

DOUBLE DIGIT ADDITION

Worksheet set 1

Rewrite each problem vertically. Make sure to line up the same place values. Do NOT solve the problems.

$44 + 33$	$2 + 78$
$+ \begin{array}{ c } \hline \\ \hline \end{array}$	$+ \begin{array}{ c } \hline \\ \hline \end{array}$
$205 + 411$	$81 + 312$
$+ \begin{array}{ c } \hline \\ \hline \end{array}$	$+ \begin{array}{ c } \hline \\ \hline \end{array}$
$364 + 2$	$7 + 265$
$+ \begin{array}{ c } \hline \\ \hline \end{array}$	$+ \begin{array}{ c } \hline \\ \hline \end{array}$

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with and
without
regrouping

Worksheet set 3

Solve each problem. Make sure to start with the ones place. When you are done, check your answers with a calculator and place a ✓ in the circle.

$\begin{array}{ c } \hline \\ \hline \end{array} \downarrow$ $\begin{array}{r} 25 \\ + 45 \\ \hline \end{array}$ $\begin{array}{ c } \hline \\ \hline \end{array} \bigcirc$	$\begin{array}{ c } \hline \\ \hline \end{array} \downarrow$ $\begin{array}{r} 37 \\ + 34 \\ \hline \end{array}$ $\begin{array}{ c } \hline \\ \hline \end{array} \bigcirc$
$\begin{array}{ c } \hline \\ \hline \end{array} \downarrow$ $\begin{array}{r} 62 \\ + 18 \\ \hline \end{array}$ $\begin{array}{ c } \hline \\ \hline \end{array} \bigcirc$	$\begin{array}{ c } \hline \\ \hline \end{array} \downarrow$ $\begin{array}{r} 9 \\ + 15 \\ \hline \end{array}$ $\begin{array}{ c } \hline \\ \hline \end{array} \bigcirc$
$\begin{array}{ c } \hline \\ \hline \end{array} \downarrow$ $\begin{array}{r} 19 \\ + 23 \\ \hline \end{array}$ $\begin{array}{ c } \hline \\ \hline \end{array} \bigcirc$	$\begin{array}{ c } \hline \\ \hline \end{array} \downarrow$ $\begin{array}{r} 16 \\ + 7 \\ \hline \end{array}$ $\begin{array}{ c } \hline \\ \hline \end{array} \bigcirc$

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INCLUDES GOOGLE SLIDES



This unit was created with this guy in mind. He has autism and an intellectual disability. He is a non-reader, can count to 20, but still struggles with a most basic math skills. With some support he is able to do this unit and enjoys the challenge. He is my tester!!

Double Digit Addition Unit

By
Christa Joy
Special Needs for Special Kids

$$\begin{array}{r} \square \\ 37 \\ + 57 \\ \hline \square \square \end{array}$$

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Also included in this resource as separate files:

- Links and directions to digital activities
- PowerPoint (**this is the book in the lesson plan**)
- Voice recorded PowerPoint
- Activities in black and white

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This unit contains 10 days of material that is in both printable and digital formats. I have included a detailed lesson plan to help you make the most of everything in this unit including daily group and individual activities.

It comes in 2 separate files. One in color and one in black and white.

Double Digit Addition Lesson Plan

Preparation

- Print out a vocabulary board for each student to use throughout unit
 - Laminate or place in page protector
- Book
 - Print out, laminate, and bind
 - OR your students can listen to the pre-recorded version
- Group activities
 - Each group activity has materials to print
 - Print necessary materials onto cardstock and laminate
- Base ten flash cards
 - Print on cardstock and laminate
 - May want several copies
- Base ten blocks
 - You will want to have access to these for the unit if possible
 - If you do not have these, you can substitute the flashcards

Preassessment (do day 1 before starting lesson)

- Use the quiz as the preassessment
- I cannot emphasize enough how important this step in preassessment is so important!!

