5th Grade Assignment – Week #12

Group Assignment: Discovery!

For Tuesday:

- Do each of the following problems, and try to discover the "trick" behind it

1. $15 \div 3$
2. $150 \div 3$
3. $1500 \div 3$
4. $15,000,000 \div 3$
5. What the trick with the above problems?

6. $24 \div 4$
7. $240 \div 40$
8. $2400 \div 400$
9. $24,000 \div 4,000$
10. $2,400,000 \div 400,000$
11. What the trick with the above problems?

12. $35 \div 5$
13. $3500 \div 50$
14. $35000 \div 50$
15. $3500000 \div 500$
16. $350000 \div 5000$
17. What the trick with the above problems?

- Apply the tricks you have learned to the following problems:
18. $2,700 \div 90$
19. $36,000 \div 400$
20. $420,000,000 \div 6,000$

For Thursday: **Be sure to do your 4's table before entering this group meeting!**
(See the first individual work assignment, below.)

- Look at your 4's table (which goes up to 400).
  Now, as a group, what can you notice that is special about the 4's table?
  And here's the important question: *If you are given a very large number, how can you quickly look at it and determine whether it is divisible by 4, or not?*

- Example: With the number   6,035,826
  We know that it <u>is</u> divisible by 2 by looking at the last digit.
  We know that it <u>isn't</u> divisible by 5 by looking at the last digit.
  We know that it <u>isn't</u> divisible by 10 by looking at the last digit.
  We know that it <u>is</u> divisible by 3 by adding the digits.
  We know that it <u>isn't</u> divisible by 9 by adding the digits.
  How do we know if it is divisible by 4?

- If you still have time, each person in the group should make up a very large number, and then give it to the group. And then the group can figure out whether the number is divisible by 2, 3, 4, 5, 9, or 10.

Individual Work

1. *To do before Thursday's group meeting*:

   Write down all the 4's table up to 400. (Parent needs to check that it is correct!)

   <u>Note for the parent</u>: In the group meeting on Thursday, we will try to lead the students to discover the 4's divisibility rule (how do we know if a large number is divisible by 4?). The 4's table that they produce will then be used for this group work. Your task (as parent) is to ensure that your child does this exercise (in order to be prepared for Thursday's group meeting), but don't give away what the intention is. In other words, don't tell them why they are creating the 4's table because it's best if they try to figure this out together in their group meeting.

2. *Reading a Ruler.* Give the reading (in order from A to G) of each mark on the ruler.
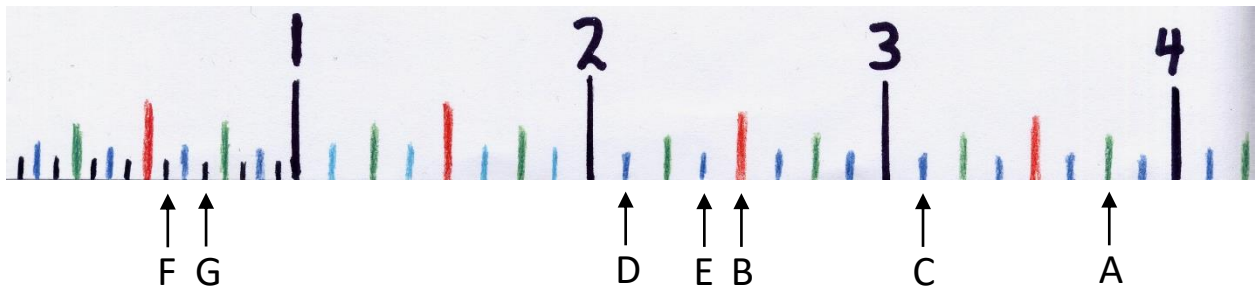
3. *Measurement Conversions.* Use your measurement tables and/or your notes, as needed.

   a) 20 ft = ___ in

   b) 60 in = ___ ft

   c) 3 mi = ___ ft

   d) 20 cups = ___ pt

   e) 6½ gal = ___ qt

   f) 80 cups = ___ gal

   g) 30 tsp = ___ fl.oz.

   h) 5 lb = ___ oz

   i) 40 oz = ___ lb

   j) 12 ton = ___ lb

   k) 18,000 lb = ___ ton