November 2013

## $2^{\text {nd }}$ Grade Math

Module 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 the material taught in the classroom. Module 3 covers Place Value, Counting, \& Comparison on Numbers to 1000. This newsletter will discuss Module 3, Topic E.

Topic E. Modeling Numbers within 1,000 with Place Value Disks

Words to know

- Hundreds
- Tens
- Ones
- Thousands
- Place Value Chart
- Place Value Disks
- Number Disks
- Groups

Things to remember!!!
Count on a number line.


## Objective of Topic E

1 Count the total value of ones, tens, and hundreds with place value disks.

2 Change 10 ones for 1 ten, 10 tens for 1 hundred, and 10 hundreds for 1 thousand.

3
Read and write numbers within 1,000 after modeling with place value disks.

4 Model numbers with more than 9 ones or 9 tens; write in expanded, unit, number, and word forms.

5 Explore a situation with more than 9 groups of ten.

## Focus Area- Topic E

Modeling Numbers within 1,000 with Place Value Disks

## What is a number disk?

A number disk is the same as a place value disk. The only difference is a number disk is used to represent numbers and a place value disk represents numbers on a place value chart.

## 323 with number disks



## 323 with place value disks



Draw 12 using tens and ones place value disks.


Draw 12 using ones place value disks.

|  | (1)(1)(1)(1) <br> (1)(1)(1) <br> (1)(1) |
| :--- | :--- |

Tell the value of the following numbers.


The value is 32 .


The value is 320 .

Fill in the sentence to tell about the change from 32 to 320 .
I changed 2 ones for 2 tens.
I changed 2 tens for 2 hundreds.

## Word Problems

Ms. Jessie bought 4 boxes of cookies. Each box had 4 smaller packs of 10 inside. How many packs of cookies were in the 4 boxes?


The $3^{\text {rd }}$ grade class has 22 students. What is the total number of toes of the students?


$$
100+100+20=220
$$

22 students have 220 toes.
Fill in the blanks
$125=\underline{1}$ hundreds $\underline{2}$ tens $\underline{5}$ ones
$25=\underline{0}$ hundreds $\underline{2}$ tens $\underline{5}$ ones
$220=\underline{2}$ hundreds $\underline{2}$ tens $\underline{0}$ ones
$220=\underline{22}$ tens $\underline{0}$ ones

## W ord Problems and Number Disks

How many packages of 10 cupcakes can Cathy make using 143 cupcakes? How many cupcakes does she need to complete another set of 10 ?


Cathy can make 14 packages of 10 cupcakes. She needs 7 more to complete another package.

There are 10 tens in one hundred. So combine the 10 tens and the 4 tens. 10 tens +4 tens $=14$ tens. To make another complete set 10 cupcakes are needed. There are 3 cupcakes left, $3+7=$ ten. 7 more cupcakes are needed to make another complete set.

Another way the problem could have been solved is by using number bonds.

## 143 cupcakes



> 10 tens +4 tens $=14$ tens
> 3 ones +7 ones $=10$ ones

Cathy can make 14 packages of 10 cupcakes.
She needs 7 more to complete another package.

143 can be expressed using a number bond. Knowing that 1 hundred is also equal to 10 tens, it can be written in expanded form. 10 tens +4 tens +3 tens. 10 tens +4 tens $=14$ tens. 7 more ones will be needed to make 1 more ten.