Teaching Tips

1. **Color Coding:** this is a really easy way to add more. Outline or color in an empty box or sorting label. Use picture symbols the same colors. Becomes a color matching activity.
 - a. For more info, read more here: <https://specialneedsforspecialkids.org/2015/09/differentiation/>
 - b. I also have a blog post on differentiating one digit addition: <https://specialneedsforspecialkids.org/2018/10/easily-and-effectively/>
2. **Make your own copies of the activities:** Every day I make copies for that reason:
 - a. I often complete the activity myself and often could use year after year.

Quick Look

Day	Activity	Day	Activity
1	<ul style="list-style-type: none"> • Book • Group activity 1: Reviewing Place Value • Place value review 	6	<ul style="list-style-type: none"> • Book • Group activity 2: no regrouping • Solving problems: no regrouping
2	<ul style="list-style-type: none"> • Book • Group activity 1: Reviewing Place Value • Place value review 	7	<ul style="list-style-type: none"> • Book • Group activity 2: with regrouping • Solving problems: with regrouping
3	<ul style="list-style-type: none"> • Book • Group activity 2: no regrouping 	8	<ul style="list-style-type: none"> • Book • Group activity 2: with regrouping • Solving problems: with regrouping
		9	<ul style="list-style-type: none"> • Book • Group activity 2: regrouping • Solving problems: regrouping
		10	<ul style="list-style-type: none"> • Quiz

Day 6

Activity	Notes	Materials
Read or listen to the movie version of the book (10 minutes)	<ul style="list-style-type: none"> • Read through the story, asking lots of questions • Continue to make connections between book and vocabulary board 	<ul style="list-style-type: none"> • Book • Vocabulary board
Group Activity 2 Solving problems as a group that do NOT require regrouping	<ul style="list-style-type: none"> • Directions are included with the activity • Give each student a mat and base 10 blocks or snap cubes <ul style="list-style-type: none"> ◦ Needs to be 2 different color sets • Either write a problem for the group to solve (that does not require regrouping) or have students draw one from the flashcards provided • NOTE: the cards without a ✓ do not require regrouping 	<ul style="list-style-type: none"> • Place value mat with ten frames (1 per student) • Snap cubes (2 colors) or base 10 blocks (2 colors if possible) • Optional: flash cards with double digit problems
Double digit addition no regrouping review (5 minutes)	<ul style="list-style-type: none"> • Review the worksheets from set 2 completed yesterday 	<ul style="list-style-type: none"> • Completed worksheet
Solving problems without regrouping (15 minutes)	<ul style="list-style-type: none"> • Worksheet set 2 <ul style="list-style-type: none"> ◦ There are 10 worksheets in this set ◦ Do 1-2 per day and as many days as needed before moving onto problems that do require regrouping. ◦ As the worksheets progress, there is less visual structure provided. You can add in more structure to these later problems (of have students do so) if needed ◦ Cut page apart if student is too overwhelmed 	<ul style="list-style-type: none"> • Worksheet • Pencils • Optional: calculators to check answers
Sharing (10 minutes)	<ul style="list-style-type: none"> • Each student shares their finished worksheet with the group using the communication method of their choice 	<ul style="list-style-type: none"> • Completed worksheets • Communication devices

The lesson plans contain:

- Overall tips for teaching students with significant needs
- A quick look at what you will do each day
- Detailed instructions on how that day's lesson should run

When you are writing down the problem in a vertical format, it is very important to always have the place values lined up. So the ones are on top of each other, the tens are on top of each other, and so on.

$$\begin{array}{r} 345 \\ + 63 \\ \hline \end{array}$$
$$\begin{array}{r} \cancel{345} \\ + \cancel{63} \\ \hline \end{array}$$

Now we will add the tens, including the extra ten we made from our extra ones. And we get our final answer.

$$\begin{array}{r} 1 + 6 + 1 \\ \left. \begin{array}{l} 1 \\ 68 \\ +19 \end{array} \right\} \\ \hline 87 \end{array}$$

There is a 29 page book with this unit using simple text and photos.

It comes in a PowerPoint version as well as a voice-recorded movie (mp4).

