Bring: Shop wrenches (English to use fractions)

7:45   Put warm-up on the board:

Today's math club is brought to you by the number 4!

How many things have 4? 4 suits, 4 he's a jolly good fellow, 4 quarters/dollar, 4 seasons/year…

1) Do not touch anything inside the desk! *The owners last week were very upset at things being moved around by math clubbers.*
2) What numbers divide evenly into 4?   2, 2
3) What number does M stand for in this multiplication:
    $39 \times M = 156$ *M = 4*
4) What is 123454321 x 11?   *1357997531*
5) What is 38.4 / 2? 38.4 / 0.2?   *A: 19.2, 192 to illustrate moving the decimal*
6) Define *infinite*   *A: "having no limit; endless; arbitrarily large number"*
7) How many flowers are in this bouquet:
    4 tulips, 4 ladybugs, 4 roses, 4 daisies?   *Flowers = 12*
                                                                          (not 16, don't count ladybugs!)

8:10   Write name on Times100 quiz -- fill it out!
        Turn in quiz and homework, take a donut!
Circulate attendance sheet
        - Update your name, number, and grade
        - Need your phone number in case of emergency rescheduling!
        - Dupl. names: (none in 5th grade!)

8:20   Discuss warm-ups

8:25   Collect homework
        Discuss top 3 problems:
        4) Trouble identifying the *whole*: a) team = 11 players, b) all donuts = 12, all
practice hours = 2 hrs/day * 5 days = 10 hours, d) all problems = 27

        4e) which is bigger? $\dfrac{n}{n+1}$? $\dfrac{n+1}{n+2}$

        5f) "4.5 x 8" is between 4x8 and 5x8

        5g) Find $\dfrac{1}{3}$ of 33, then add 3, then multiply by 3

                "1/3 of 33" where "of" means multiply the fraction with the number!

8:30   Lesson 2
        Q: Why can't you add ½ plus 1/3 and get 1/5? or 2/5?
        GCF and LCM – this is why you learn multiplication tables – a calculator *can't* do
it for you!
        (This goes fast -- add more examples!)
Words: Prime vs composite.
                Proper vs improper.

Product.

Mixed fraction.

What is the largest known prime number?   *A: draw a gigantic '2'*

What is the smallest prime?*A: $2^{6972593}$-1, two million digits, M38, where calculations are done using computer's cycles between mouse clicks*

8:40   Theory of prime numbers, Erasthosenes Sieve

fill: How to multiply by 11

fill: Practice reciprocals of 2 through 10

fill: How to factor for 2, 3, 4, 5, 6, 8, 9, 10

          Unsolved puzzles of prime numbers

9:05   Hand outs

          Start homework, if time

9:10   Done