




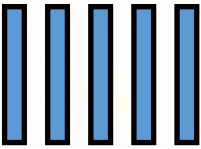
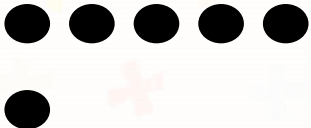
Learn at Home

@ PIMA COUNTY PUBLIC LIBRARY





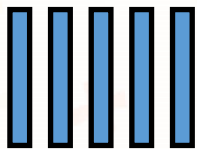




Grades 2-3: Adding Using a Place Value Chart

- A place value chart is a picture showing **how numbers break down into the ones place, tens place, hundreds place, and so on**. It can help with **addition and subtraction** (and even **multiplication and division**, too!).
- This skill sheet focuses on **adding numbers up to three digits** (one, tens, and hundreds). However, you can make a place value chart that goes all the way to the trillions place or higher—just keep adding columns to the left.
- Here is what the number **256** looks like on a place value chart. The **6 black circles are ones**. The **5 blue rectangles are tens**. The **2 red squares are hundreds**.

Hundreds	Tens	Ones
		

Let's use the place value chart to **add 256 + 311**:

- Start by again **drawing in the shapes for the ones, tens, and hundreds of the first number, 256**. Even though you might want to start by drawing in the hundreds first, ***it's a good idea to draw your ones first***.
- Next, **draw the shapes for the ones, tens, and hundreds of the second number, 311**. We can draw these right underneath the shapes for the first number.
- As long as there are no more than 9 ones, tens, or hundreds**, we just **count up the total number of shapes in each place value**, and we have our final answer. **256 + 311 = 567**

Hundreds	Tens	Ones
 	 	  

5

6

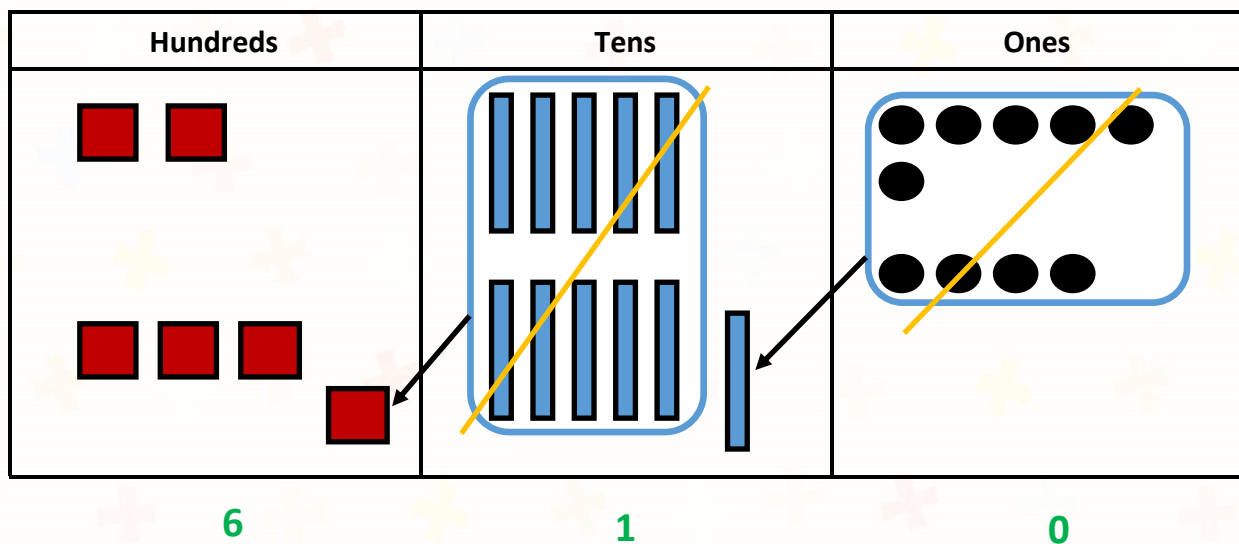
7

IMPORTANT RULES:

- ⇒ If you ever have **10 or more in your ones, tens, or hundreds place**, you **need to bundle them and cash them in for 1 of the next place value up**. For example, you cash in a bundle of 10 ones for 1 ten, and you cash in a bundle of 10 tens for 1 hundred.
- ⇒ You also **have to start bundling in your ones place**, or the final answer will come out wrong.

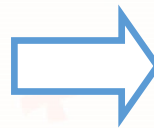
Look at the example to see how we use bundling when we add $256 + 354$:

- 1) First, **draw in the ones, tens, and hundreds** for the first number, 256. Right below these, **draw in the ones, tens and hundreds** for the second number, 354.
- 2) We have 10 ones, so we **draw a circle (or something similar) around the group of 10 ones**. The arrow shows that we **cash in these 10 ones for 1 ten**. The orange diagonal line shows the **10 ones are gone from the ones place after we cash them in**.
- 3) We now have 11 tens, so we **draw a circle (or something similar) around a group of 10 tens**. The arrow shows that we **cash in these 10 tens for 1 hundred**. The orange diagonal line shows these **10 tens are gone from the tens place after we cash them in**.
- 4) Since we *don't* have 10 or more hundreds, we are **done bundling**. To find our final answer, we can **count up how many unbundled ones, tens, and hundreds** there are now in each place. There are **0 ones, 1 ten, and 6 hundreds**, so the answer is **610**.



What about adding the numbers vertically?

- The bundling and cashing in helps show **why we carry a number to the next place value** when adding up numbers vertically, "the old way."
- For example, using the place value chart, we show that **10 ones are really the same thing as 1 ten**, so it makes sense to bundle and cash them in. That's **what carrying the one means: adding one more to the next highest place**.



	1	1	
2	5	6	
+	3	5	4
	6	1	0

For More on This Topic: <https://www.youtube.com/watch?v=iluls3A28eM&list=PLvolZqLMhJmKlCiqyf94KT2oVhIDM252G&index=5&t=0s>