Group activity #1

Place Value Practice

- Print one place value chart for each student and laminate.
- Give student:
 - Place value chart
 - 100 flats, 10 sticks, 1 units
 - or use flashcards
 - Dry erase marker
- Write a number on the board.
- Students will build the number on their mat.
- They will then practice writing it in expanded form (be sure to add the + sign)
- Record the totals in the place value chart at the bottom.

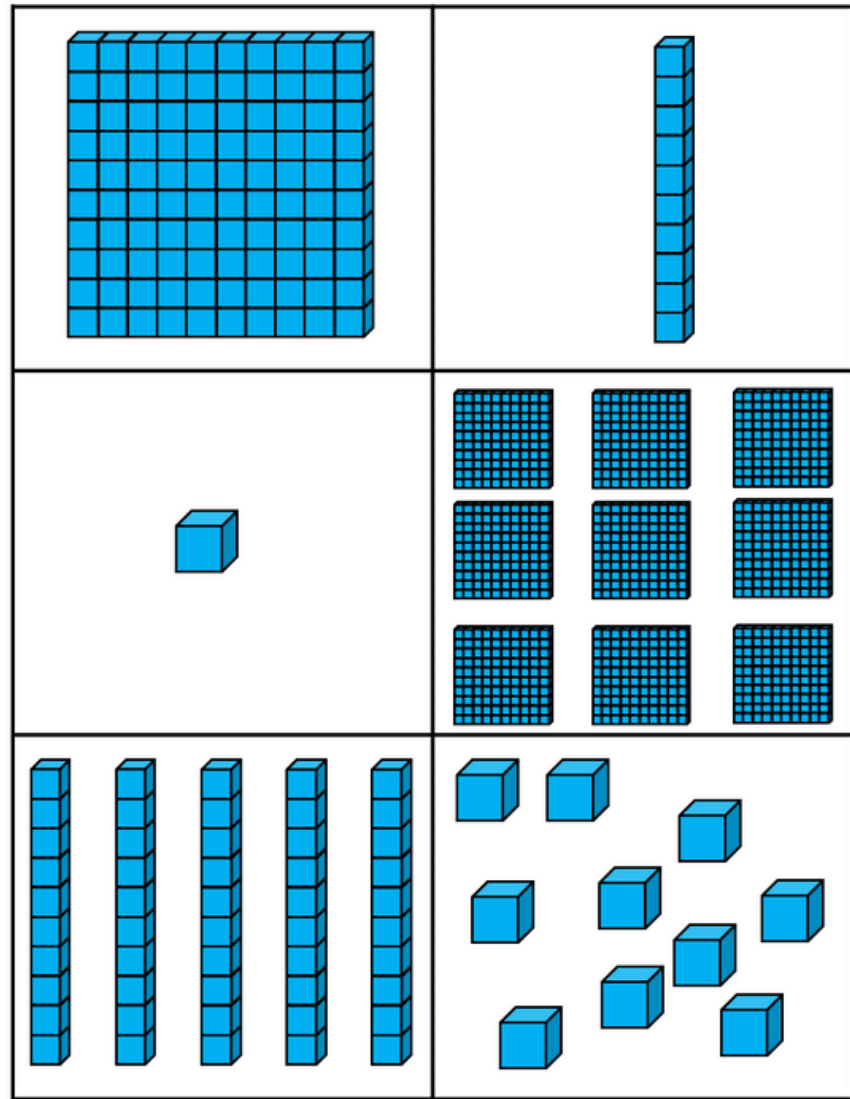
Build
using
Base
10
Blocks

Write in
expanded
form

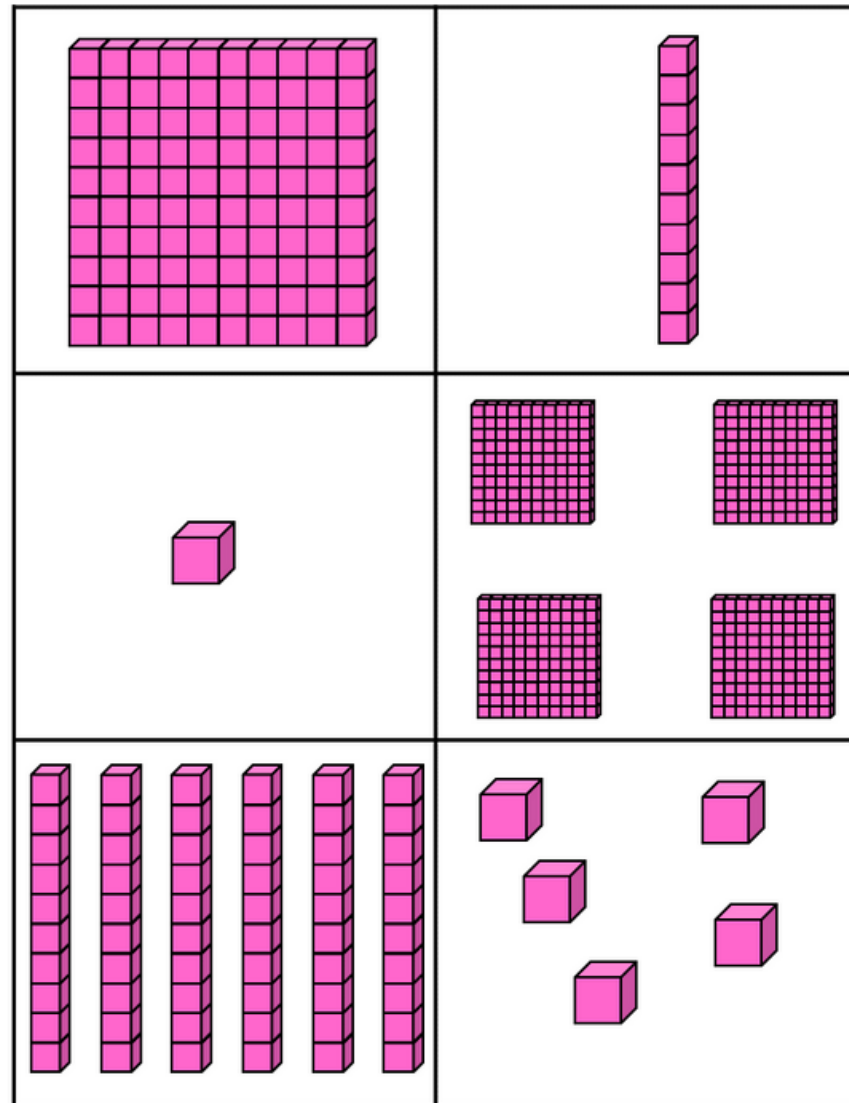
hundreds	tens	ones

Final number:

*This group activity
reviews place value.*



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There are 7 pages of flashcards you can use if you do not have Base 10 blocks.

Suggestions for additional group activities included.

Group activity #2

Double digit addition using manipulatives

- Have students draw a card with an addition problem.
 - This with a ✓ in the top corner require regrouping.
 - I left enough space so you can add the vertical line dividing ones and tens places
- You will need:
 - Place value mat (laminated) for each student. 2 different orientations are provided.
 - Base 10 blocks or snap cubes of 2 different colors.
 - Dry erase markers
 - White boards
- Students will build the first number on the mat using the correct units.
 - Note: if using snap cubes, students should connect 10 blocks in a tower to form a group of 10.
- Students will then build the second number on the same board using a different color.
- If students have more than 10 ones, they should swap it out for a group of 10.
- Optional: Students will write the problem on the white board and the answer, counting the blocks they have on the mat.
- Here is a video of the process: https://youtu.be/Mi_uGPWT420

$$\begin{array}{r} 32 \\ + 18 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ + 49 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \\ + 14 \\ \hline \end{array}$$

$$\begin{array}{r} 36 \\ + 18 \\ \hline \end{array}$$

$$49$$

$$29$$

$$22$$

tens	ones

Students will solve addition problems using manipulatives.

Includes 20 pages of flashcards.

There are 4 worksheet sets in this unit that scaffold skills needed for double-digit addition with regrouping.

