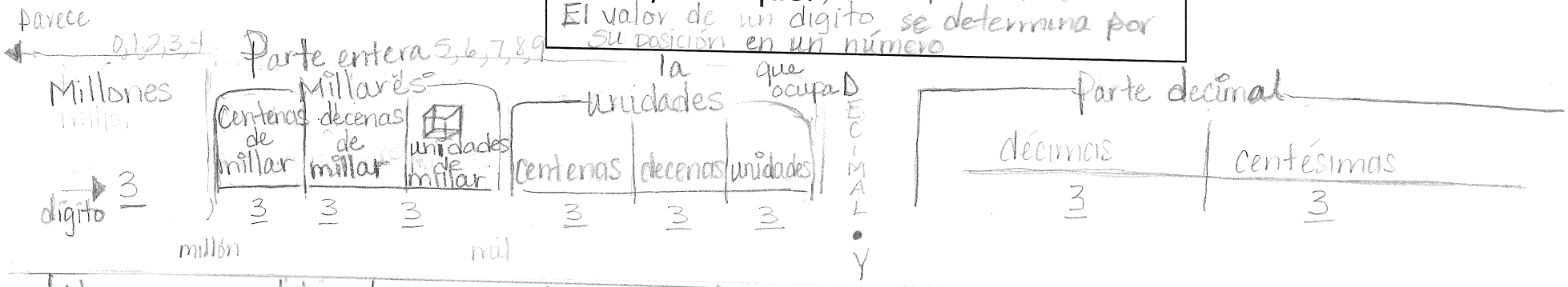
AIM4S$^{3™}$ Compendium Template

Título/ Enfoque: Valor Posicional

El valor de un dígito se determina por su posición en un número



Numeros en palabras

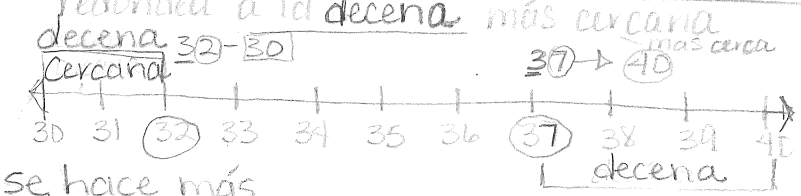
1 uno	11 once	10 diez
2 dos	12 doce	20 veinte
3 tres	13 trece	30 treinta
4 cuatro	14 catorce	40 cuarenta
5 cinco	15 quince	50 cincuenta
6 seis	16 dieciseis	60 sesenta
7 siete	17 diecisiete	70 setenta
8 ocho	18 dieciocho	80 ochenta
9 nueve	19 diecinueve	90 noventa

Redondeando

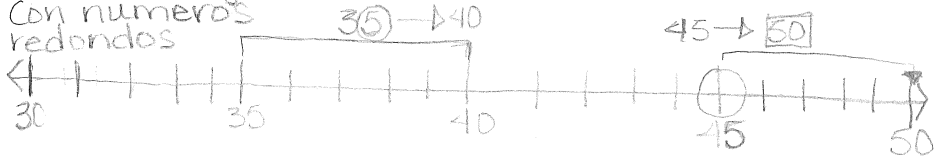
¿Porque? Para estimar cuantos?

* Es más facil y rapido trabajar con numeros redondeados

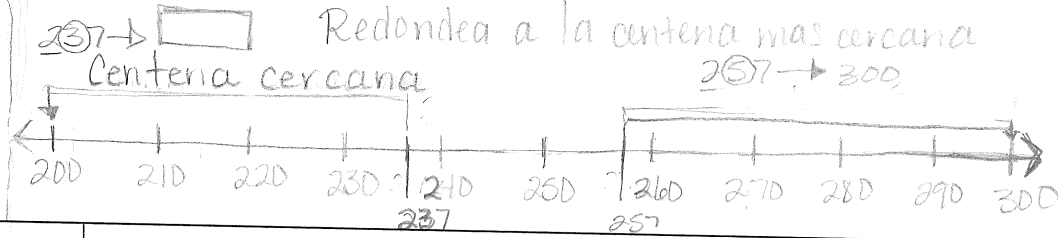
redondea a la decena más cercana



se hace más facil trabajar con numeros redondos



Redondea a la centena mas cercana



Números enteros

— en las unidades
— en las centenas
— en las decenas
— en las diez-centenas de millar
— en las milesimas-unidades de millar

Estándares y prácticas matemáticas

* Vamos a usar el entendimiento del valor posicional modelando con matematicas para leer y escribir numeros a los millares
* Vamos a usar el entendimiento del valor posicional para redondear números enteros a la decena o la centena más cercana observando y haciendo la estructura

La investigación — Valor Posicional

Lo que sabemos sobre _____

Lo que queremos aprender _____

(p. 2)

Place value – the value of a digit is determined by where it is placed in a number

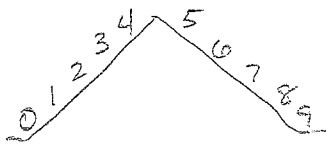
looks like 0, 1, 2, 3, 4 Whole Numbers 5, 6, 7, 8, 9

looks like $\frac{1}{2} = 50\% = 0.50$

Millions Period			Thousands Period			Ones Period			Decimal	Partial Numbers	
millions			hundred thousands	ten thousands	thousands	hundreds	tens	ones		tenths	hundredths
3	3	3	3	3	3	3	3	3	and	3	3
digit	million				thousand						

