5th Grade Assignments – Week #2

Notes for the Parents/Teachers: A Word about Main Lessons

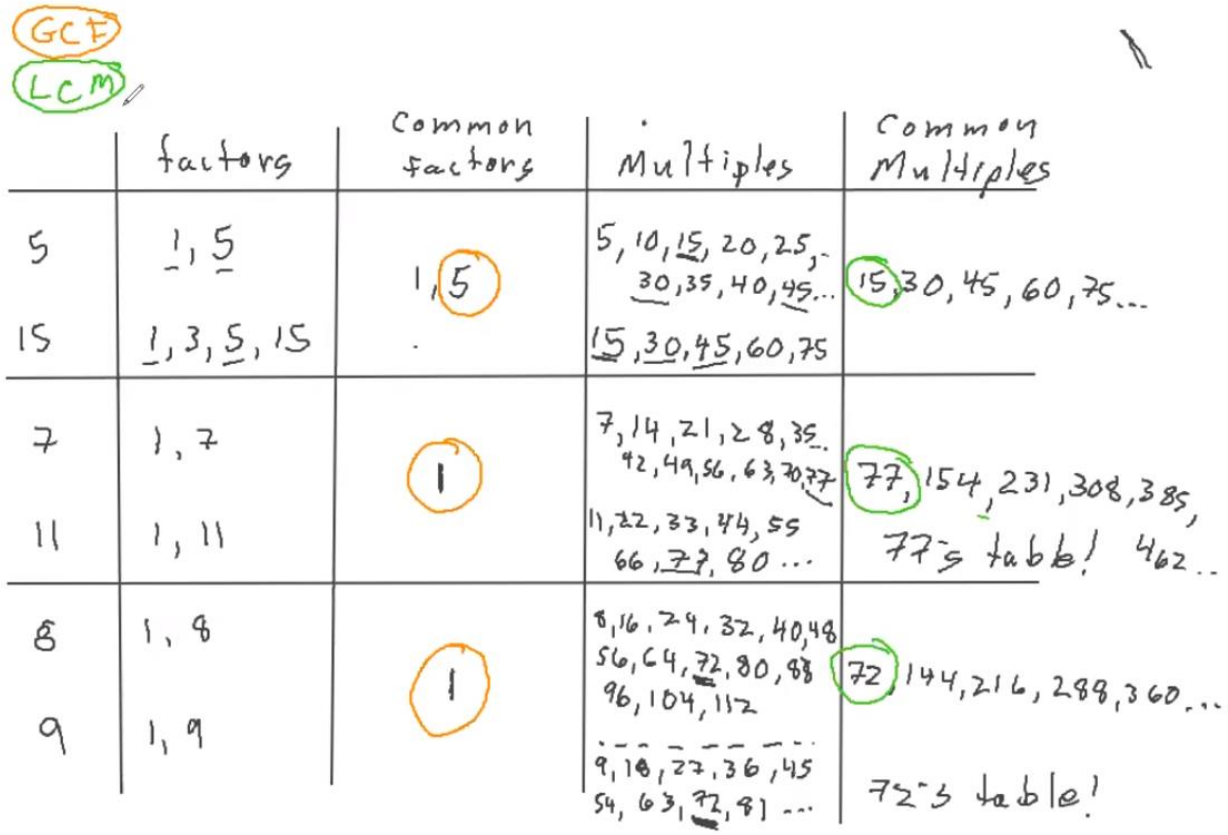
In the lecture today, I said it would be good to make a "main lesson page" for the factors and multiples table. To be more precise, I should have said "make a summary page in the style of a main lesson book page". This will mark the end (for now) of the topic of factors and multiples. I do see great learning value in the Waldorf tradition of creating a main lesson book page to summarize what's been learned in a main lesson. That's what I'd like the students to do here. I will give more detailed instructions below.

I should also be more clear about the 5th grade main lessons. In the new edition of our Grades 1-5 Source Book, we recommend three main lessons in fifth grade, and we recommend one math track class per week. I figured that with the math academy structure, two main lessons (geometry in the fall and decimals/metric later in the year) would be sufficient, and then I would integrate other typical main lesson topics (fractions, wonder of number, etc.) into the math academy time. So, yes, some of what I am doing now could be included in a main lesson, but we aren't calling it "main lesson". However, there will be times when I feel it is beneficial for the students to create a "main lesson book page" (which I should probably call a "summary page", because it isn't officially a main lesson).

Group Assignments

For Tuesday

I would like the students to reflect upon the table that I created in the lecture (see the below screenshot) and, after studying it for a bit (do they really understand what a GCF and LCM are?) come up with some mathematical laws. I'll give them some assistance by starting the statements for each law (on the next page).



Some Laws of Common Factors and Common Multiples

(to be done for Tuesday's Group Work after studying the above table)

Complete each statement by filling in between <the brackets>.

- For any two numbers, the common multiples <say something about the relationship between the common multiples (hint: I said this in the lecture)>
- For any two prime numbers, <say something about the common factors and GCF>
- If two numbers have only 1 as a common factor then, <say something about the common multiples and LCM>
- For any two numbers, if the smaller number is a factor of the larger number (and therefore the larger number is a multiple of the smaller number), then <say something about the GCF and LCM>.

For Thursday

- Do three forms of long division ("Acting it Out", Story LD, Flexible LD) for 348÷4
- Do Flexible LD (and also the other two forms, if you wish) for 1195÷5
- *Puzzle!* John has a basket of apples. If he counts them by 3's, he has 1 left over. If he counts them by 4's, he has 3 left over. How many apples are there? (There is more than one possible answer.)

Individual Work

- Create a "summary page" similar to what I did in the lecture (see above screenshot) – with the same column labels, but use these pairs of numbers instead:
  5 and 13
  6 and 15
  10 and 21
  12 and 40
  Choose one (or two!) pair(s) of your own

  Things to keep in mind:
  - Be sure to adjust the column width, as needed (e.g., the factors columns can be narrower than the multiples columns).
  - Circle the GCF and LCM in two different colors (as I did).
  - Your work should be done beautifully!
- If you have the time and desire, (after Wednesday's lecture) create a second summary page that includes the (above) laws that you came up with in your group work.
- *Big Challenge!* What is the LCM of 132 and 144?

A file to print for Wednesday's Lecture (Week #2 – Lecture #2)

- On the next page, there is a table I will use for the next lecture. Do not show it to you child until I mention it in the lecture. I want them to work on it in the lecture, but printing it out will save them the time of copying everything down. Alternatively, you could just copy the table by hand before the lecture.

	GCF	LCM	What's special?
8, 20			
7, 11			
9, 8			
6, 8			
20, 25			
12, 30			
15, 100			