Think Before You Add

GOAL Decide what *a* sum will be close to before you add, and explain how you know.

1 More or less?

247 + 126 Will the sum be more or less than 370? ☐ more ☐ less

How do you know?

2 Is Kris correct?

Kris says: 318 + 245 is *less* than 560, because 3 + 2 = 5 hundreds and 1 + 4 = 5 tens.

Is Kris correct? ☐ yes ☐ no Explain why.

3 Which answer makes sense?

437 + 148 = ☐ 575 ☐ 585 ☐ 5715

Tick the answer that makes sense. Why are the other two wrong?

4 Which hundreds?

627 + 265 Will the sum be in the 800s or the 900s? ☐ 800s ☐ 900s

How do you know?

5 Is Omar correct?

Omar says: 164 + 223 will need *a* trade, because the numbers are big.

Is Omar correct? ☐ yes ☐ no Explain why.

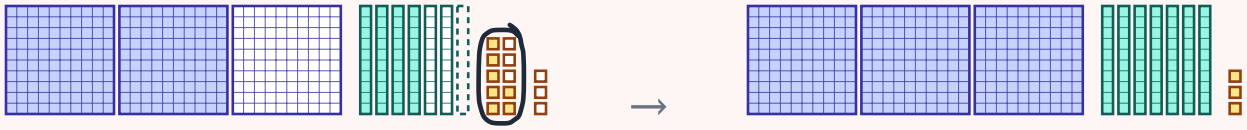
Trade 10 Ones for 1 Ten

GOAL Trade 10 ones for 1 ten when you add, and explain why the new ten goes in the tens.

6 Watch the trade

WORKED EXAMPLE

247 + 126 = 373



Join: 3 hundreds, 6 tens, 13 ones.
Circle 10 ones. Trade them for 1 ten.

After: 3 hundreds, 7 tens, 3 ones

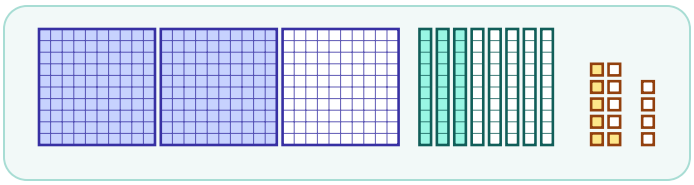
	Hundreds	Tens	Ones
joined	3	6	13
traded	3	7	3

	H	T	O
	2	4	7
+	1	2	6
	☐	1	
	3	7	3

The new ten is written in the **tens**: 4 + 2 + **1** = 7 tens. It is *a* ten, not *a* hundred, because it was made from 10 ones.

7 Your turn, with help

The pieces of **236 + 158** are joined. Circle 10 ones. Draw the new ten. Fill in the chart.



	Hundreds	Tens	Ones
joined			
traded			

236 + 158 = _____ Do the 9 tens make *a* new hundred? _____

8 On your own

Make *a* quick drawing of **429 + 135**: *a* square for each hundred, *a* stick for each ten, *a* dot for each one. Make *a* ten. Fill in the chart.

Draw here.

	Hundreds	Tens	Ones
joined			
traded			

= _____

New Ten or Not?

GOAL Decide when the ones make a new ten, then add.

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For each sum, decide first: will the ones make a new ten? Then add, and write any new ten in its box.

a. 345 + 128

New ten? ☐ yes ☐ no

	H	T	O
	3	4	5
+	1	2	8
	☐	☐	

b. 263 + 524

New ten? ☐ yes ☐ no

	H	T	O
	2	6	3
+	5	2	4
	☐	☐	

c. 518 + 375

New ten? ☐ yes ☐ no

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d. 604 + 279

New ten? ☐ yes ☐ no

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	☐	☐	

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New ten? ☐ yes ☐ no

	H	T	O
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+	1	5	4
	☐	☐	

f. 436 + 251

New ten? ☐ yes ☐ no

	H	T	O
	4	3	6
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Explain the Trade

GOAL Show that a trade keeps the amount the same, and find trading mistakes.

10 Who is right?

Ana says: 4 hundreds, 6 tens and 15 ones is the *same amount* as 4 hundreds, 7 tens and 5 ones.