Number Words

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



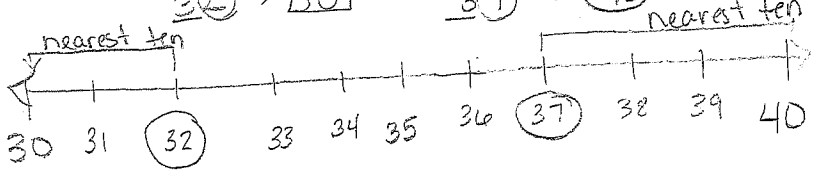
Rounding

Why
- to estimate to find about how many or how much
- rounded numbers are faster to work with

round to the nearest ten (closer to)

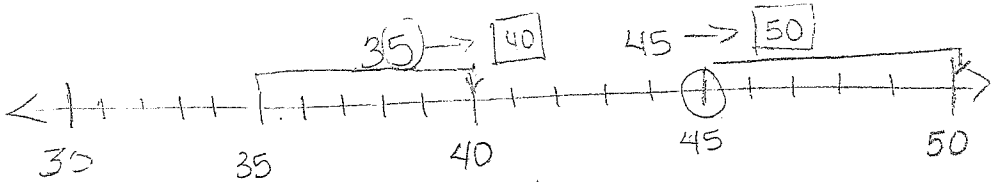
32 → 30 (nearest ten)

37 → 40 (nearest ten)



35 → 40

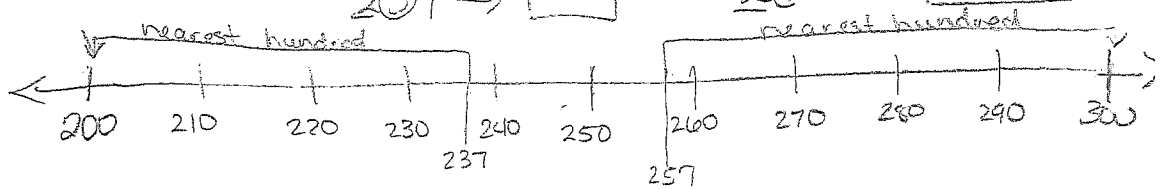
45 → 50



round to the nearest hundred

207 → ☐ (nearest hundred)

257 → 300 (nearest hundred)



Whole numbers

___, ___ ___

___ in the ones place
___ in the hundreds place
___ in the tens place
___ in the ten-thousands place
___ in the thousands place

Standards and Mathematical Practices

We will continue to use place value understanding, and model with mathematics to read and write numbers to the thousands.

We will use place value understanding to round whole numbers to the nearest 10 or 100 by looking for and making use of structure.

We will attend to precision when we fluently add and subtract [illegible] using strategies and algorithms based on

What we know about place value ...

Inquiry | What we want to learn about place value ...

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UNIT PLANNING TOOL

Unit _____: Place Value

CCSSM: 3.NBT.1 - Use place value understanding to round whole numbers to the nearest 10 or 100.

3.NBT.2 - Fluently add and subtract within 1,000 using strategies and algorithms based on place value, properties of operations, and/or relationships between addition and subtraction

Math Practices being emphasized:

① model with mathematics

⑥ attend to precision

⑦ look for and make use of structure.

Essential Questions

Why is place value important?

How are addition and subtraction related?

How can we effectively estimate numbers?

Pre and Post Assessments

Stepping Stones or teacher generated

Key Concepts

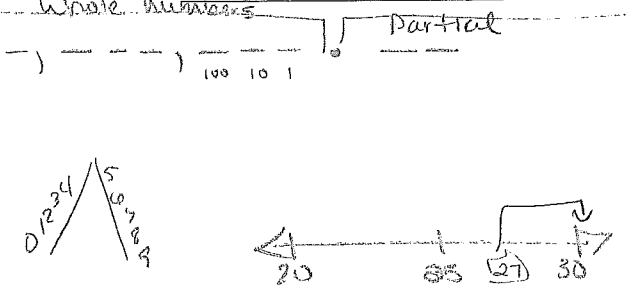
The value of a digit in a number

Whole numbers / partial numbers

rounding using a number line

rounding why and where the split is

Visual Models of Concepts



Algorithms/Diagrams

___ in the ___ place

___ in the ___ place

___ ___ , ___ ___ ___

Connections (Real World Applications)

Place Value gives value to how we count, + measure things. like money $1 vs $10

- Estimating (rounding)

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Language Functions/Structures

Identify:

The value of the ____ digit in _____ is ____.

The digit ____ is in the _____ place.

Compare:

The number _____ will round to ____, but the number _____ will round to _____ because _____

Vocabulary

ones	place value	partial numbers	nearest 10
tens	digit	operations	nearest 100
hundreds	millions	round	
thousands	whole numbers	estimate	

Focus and Motivation

A million Fish, more or less
by Pat McKissack

Sir Cumference and All the Kings Tens
by Cindy Neuschwander

Animation

Brainpop Jr.
- rounding

Study Jams
- Place Value

Activity

I have, who has