- Place value review
- Writing problems vertically
- Adding without regrouping
- Adding with regrouping

Each set has a decreasing amount of visual structure when solving problems.

worksheet set 1

Write the following numbers in standard and expanded form.

116

	Hundreds	Tens	Ones
Standard Form			
Expanded Form			

975

	Hundreds	Tens	Ones
Standard Form			
Expanded Form			

354

	Hundreds	Tens	Ones
Standard Form			
Expanded Form			

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Complete the place value chart for each number.

Use a for hundreds, | for tens and a dot for ones.

156

	Hundreds	Tens	Ones
Draw			
Standard Form			
Expanded Form			

237

	Hundreds	Tens	Ones
Draw			
Standard Form			
Expanded Form			

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There are 5 worksheets for students to review place value.

Rewrite each problem vertically. Make sure to line up the same place values. Do NOT solve the problems.

$84 + 23$

$77 + 10$

$378 + 212$

$3 + 4$

$301 + 45$

$701 + 45$

worksheet set 2

Rewrite each problem vertically. Make sure to line up the same place values. Do NOT solve the problems.

$44 + 33$

$2 + 78$

$205 + 411$

$81 + 312$

$364 + 2$

$7 + 265$

There are 6 worksheets for students to practice writing problems vertically making sure to line up place values.

Solve each problem. Make sure to start with the ones place.
When you are done, check your answers with a calculator and
place a ✓ in the circle.

$$\begin{array}{r} \downarrow \\ 23 \\ + 45 \\ \hline \square \square \bigcirc \end{array}$$

$$\begin{array}{r} \downarrow \\ 67 \\ + 30 \\ \hline \square \square \bigcirc \end{array}$$

$$\begin{array}{r} \downarrow \\ 81 \\ + 10 \\ \hline \square \square \bigcirc \end{array}$$

$$\begin{array}{r} \downarrow \\ 2 \\ + 95 \\ \hline \square \square \bigcirc \end{array}$$

$$\begin{array}{r} \downarrow \\ 19 \\ + 20 \\ \hline \square \square \bigcirc \end{array}$$

$$\begin{array}{r} \downarrow \\ 16 \\ + 3 \\ \hline \square \square \bigcirc \end{array}$$

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worksheet set 3

There are 10 worksheets for students to add numbers without regrouping. There is less visual structure as you progress through the worksheets.

Students are encouraged to check their answers with a calculator.



Worksheet set 2
Solve each problem. Make sure to start with the ones place.
When you are done, check your answers with a calculator and
place a ✓ in the circle.

$$\begin{array}{r} 2 \\ + 50 \\ \hline \square \bigcirc \end{array}$$

$$\begin{array}{r} 57 \\ + 2 \\ \hline \square \bigcirc \end{array}$$

$$\begin{array}{r} 35 \\ + 32 \\ \hline \square \bigcirc \end{array}$$

$$\begin{array}{r} 61 \\ + 21 \\ \hline \square \bigcirc \end{array}$$

$$\begin{array}{r} 49 \\ + 30 \\ \hline \square \bigcirc \end{array}$$

$$\begin{array}{r} 80 \\ + 11 \\ \hline \square \bigcirc \end{array}$$

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Solve each problem. Make sure to start with the ones place.
When you are done, check your answers with a calculator and
place a ✓ in the circle.

$$\begin{array}{r} \square \downarrow \\ 25 \\ + 45 \\ \hline \square \square \bigcirc \end{array}$$

$$\begin{array}{r} \square \downarrow \\ 37 \\ + 34 \\ \hline \square \square \bigcirc \end{array}$$

$$\begin{array}{r} \square \downarrow \\ 62 \\ + 18 \\ \hline \square \square \bigcirc \end{array}$$

$$\begin{array}{r} \square \downarrow \\ 9 \\ + 15 \\ \hline \square \square \bigcirc \end{array}$$

$$\begin{array}{r} \square \downarrow \\ 19 \\ + 23 \\ \hline \square \square \bigcirc \end{array}$$

$$\begin{array}{r} \square \downarrow \\ 16 \\ + 7 \\ \hline \square \square \bigcirc \end{array}$$

worksheet set 4

Solve each problem. Make sure to start with the ones place.
When you are done, check your answers with a calculator and
place a ✓ in the circle.