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I think _____ is right because

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Kai's work

	H	T	O
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+	2	1	5
	1		
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Kai made a new ten from 8 + 5 = 13 ones. Where did Kai write it? Where does it belong?

368 + 215 = _____

12 Check Jo's chart

Jo added **254 + 139** and filled in a chart.

	Hundreds	Tens	Ones
joined	3	8	13
Jo's trade	3	8	3
fixed			

Joined: 300 + 80 + 13 = _____

Jo's trade: 300 + 80 + 3 = _____

Is the amount still the same? _____

What did Jo forget? Fix the last row.

Show What You Know

GOAL Use the trade to find missing digits, make your own sum, and write a story.

13 Missing digits

Write the missing digit in each box. Check by adding.

26□ + 125 = 393	5□8 + 217 = 785	356 + □29 = 685
4□5 + 238 = 663	309 + 2□6 = 565	6□7 + 125 = 772

14 Make your own

Write two 3-digit numbers whose ones make a new ten, but whose tens do **not** make a new hundred. Keep the sum less than 1,000. Add them and show the trade.

_____ + _____ = _____

Show the trade.

15 Check yourself

556 + 238 = _____

Tens: 5 + 3 + ___ = ___ tens.

A new hundred? _____

452 + 336 = _____

Did you trade? _____ Why?

16 Write a story

Write a story that matches **256 + 137**. Then solve it.

Answer: _____

Think Before You Add

GOAL Decide what a sum will be close to before you add, and explain how you know.

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437 + 148 = ☐ 575 ☐ 585 ☐ 5715

Tick the answer that makes sense. Why are the other two wrong?

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627 + 265 Will the sum be in the 800s or the 900s? ☐ 800s ☐ 900s

How do you know?

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Omar says: 164 + 223 will need a trade, because the numbers are big.

Is Omar correct? ☐ yes ☐ no Explain why.

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GOAL Trade 10 ones for 1 ten when you add, and explain why the new ten goes in the tens.

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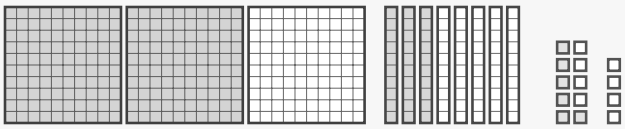
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The pieces of **236 + 158** are joined. Circle 10 ones. Draw the new ten. Fill in the chart.



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236 + 158 = _____ Do the 9 tens make a new hundred? _____

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Make a quick drawing of **429 + 135**: a square for each hundred, a stick for each ten, a dot for each one. Make a ten. Fill in the chart.

Draw here.

	Hundreds	Tens	Ones
joined			
traded			

= _____

New Ten or Not?

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9 Will the ones make *a* new ten?

For each sum, decide first: will the ones make *a* new ten? Then add, and write any new ten in its box.

a. 345 + 128

New ten? ☐ yes ☐ no

	H	T	O
	3	4	5
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	☐	☐	

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New ten? ☐ yes ☐ no

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New ten? ☐ yes ☐ no

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	☐	☐	

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New ten? ☐ yes ☐ no

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	☐	☐	

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New ten? ☐ yes ☐ no

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	3	2	6
+	1	5	4
	☐	☐	

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New ten? ☐ yes ☐ no

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Kai's work

	H	T	O
	3	6	8
+	2	1	5
	1		
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Kai made a new ten from 8 + 5 = 13 ones. Where did Kai write it? Where does it belong?

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Joined: 300 + 80 + 13 = _____

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What did Jo forget? Fix the last row.

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_____ + _____ = _____

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556 + 238 = _____

Tens: 5 + 3 + ___ = ___ tens.

A new hundred? _____

452 + 336 = _____

Did you trade? _____ Why?

16 Write a story

Write a story that matches **256 + 137**. Then solve it.

Answer: _____

Think Before You Add

Answers in blue. Accept other clear reasons that use the hundreds, tens and ones.

1 More or less?

247 + 126 Will the sum be more or less than 370? ☑ more ☐ less

How do you know?

200 + 100 = 300 and 40 + 20 = 60, so 360. The ones, 7 + 6 = 13, add more than 10.

