## Deconstructing an Essential Standard

Getting crystal clear on what students need to know!

Learning Targets

## Deconstructing an Essential Standard

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Learning Targets
-I can identify the value of a digit when it is moved one place value greater within a number.
-I can identify that a digit represents ten times what the same digit represents in the place to its right.

Identify the value of a digit if it moves its place value one position greater

## 4.NSBT. 1 Understand that, in a

multi-digit whole number, a digit
represents ten times what the same
digit represents in the place to its
-What is the difference between a digit anda right. number.
-What happens to the value of the digit in the
Digit
$\qquad$ place when the number is multiplied by 10 ?

Place value
-How does the value of the digit in the $\qquad$ place
compare to the value of the digit in the $\qquad$ place?

Value
10 times greater

## Deconstructing an Essential Standard

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Learning Targets

I can identify periods in larger numbers.
I can regroup multi digit place values.

> Recognize math periods and number patterns within each period to read and write in standard form large numbers through 999,999,999.
-What conclusions can I make about the places within our base 10 number system
-What happens to a digit when multiplied by 10 ? -What effect does the location of a digit have on the value of the digit?

Characteristics

## *Expanded form

-identify math periods, number patterns
-identify the value of a double digit number in a single place value
-writing a number in standard form
-3 digits between commas
-read a number in standard form
-periods
-patterns
-double digit
-standard form
-place value
-expanded form/DECOMPOSE

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## Learning Targets

I can use decompose numbers to add and subtract.
I can explain why standard algorithm works.
-add
-How do you decompose a number?
-How can you use a variety of strategies to add and subtract multi-digit number?
-How does my chosen strategy work?
-subtract
-decompose
-partial sums
-regroup
-addend -minuend -subtrahend -sum
-difference

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Learning Targets
I can multiply a 2 digit by 1 digit number. I can multiply a 3 digit by 1 digit number. I can multiply a 4 digit by 1 digit number. I can multiply a 2 digit by 2 digit number.
-multiply $2 \times 1$ digit, $3 \times 1$ digit, $4 \times 1$ digit -multiply $2 \times 2$ digit
-use strategies including area model and/or standard algorithm

Essential Standard
4.NSBT. 5 Multiply up to a four-digit number by a one-digit number and multiply a two-digit number by a two-digit number using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using rectangular arrays, area models and/or equations.
-What does it mean to multiply? What is multiplication? -How do you use the area model to multiply numbers?
-How do you use the standard algorithm to multiply numbers?
area model
-multiply
standard algorithm
-partial product
-product
-factor
-regroup
-multiplicative comparison

## Deconstructing an Essential Standard

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## Learning Targets

I can divide a 2 digit dividend by 1 digit divisor. I can divide a 3 digit dividend by 1 digit divisor. I can divide a 4 digit dividend by 1 digit divisor.

## Characteristics

Use strategies including partial quotients, standard algorithm, repeated subtraction to solve division problems. Divide up to a four digit dividend by a 1 digit divisor

How are multiplication and division related?
-What does it mean to divide (separate into equal groups? What is division?
-How do you use the partial quotient strategy to divide numbers?
-How do you use the standard algorithm to divide numbers?
-How do you use multiplication to check division?

Question Stems
dividend
-divisor
-quotient
-partial quotient
-remainder
-inverse
-near facts -division -equal groups standard algorithm partition
-divide

## Deconstructing an Essential Standard

## Getting crystal clear on what students need to know!

## Learning Targets

I can divide a 2 digit dividend by 1 digit divisor. I can divide a 3 digit dividend by 1 digit divisor. I can divide a 4 digit dividend by 1 digit divisor.

## Characteristics

Use strategies including partial quotients, standard algorithm, repeated subtraction to solve division problems. Divide up to a four digit dividend by a 1 digit divisor

How are multiplication and division related?
-What does it mean to divide (separate into equal groups? What is division?
-How do you use the partial quotient strategy to divide numbers?
-How do you use the standard algorithm to divide numbers?
-How do you use multiplication to check division?

Question Stems
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