$$\begin{array}{r} 42 \\ + 29 \\ \hline \square \bigcirc \end{array}$$

$$\begin{array}{r} 27 \\ + 17 \\ \hline \square \bigcirc \end{array}$$

$$\begin{array}{r} 65 \\ + 6 \\ \hline \square \bigcirc \end{array}$$

$$\begin{array}{r} 11 \\ + 49 \\ \hline \square \bigcirc \end{array}$$

$$\begin{array}{r} 28 \\ + 38 \\ \hline \square \bigcirc \end{array}$$

$$\begin{array}{r} 59 \\ + 34 \\ \hline \square \bigcirc \end{array}$$

There are 10 worksheets for students to add numbers with regrouping. There is less visual structure as you progress through the worksheets.

Students are encouraged to check their answers with a calculator.



Double Digit Addition Quiz

1. How many tens are in the number 985?

2. How many hundreds are in the number 467?

3. How many ones are in the number 450?

4. Rewrite this problem vertically, lining up place values: $623 + 45$

+ _____

5. Rewrite this problem vertically, lining up place values: $922 + 8$

+ _____

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Solve the following addition problems.

7	1
+	13

4	4
+	23

8	4
+	14

6	5
+	26

4	3
+	28

1	6
+	36

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There is a 7 question quiz to assess understanding.

This is also used as the pre-assessment to measure growth.



Double Digit Addition

By Christa Joy

There are also digital versions of the printable activities included in this unit. There is a movie version of both books that is narrated and animated.

Great for review

$$\begin{array}{r} \square \downarrow \\ 25 \\ + 45 \\ \hline \square \square \bigcirc \end{array}$$

$$\begin{array}{r} \square \downarrow \\ 37 \\ + 34 \\ \hline \square \square \bigcirc \end{array}$$

$$\begin{array}{r} \square \downarrow \\ 62 \\ + 18 \\ \hline \square \square \bigcirc \end{array}$$

$$\begin{array}{r} \square \downarrow \\ 9 \\ + 15 \\ \hline \square \square \bigcirc \end{array}$$

$$\begin{array}{r} \square \downarrow \\ 19 \\ + 23 \\ \hline \square \square \bigcirc \end{array}$$

$$\begin{array}{r} \square \downarrow \\ 16 \\ + 7 \\ \hline \square \square \bigcirc \end{array}$$

worksheet set 2

Solve each problem. Make sure to start with the ones place. When you are done, check your answers with a calculator and place a ✓ in the circle.



There is a set of slides for each learning level.

In this first set of slides, students type in their answers for some of the slides.

Perfect for all learning levels.

$$\begin{array}{r|l} 1 & \\ + & 9 \\ \hline 1 & 8 \end{array} \bigcirc$$

$$\begin{array}{r|l} 1 & \\ + & 37 \\ \hline 9 & 4 \end{array} \bigcirc$$

$$\begin{array}{r|l} 1 & \\ + & 79 \\ \hline 9 & 2 \end{array} \bigcirc$$

$$\begin{array}{r|l} 1 & \\ + & 16 \\ \hline 7 & 2 \end{array} \bigcirc$$

$$\begin{array}{r|l} 1 & \\ + & 62 \\ \hline 8 & 0 \end{array} \bigcirc$$

$$\begin{array}{r|l} 1 & \\ + & 44 \\ \hline 7 & 2 \end{array} \bigcirc$$

worksheet set 2

Solve each problem. Make sure to start with the ones place. When you are done, check your answers with a calculator and place a ✓ in the circle.



In this set of slides, students will still type in some answers but there is additional visual support included (gray numbers to match to.)

This resource comes in a zipped folder. You will need to unzip the folder to access all the contents which include:

- *Addition activities in color*
- *Addition activities in black and white*
- *Voice-recorded PowerPoint shows*
- *Double Digit Addition book (PowerPoint) to use with activities*
- *Links and directions to digital activities*