

# Warm Up

CST/CAHSEE: 3

Review: Grade 3

Current: Grade 2- 3

Make as many 3 digit numbers as you

Other: Grade 2- 3

Which of the following has a value of 579? Hint: There is more than one answer!

A  $500 + 7 + 9$

B  $400 + 100 + 40 + 30 + 9$

C  $9 + 70 + 500$

D  $300 + 270 + 9$

E  $279 + 300$

**Challenge:** Write other ways to make 579.

**Quad II: CST/CAHSEE Grade 3**

Which number has the same digit in both the ones place and the hundreds place?

- A 3308
- B 4118
- C 5977
- D 6242

**Challenge**, write your own 4 digit number with a 5 in the ones place and the hundreds place. (Answers vary)

**D** : Take a survey of which answers students chose. Work out each problem chosen, proving that 6242 is correct. Ask, "Why is answer choice A not correct?" Think Pair Share why you think A is not correct. One person share

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## Plotting Numbers on a Number Line: Grades 2 -3

*(In this lesson, the teacher models making a number line by setting up the whole (0 to 10, 1 to 100, 1 to 1,000), finding the midpoint, and marking off smaller sections from there. They then choose the appropriate number line to plot 3 digit numbers on. Students are allowed time to figure out spacing and develop confidence while exploring the base ten system.)*

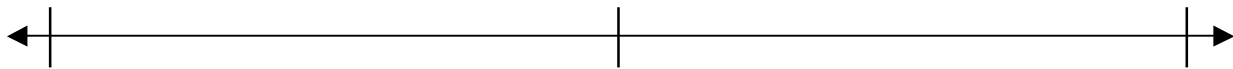
Today you are going to plot numbers on a number line. That means you will draw your own number line, and then mark the points where the numbers go on the line.

Watch carefully how I make these number lines, so you can be ready when it's your turn.

First I'm going to use a ruler or straight edge to draw a line all the way across the page. I want to have room to write in the numbers.

I want to make a number line with 10 sections or jumps.

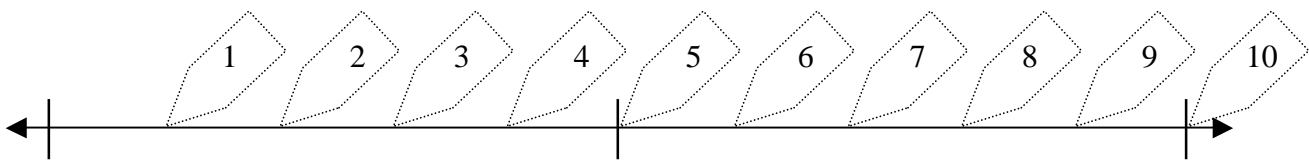
I mark my starting point and ending point. Now I need a halfway mark. Does that look pretty close? Does it have to be perfect? (no) It just needs to be kind of close.



Now we have 2 sections, or jumps. Let's turn them into 10.

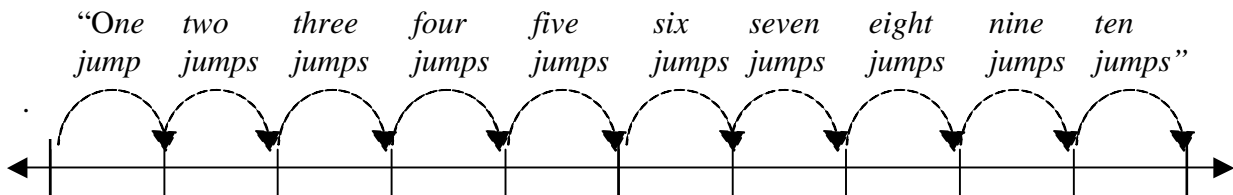
Use your pencil to "plan" where you will place the tick marks.

Here's 1, 2, 3, 4, (5), 6, 7, 8, 9 and (10).



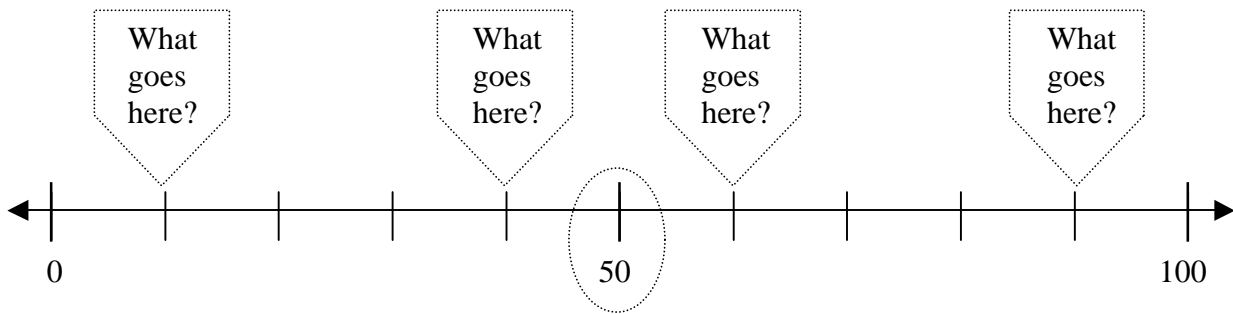
Remember that it's okay if the spaces aren't perfect.

Finally, I can put in my tick marks. Let's count the sections, or jumps to be sure. (The jumps can be lightly done or on a transparency so that they can be easily removed afterwards, leaving the number line.)

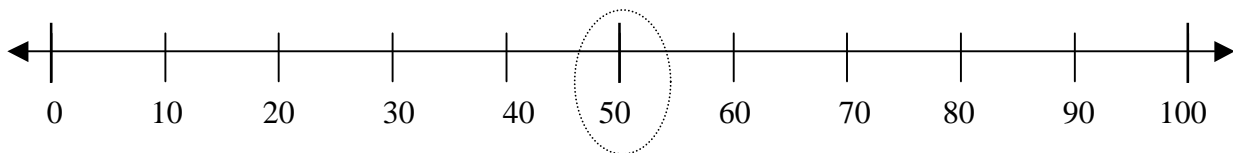


What if we start with a 0 and end with 100? What would each tic mark be worth? Think... Share with your partner. (Listen for responses.) Thumbs up if you have it. Everyone share.(10). Let's test it. (Count out by 10, pointing at each tic mark.) Yes it works. By the way, did you know that another name for 100 is 10 tens? Thumbs up if that makes sense. I always like to circle the halfway point. What is half of 100? (50).

Before I mark all the numbers, I'm going to test you....  
(Randomly choose tic marks for the students to name the value.)



Very good. You could tell me the values without seeing all the numbers. For now, we are going to write in all the numbers that go with the tic marks.



Thumbs up if you are ready to make your own number line.

Title your page, Plotting Numbers on a Number Line. Skip 3 spaces to give yourself room. Then use your ruler to draw a straight line across the whole page.

Mark your beginning point and your ending point (0 and 100).

What do we do after we have the beginning and ending points? Think...Share with your neighbor....Thumbs up if you know... Everyone share. (Mark the halfway point.)

Then we need a place for 10, 20, 30.....90. (model as before). Go ahead and mark your spaces and your numbers. (Monitor and help students.)

(As most finish...)What is halfway between 0 and 100 again? (50). Circle 50, our halfway point.

*Student notes so far:*

I think you are ready for another number line. (*Establish another number line using the same method as before, --endpoints, halfway mark, and tic marks in between—with or without the verbal prompts.*)

Very good... Now I add in the values and circle the halfway mark.

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**You Try:**

**First we will plot 873 together.**

*Be sure*