2 Is Kris correct?

Kris says: 318 + 245 is *less* than 560, because 3 + 2 = 5 hundreds and 1 + 4 = 5 tens.

Is Kris correct? ☐ yes ☑ no Explain why.

No. 8 + 5 = 13 ones make another ten, so there are 6 tens: 563 is more than 560.

3 Which answer makes sense?

437 + 148 = ☐ 575 ☑ 585 ☐ 5715

Tick the answer that makes sense. Why are the other two wrong?

575 forgets the new ten from 15 ones. 5715 writes 15 in the ones place: it is far too big.

4 Which hundreds?

627 + 265 Will the sum be in the 800s or the 900s? ☑ 800s ☐ 900s

How do you know?

600 + 200 = 800. 27 + 65 = 92, which is less than 100, so the sum stays in the 800s.

5 Is Omar correct?

Omar says: 164 + 223 will need a trade, because the numbers are big.

Is Omar correct? ☐ yes ☑ no Explain why.

No. 4 + 3 = 7 ones, not enough for a ten. Big numbers do not always need a trade.

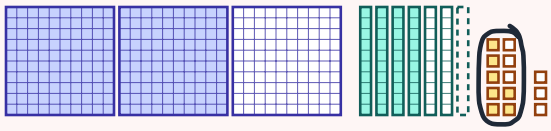
Trade 10 Ones for 1 Ten

Answers in blue. Task 7: any 10 of the 14 ones may be circled. Task 8: any clear quick drawing is fine.

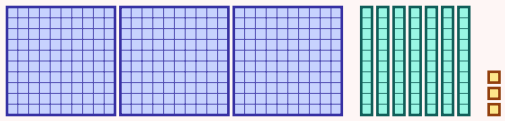
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247 + 126 = 373



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Circle 10 ones. Trade them for 1 ten.



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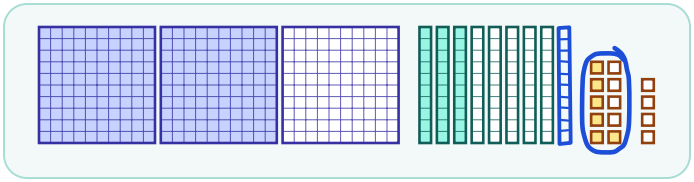
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	H	T	O
	2	4	7
+	1	2	6
	☐	1	
	3	7	3

The new ten is written in the **tens**: 4 + 2 + **1** = 7 tens. It is *a* ten, not *a* hundred, because it was made from 10 ones.

7 Your turn, with help

The pieces of **236 + 158** are joined. Circle 10 ones. Draw the new ten. Fill in the chart.

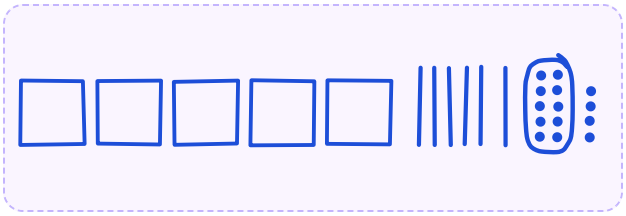


	Hundreds	Tens	Ones
joined	3	8	14
traded	3	9	4

236 + 158 = 394 Do the 9 tens make *a* new hundred? no

8 On your own

Make *a* quick drawing of **429 + 135**: *a* square for each hundred, *a* stick for each ten, *a* dot for each one. Make *a* ten. Fill in the chart.



	Hundreds	Tens	Ones
joined	5	5	14
traded	5	6	4

= 564

New Ten or Not?

Answers in blue, with each new ten in its box.

