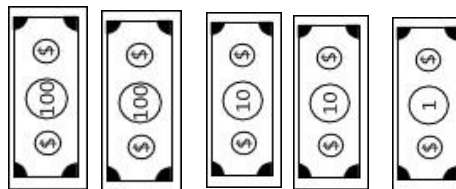
Modeling Base Ten Numbers within 1,000 with Money

Relate Money on a Place Value Chart

hundreds	tens	ones

A one dollar bill represent 1 one, a ten dollar bill represents 1 ten, and a hundred dollar bill represents 1 hundred.

Understanding the Value of Bills



Write the value in various forms.

Place Value Chart:

Hundreds	Tens	Ones
2	2	1

Unit Form:

2 hundred dollars 2 ten dollars 1 one dollar

Expanded Form:

$\$200 + \$20 + \$1$

Number Form:

$\$221$

Word Form:

Two hundred twenty-one dollars

Show each amount of money using only 10 bills. Write the amount of money in expanded form. Write the total value of each set of bills as a number bond.

dollar bills →

\$100	\$100	\$10	\$10	\$1
\$100	\$10	\$10	\$10	\$1

$352 = 300 + 50 + 2$   
 ← expanded form

number bond →

352	=	300	+	50	+	2
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Students should be able to express 352 as 10 different bills, in extended form, and as a number bond.

### Manipulating the Value of 10 Bills

The value of **352** is expressed below

\$100	\$100	\$10	\$10	\$1
\$100	\$10	\$10	\$10	\$1

**Change 2 one dollar bills to 2 ten dollar bills.**

\$100	\$100	\$10	\$10	\$1
\$100	\$10	\$10	\$10	\$10

What is the value now? **370**

**Change 2 ten dollar bills to 2 hundred dollar bills.**

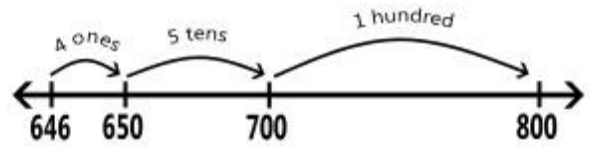
\$100	\$100	\$10	\$10	\$10
\$100	\$100	\$100	\$10	\$10

What is the value now? **550**

Students should understand that changing ones, tens, or hundreds will also change the value of the number. They should also understand that even though the boxes look the same they represent different things just like a bill's value is determined by what it represents.

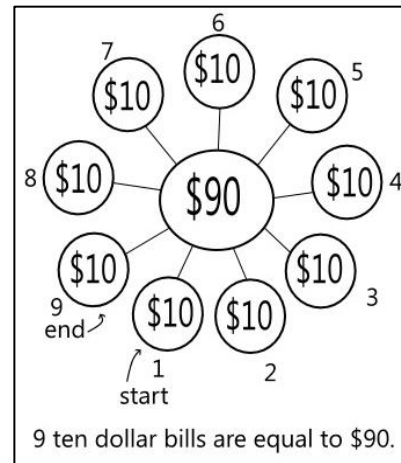
### Counting on a Number Line.

Count from 646 to 800 on a number line using ones, tens, and hundreds



There are 4 ones between 646 and 650. There are 5 tens between 650 and 700. There is 1 hundred between 700 and 800. 1 hundred + 5 tens + 4 ones = 154. That is the amount between 646 and 800

**How many 10 dollar bills are in \$90?**

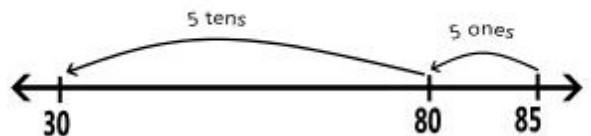


Skip count by tens and for every set of 10 draw a group of 10 around the \$90. Connect each set to the \$90 to show that it is a part of the \$90. Then count how many tens it took to get to \$90.

Draw and solve.

Jaimee wants a game that costs \$85. She needs to save \$30 more dollars to have enough to buy the game. How much money does Jaimee already have?

$$5 \text{ tens} + 5 \text{ ones} = 55$$



Jaimee already has \$55.