

Lesson plan—Fraction Track
4th grade

1. Lesson

Students will go to the library/computer lab where they can use a smartboard or partner on a computer. Students will play the Fraction track game at <http://standards.nctm.org/document/eexamples/chap5/5.1/> (or Google fraction track). I will demonstrate the game first with a partner. Make sure to demonstrate breaking up a fraction into pieces and an incorrect response. I will ask them to tell me any strategies that they find that help them finish more quickly.

2. Benchmarks and Objectives

MA.04.CE.03 Locate common fractions and decimals on a number line.
and...

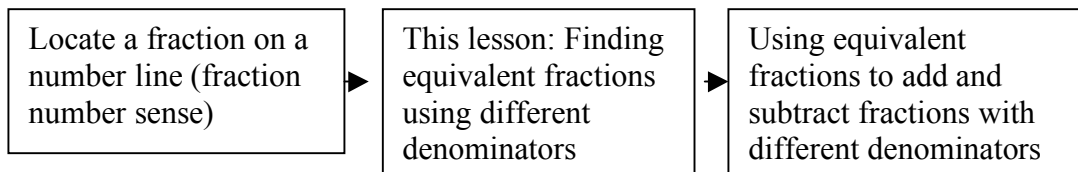
MA.04.CE.17 Demonstrate the meaning of fractions as part of a unit...
whole and...

MA.04.CE.04 Model, recognize, and generate equivalent forms of decimals (*although we are doing equivalent fractions which will lead us to be able to...*)

MA.04.CE.11 Add and subtract commonly used fractions with *unlike* denominators (halves, thirds, fourths, eighths, tenths)—(note we are going beyond the 4th grade benchmark to work with fractions with unlike denominators)

SWDTU of equivalent fractions by successfully playing fraction track with a neighbor and “breaking up” at least one fraction into parts. e.g. $\frac{3}{4}$ could be $\frac{3}{6}$ plus $\frac{2}{8}$.

3. Context



4. Important points to remember

- Circulate actively pausing to look for students correctly playing the game AND encourage/model/recognize/wait for students breaking fractions into parts.
- Work out a rotation so that when the whiteboard group is done they select some students (without “me me me”) to take their place. Encourage that switch to be fast.
- Play it on paper with at least 2 groups.

5. Anticipated student responses

Student strategy	Teacher guidance/question
Student moves the fraction other than the required amount e.g. moves $\frac{3}{4}$ a distance of $\frac{7}{8}$.	How far are you moving the button? How far <i>did</i> you move it? How much is $\frac{3}{4}$?
Student tries to move the full distance in one move instead of breaking it up sometimes.	Is there a way you could have moved that amount and move 2 markers?

6. Closure

Does any one have a strategy they think is more successful in moving all of the markers? Hoped for response: Move more than one marker on as many moves as possible.