9 Will the ones make a new ten?

For each sum, decide first: will the ones make a new ten? Then add, and write any new ten in its box.

a. 345 + 128

New ten? ☑ yes ☐ no

	H	T	O
	3	4	5
+	1	2	8
		1	
	4	7	3

b. 263 + 524

New ten? ☐ yes ☑ no

	H	T	O
	2	6	3
+	5	2	4
	7	8	7

c. 518 + 375

New ten? ☑ yes ☐ no

	H	T	O
	5	1	8
+	3	7	5
		1	
	8	9	3

d. 604 + 279

New ten? ☑ yes ☐ no

	H	T	O
	6	0	4
+	2	7	9
		1	
	8	8	3

e. 326 + 154

New ten? ☑ yes ☐ no

	H	T	O
	3	2	6
+	1	5	4
		1	
	4	8	0

f. 436 + 251

New ten? ☐ yes ☑ no

	H	T	O
	4	3	6
+	2	5	1
	6	8	7

c. 518 + 375: 1 + 7 + 1 = 9 tens, so no new hundred. **e. 326 + 154:** 6 + 4 = 10 ones, exactly one new ten and 0 ones: 480.

Explain the Trade

Answers in blue. Task 12: Jo's fixed row is 3, 9, 3.

10 Who is right?

Ana says: 4 hundreds, 6 tens and 15 ones is the *same amount* as 4 hundreds, 7 tens and 5 ones.

Ben says: 4 hundreds, 7 tens and 5 ones is *more*, because it has one more ten.

I think **Ana** is right because

400 + 60 + 15 = 475 and 400 + 70 + 5 = 475. The extra ten was made from 10 of the ones.

11 Find Kai's mistake

Kai's work

	H	T	O
	3	6	8
+	2	1	5
	1		
	6	7	3

Kai made a new ten from 8 + 5 = 13 ones. Where did Kai write it? Where does it belong?

In the hundreds. It belongs in the tens: it is 1 ten, made from 10 ones.

368 + 215 = 583

12 Check Jo's chart

Jo added **254 + 139** and filled in a chart.

	Hundreds	Tens	Ones
joined	3	8	13
Jo's trade	3	8	3
fixed	3	9	3

Joined: 300 + 80 + 13 = **393**

Jo's trade: 300 + 80 + 3 = **383**

Is the amount still the same? **no**

What did Jo forget? Fix the last row.

She took 10 ones away but did not add the new ten.

Show What You Know

Answers in blue. Tasks 14 and 16 have many right answers.

13 Missing digits

Write the missing digit in each box. Check by adding.

26 **8** + 125 = 393	5 **6** 8 + 217 = 785	356 + **3** 29 = 685
4 **2** 5 + 238 = 663	309 + 2 **5** 6 = 565	6 **4** 7 + 125 = 772

5□8 + 217: 8 + 7 = 15 makes a new ten, so 6 + 1 + 1 = 8 tens (forgetting it gives 7).

14 Make your own

Write two 3-digit numbers whose ones make a new ten, but whose tens do **not** make a new hundred. Keep the sum less than 1,000. Add them and show the trade.

438 + **145** = **583**

Show the trade.

One answer: 438 + 145. 8 + 5 = 13 ones: trade 10 ones for 1 ten; 3 + 4 + 1 = 8 tens; 4 + 1 = 5 hundreds: 583. **Accept any correct sum under 1,000** whose ones make 10 or more and whose tens plus the new ten make 9 or less.

15 Check yourself

556 + 238 = 794

Tens: 5 + 3 + **1** = **9** tens.

A new hundred? **no**

452 + 336 = 788

Did you trade? **no** Why?

2 + 6 = 8 ones: not enough for a ten.

16 Write a story

Write a story that matches **256 + 137**. Then solve it.

One story: A library had 256 books and got 137 more. How many books does it have now? 393 books.

Answer: **393**

Trade 10 Ones for 1 Ten (Three Digits): teaching notes

GOAL

Student goal: trade 10 ones for 1 ten when adding three-digit numbers, and explain why the new ten goes in the tens. **Precisely:** one ones-to-tens composition within 1,000, with near misses where the tens reach 9 and do not compose a hundred.

BEFORE THIS LESSON

Trading ones for a ten with two-digit numbers (A07), hundreds as ten tens (B15) and three-digit sums with no trade (B17). **Quick check:** "Show 352 with blocks. Now show it with only 4 tens." (3 hundreds, 4 tens, 12 ones.)

MATERIALS AND PACING

Base-ten flats, rods and cubes, one set per pair; on paper, the quick drawing (a square for a hundred, a stick for a ten, a dot for a one). Tasks 1–9 make one lesson (think first, teach, practise); tasks 10–16 suit a second day or homework.

