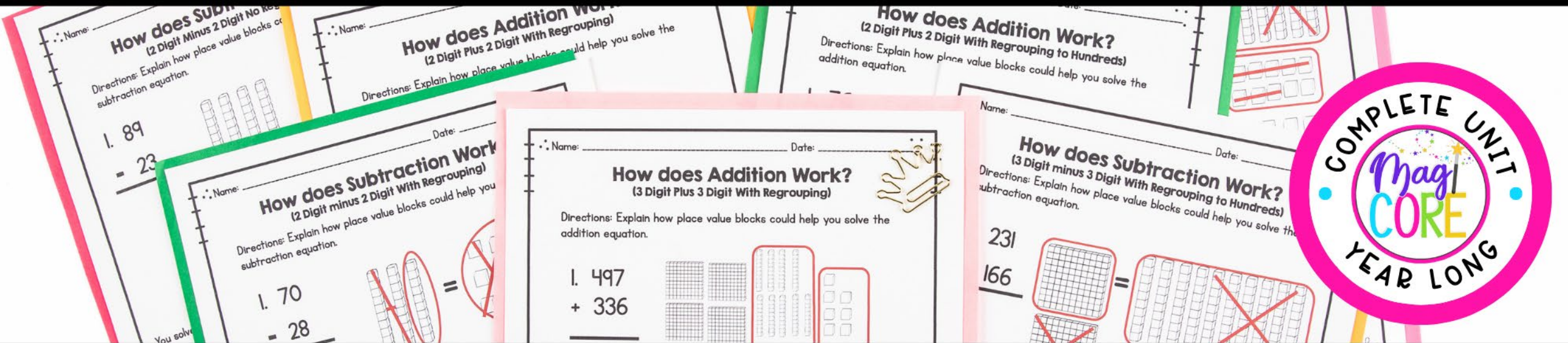


WORKSHEETS, HIGHER ORDER
THINKING, & POSTER ACTIVITY

2nd Grade

WHY DO ADDITION & SUBTRACTION WORK



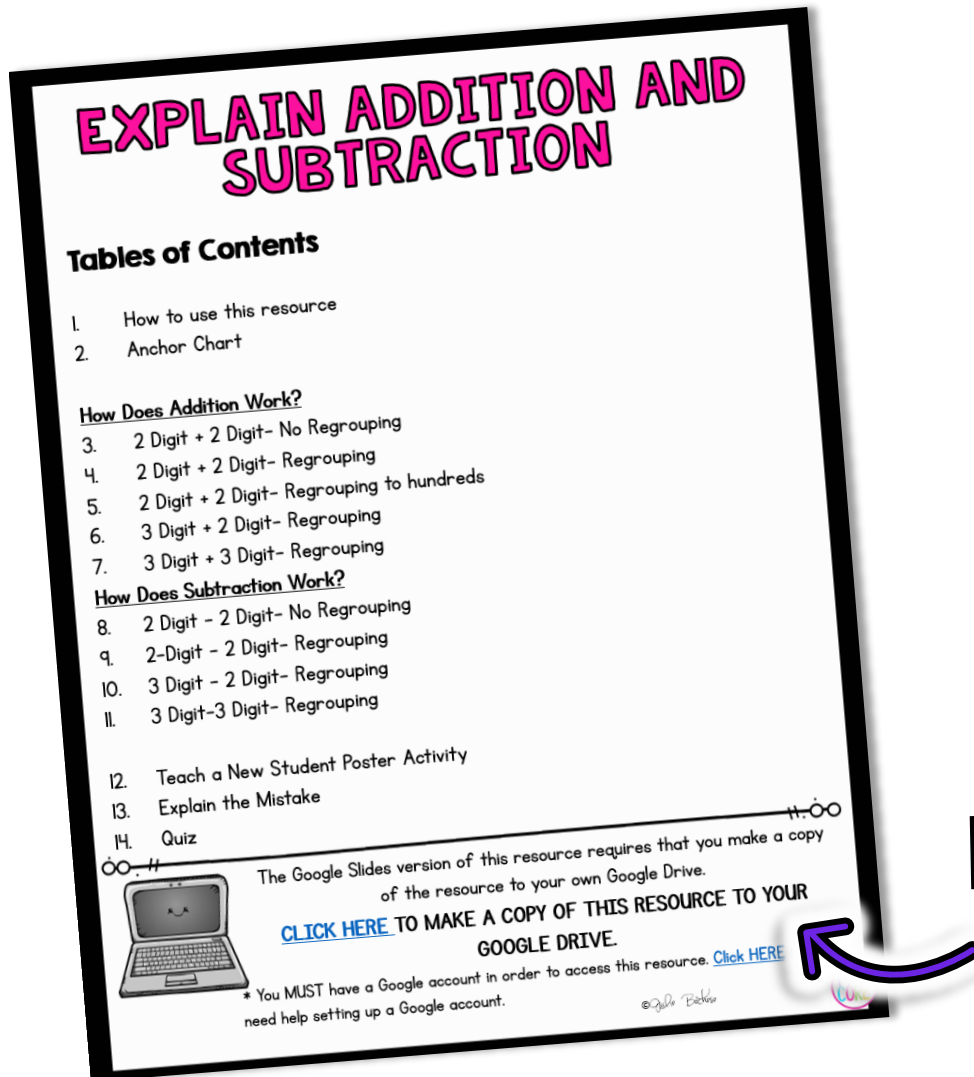
PRINTABLE • GOOGLE SLIDES

WHAT'S INSIDE?

PRINTABLE PDFs and INTERACTIVE DIGITAL VERSIONS included

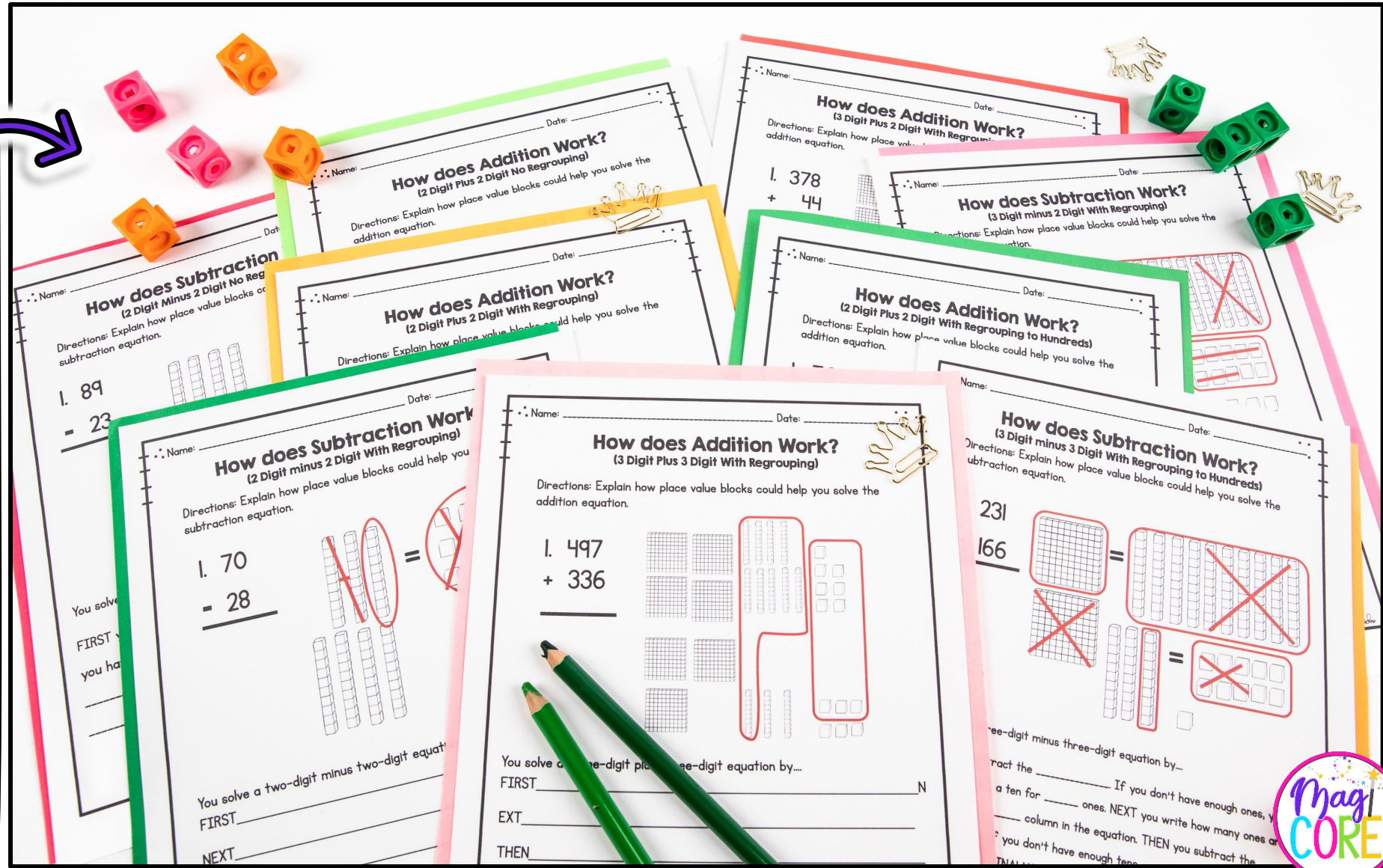
- Teaching students how to explain addition and subtraction
- Group Poster Work & Final Assessment
- AND links to interactive digital versions

Printable & Digital Links Included



STANDARD ALIGNED ACTIVITIES

- Fun and aligned activities.
- Variety of worksheets and hands on engagement.
- Helps students practice how to explain addition and subtraction strategies.



