

[Illustrative Mathematics](#)

K.CC Rainbow Number Line

[Alignment 1: K.CC.A.3](#)

The teacher will need a package of regular sentence strips and a medium point black permanent marker. Write the numbers from 1-20 on a sentence strip, one per student. Indicate the starting point for tracing each number with a dot.

As an alternative, the teacher could print out number strips on card stock using the computer. Teacher fonts are available free on-line with traceable number formations.

Give each student five or six different colored crayons (any color but black). Starting at the dot, have them trace over each number with each of the colored crayons. Laminate each number strip and tape it to the student's desk or table area for future reference. Students can also cut the number strip into separate cards to use for sequencing activities.

Commentary:

- A rainbow number strip is a colorful tool with a personal connection to the student that may increase its use as a reference over a pre-produced number line. It should be in a readily available place like on the student's desk or table area. It will serve as a visual and motor reminder when reading and writing numbers because the student has gone through the tracing motion.
- It is useful for teachers of young children to acknowledge the difference between number recognition and number identification. Students demonstrate recognition when asked, for example, "Where is the 6?" and they point out the 6. Students demonstrate identification when asked, for example, "what number is this?" and they can say, "That is 6." The difference is that with identification, a student has to come up with the number name on his or her own, whereas with recognition, the teacher has supplied the number name and the student just has to "recognize" the numeral. Number identification indicates a more sophisticated understanding than number recognition, so teachers must ensure they are posing tasks that support number identification and not just recognition.
- Writing teen numbers can pose challenges for students because of the way they sound when spoken. Teen numbers (13-19) are read/spoken from right to left, while other numbers are not. When "16" is spoken, one hears the sound of "6" before the "teen" part and so students will often start writing with a "6" and then pause and add the "1," sometimes in front of the "6" but often behind it because they hear the "teen" part second when speaking the number name. This right-to-left sound-pattern can complicate things further when students begin reading larger two-digit numbers. Students will often reverse numbers; for example they might read "27" as "72" based on the pattern they have learned for reading "teen" numbers.
- Another important area to focus on when working with numerals is sequencing tasks. Give each child a set of small number cards 1-10 or 1-20 and have them sequence the cards. They can use the number line to match, or they can cut and sequence the number line they made. Students need to repeat these types of activities until they can do it without support.
- The number line can also be used to support forward counting, "number before" or "number after" activities as well as numeral recognition, identification and writing.

Solution: Solution

Number lines can be made for numerals 1-20 or from 1-10 as a starting point or for students who are struggling.

The final product will be colorful but not an actual "rainbow" shape.



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