THINK BEFORE YOU ADD (TASKS 1–5)

Five ways to reason about a sum without working it all out: more or less than a number, a claim to judge (Kris forgets the ones), an answer that makes sense, which hundreds, and a claim that big numbers always trade (Omar). Ask for reasons, not sums. These are the habits the trade depends on: looking at the ones first, and knowing what a sensible answer is.

TEACH (TASK 6)

Build 247 and 126, join them, count 3 hundreds, 6 tens, 13 ones. Ask: *"Can we make another ten? Another hundred?"* Swap 10 cubes for a rod. Then point at the column: the small 1 in the tens box is that rod. Ask: *"Why does it go in the tens and not the hundreds?"* (It is one ten.)

GUIDED AND INDEPENDENT (TASKS 7–8)

Task 7 is a near miss: after the trade there are 9 tens, which is not a new hundred. Task 8 moves to quick drawings, the bridge to the written method.

PRACTICE AND REASONING (TASKS 9–16)

Task 9 mixes sums with and without a trade, a near miss (518 + 375: 9 tens), a zero in the tens (604 + 279) and exactly 10 ones (326 + 154 = 480). Task 10 is about the amount staying the same; task 11 is a new ten written in the hundreds; task 12 is a trade that lost a ten (the amount changed). In task 13 the four missing tens digits only work if the new ten is counted; have students check all six by adding.

MISCONCEPTIONS AND RESPONSES

- **Writes the new ten in the hundreds** (Kai's 673 for 368 + 215). Build it: the rod made from 10 cubes is a ten. Ask: "Is this worth 10 or 100?"
- **Writes 15 in the ones** (5715 for 437 + 148). "Can one place hold 15?"
- **Takes away 10 ones but forgets the new ten** (Jo's 383 for 254 + 139). Ask: "Is it still worth the same?"
- **Trades the tens when they reach 9** (518 + 375 = 903: 9 tens swapped for a hundred). "Do you have ten tens?"
- **Thinks the trade changes the amount** (Ben). Count all the pieces before and after.

Trade 10 Ones for 1 Ten (Three Digits): teaching notes (continued)

WHAT TO LOOK FOR

Secure: sensible reasons in tasks 1–5, correct sums, new tens in the tens box, "no" for the near misses with a reason, and an explanation that names 10 ones as 1 ten. Developing: correct sums but the new ten written above the wrong column or not written. Needs support: 15 written in the ones place; go back to blocks.

SUPPORT AND EXTENSION

Support: do tasks 6–9 with blocks first; cut task 9 to a, b and c. **Extension:** "Find a pair where the ones make a new ten and the tens then make exactly 9." "Which is more: 3 hundreds 8 tens 17 ones, or 3 hundreds 9 tens 6 ones?" (397 and 396.)

ABOUT THE GRADE

Common Core and NC teach three-digit addition with models and strategies in Grade 2. Common Core expects fluency in Grade 3; current NC Grade 3 asks for addition up to and including 1,000 without the word "fluently" (NC 2026 adds procedural fluency). Florida explores it in Grade 2; Texas expects it in Grade 3 (3.4(A)).

STANDARDS

Set	Direct	Supporting
Common Core	2.NBT.B.7; 2.NBT.B.9 (explaining the trade and where the new ten goes, tasks 10–12); 3.NBT.A.2	2.NBT.A.1
NC 2017 (current)	NC.2.NBT.7; NC.3.NBT.2	NC.2.NBT.1
NC 2026 (adopted; from 2028–29)	2.ANR.7.2; 2.ANR.7.3; 3.ANR.2.2	3.ANR.2.3
Florida B.E.S.T.	MA.2.NSO.2.4 (Grade 2 "explore"); MA.3.NSO.2.1	
Texas TEKS	3.4(A)	2.4(C) (Grade 2 works within 1,000 in problems)

Standards crosswalk, verified 2026-11-04 against corestandards.org, NC DPI (2017 SCOS; 2026 SCOS adopted Oct 1, 2026, in classrooms from 2028–29), FLDOE B.E.S.T. and TEA TEKS.