UTILIZE ALL YEAR

- Resource is designed to be used in isolation or added in throughout other units.
- Guide on how to utilize and teach this resource INCLUDED
- Detailed explanation

How to use this Resource

This resource focuses on 2.NBT.B.9, understanding how to explain addition and subtraction. This resource focuses on teaching students to explain why addition and subtraction strategies work. In this unit, students will have several opportunities to work through and explain various addition and subtraction strategies.

You can teach this unit sequentially and explicitly, or you can scatter this unit throughout other addition and subtraction units as supplemental expansion activities.

- Begin by taking students through the Anchor Chart and model for students how to explain addition strategies. They should utilize this process throughout the unit.
- Work through the different addition strategies in this order:
 - 2 Digit + 2 Digit- No Regrouping
 - 2 Digit + 2 Digit- Regrouping
 - 2 Digit + 2 Digit- Regrouping to hundreds
 - 3 Digit + 2 Digit- Regrouping
 - 3 Digit + 3 Digit- Regrouping
- Take students through the Anchor Chart again, and this time, model how to explain subtraction strategies. They should utilize this process throughout the unit.
- Work through the different addition strategies in this order:
 - 2 Digit - 2 Digit- No Regrouping
 - 2-Digit - 2 Digit- Regrouping
 - 3 Digit - 2 Digit- Regrouping
 - 3 Digit-3 Digit- Regrouping
- The next step in the unit is the following expansion poster activities to deepen student understanding and learning:
 - Teach a New Student How to Add Poster Activity
 - Teach a New Student How to Subtract Poster Activity
- Review and expand student understanding with the Explain the Mistake activity.
- Finish the unit by assessing mastering through the unit Quiz.

Works

Teach him how to solve the equation.

Quiz- Explain How Subtraction Works

Sophie was writing an explanation about how to solve a subtraction equation. Can you find Sophie's mistake? Explain to Sophie what she did wrong.

$$\begin{array}{r} 1. \ 724 \\ - \ 145 \\ \hline 312 \end{array}$$

Sophie's Explanation
First you subtract $4-5=1$. Write 1 under the ones place. Next subtract $2-4=2$. Write 2 under the tens place. Finally subtract $7-1=6$. Write 6 under the hundreds place.

Dear Sophie,

ANCHOR CHART

- 2 Anchor Charts to teach and break down the skill.
- Perfect to add into student folders or journals.
- Provides visual guidance on explaining addition and subtraction strategies.
- Explanation and modeling.

Explaining Subtraction

1. Look at the equation

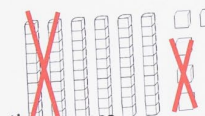
$$\begin{array}{r} 65 \\ - 23 \\ \hline \end{array}$$

2. Solve it using place value blocks

3. Explain the process using words like:

First	After
Next	Later
Then	Finally

FIRST you subtract the
NEXT write how many
have under the one's column
THEN subtract the tens
FINALLY Write how many
you have under the ten's

 = 42

Explaining Addition

1. Look at the equation


$$\begin{array}{r} 65 \\ + 23 \\ \hline \end{array}$$

2. Solve it using place value blocks

3. Explain the process using words like:

First	After
Next	Later
Then	Finally

FIRST you add the ones. NEXT write
how many ones you have under the
one's column. THEN add the tens.
FINALLY Write how many tens you
have under the ten's column.

 = 88

DIGITAL VERSION

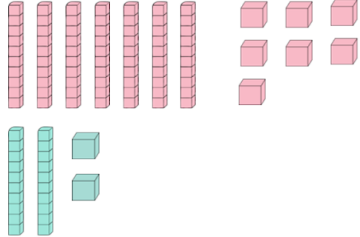
- Google Classroom Friendly!
- Interactive Google Slides for practicing solving explaining addition and subtraction.
- Students stay engaged while demonstrating mastery online.



How does Addition Work?
(2 Digit Plus 2 Digit No Regrouping)

Directions: Explain how place value blocks could help you solve the addition equation.

1.
$$\begin{array}{r} 77 \\ + 12 \\ \hline \square\square \end{array}$$



You solve a two digit plus two digit equation by...

FIRST you add the

NEXT write how many ones you have under the column.

