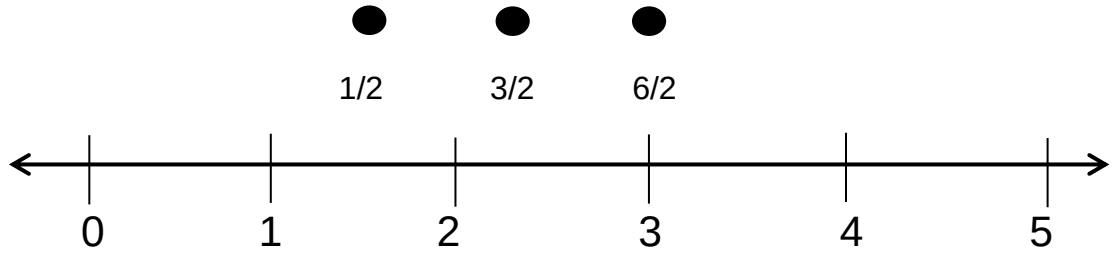
PARCC Sample Item
Grade 3 - Fractions on Number Line

Drag each fraction to the correct location on the number line.



Grade 3	Fluency
Type	Type I, Claim A
Most relevant Stand(s) for Mathematical Content	3.NF.2. Understand a fraction as a number on the number line; represent fractions on a number line diagram. a) Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line. b) Represent a fraction a/b on a number line by marking off lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.
Most relevant Standard(s) for Mathematical Practice	MP.7 (Look for and make use of structure) – The task requires students to attend to the parts of each fraction expression (numerators and denominators); for example, if students notice that all of the denominators are the same, then they may be able to complete the task more efficiently. Visual fraction models like the number line are an important too. (MP.5, Use appropriate tools strategically) – although this item does not require the student to make an independent/strategic decision to use a number line, as it appears in the prompt.
Item description and assessment qualities	This item illustrates some important shifts in the expectations for fractions in the Standards. See 3.NF. the general expectation that students develop fractions as numbers implies that tasks will sometimes involve fractions greater than 1, will sometimes involve fractions equal to whole numbers, will sometimes involve number lines instead of area or strip models, and will sometimes provide no visual models in the prompt. Unlike traditional multiple choice, it is difficult to guess the correct answer or use a choice elimination strategy. In addition to using a dot to indicate the location of the fraction, the testing interface might display a thick segment based at 0 to show the magnitude of the fraction in a dynamic way as the student drags the fraction to various points.
Scoring	The testing interface would allow a given fraction to "stick" to the number line in a finite number of locations, e.g., every ¼ of a unit. Two or more fractions could be dragged to occupy the same location, although in a correct response all three fractions all occupy different locations on the number line.

The fraction number line task is adapted from a task available at http://illustrativemathematics.org.
Source: http://www.parcconline.org/samples/mathematics/grade-3-mathematics-number-line