THEN add the

FINALLY Write how many tens you have under the column.

ENGAGING POSTER ACTIVITY

- Poster Activity for students to demonstrate mastery.
- Perfect for group work.
- Challenge students to “teach a new student” and explain how addition and subtraction work.
- Higher Order Thinking and Critical Thinking challenge



TAKE A PEEK

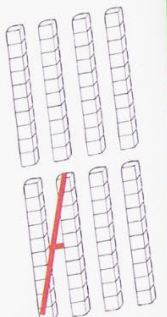
Name: _____ Date: _____

How does Subtraction Work?

(2 Digit Minus 2 Digit No Regrouping)

Directions: Explain how place value blocks could help you solve the subtraction equation.

1. $89 - 23$



You solve a two-digit minus two-digit equation by...

FIRST you subtract the _____.

you have under the _____.

FINALLY you write how many _____.

Name: _____ Date: _____

How does Subtraction Work?

(2 Digit minus 2 Digit With Regrouping)

Directions: Explain how place value blocks could help you solve the subtraction equation.

1. $70 - 28$



You solve a two-digit minus two-digit equation by...

FIRST _____

NEXT _____

THEN _____

FINALLY _____

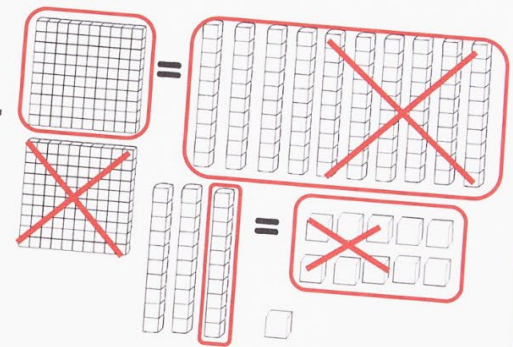
Name: _____ Date: _____

How does Subtraction Work?

(3 Digit minus 3 Digit With Regrouping to Hundreds)

Directions: Explain how place value blocks could help you solve the subtraction equation.

$231 - 166$



three-digit minus three-digit equation by...

subtract the _____. If you don't have enough ones, you _____ in a ten for _____ ones. NEXT you write how many ones are left _____ column in the equation. THEN you subtract the _____. If you don't have enough tens, you need to trade in a hundred _____. FINALLY you write how many tens you have under the _____ column. LASTLY you subtract the _____.

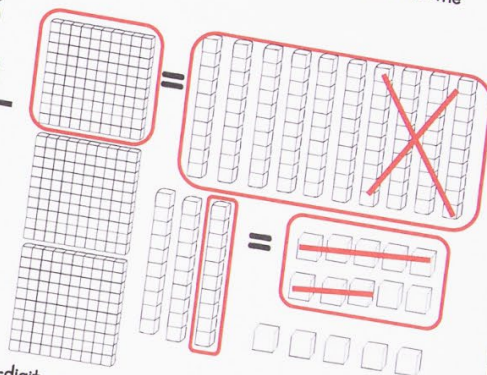
Name: _____ Date: _____

How does Subtraction Work?

(3 Digit minus 2 Digit With Regrouping)

Directions: Explain how place value blocks could help you solve the subtraction equation.

$35 - 48$



three-digit minus two-digit equation by...

AND ANOTHER PEEK

Directions: Explain how place value blocks could help you solve the addition equation.

Name: _____ Date: _____

How does Addition Work?

(2 Digit Plus 2 Digit With Regrouping)

Directions: Explain how place value blocks could help you solve the addition equation.

$$\begin{array}{r} 1. \ 65 \\ + \ 25 \\ \hline \end{array}$$



You solve a two-d
FIRST _____

NEXT _____

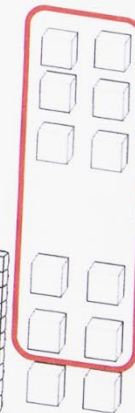
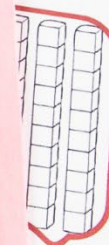
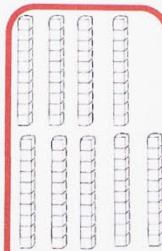
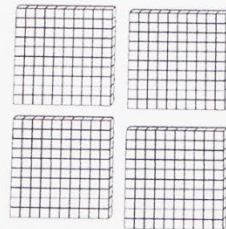
Name: _____ Date: _____

How does Addition Work?

(3 Digit Plus 3 Digit With Regrouping)

Directions: Explain how place value blocks could help you solve the addition equation.

$$\begin{array}{r} 1. \ 497 \\ + \ 336 \\ \hline \end{array}$$



by....
as are greater than _____ you
NEXT you write how many ones are
tion. THEN you add the