

Hello Teachers,

Thank you for downloading this handout. After decades of teaching, now I am sharing some of the activities I designed for my students and some new ones as well.

Visit <u>UnCommon-Core.com</u> and sign up for your free copy of Colorful Collections: *A Mindful Exploration of Proper Fractions.* You will also receive Wednesday morning emails with teacher tips, educational ideas, or free copies of products I'm making. You get to use them for free and I get the benefit of your comments and suggestions!

Also, visit my Teachers Pay Teachers store <u>UnCommon-Core dot com</u>.

Thank you again. All the best,

<section-header><section-header><section-header>

Isabelle

Isabelle Hoag M.Ed. Director of Education UnCommon-Core.com

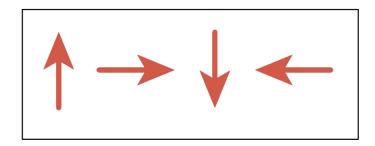
Patterns in Unit's Place in Multiples of Single Digit Numbers

Do shapes based on number pairs that add to 10 tesselate? Why are shapes based on numbers that sum to 10 so alike?

What kinds of shapes will be made based on multiples of larger numbers? numbers in other bases? Given directions other than up, right, down, left? Sharp corners vs soft corners?

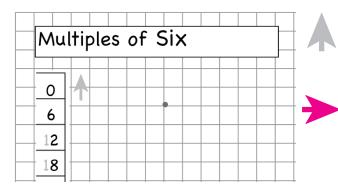
What kinds of art can be created? What kinds of symmetry are expressed here? Calculate area and perimeter – are there any corelations found?

Note: These patterns all start with zero going 'up'. Even though there is not a zero at the beginning of the lists of multiples, I used it as a starting point.



Instructions

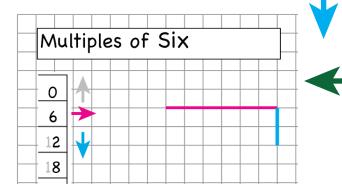
List multiples of a single digit number as shown. Highlight digits in the unit's place. Use those digits in order to make an Up, Right, Down, Left pattern on the grid in pencil. If the pattern doesn't meet itself, recheck the distances. Use markers to trace the pattern and add artistic details.



The first multiple of any number is zero. Even if it isn't listed use zero to start with. Zero just makes a point on the grid.

The second number in the example is six. From the starting point, draw a line that is six spaces to the right of where you started.

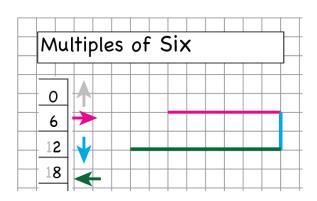


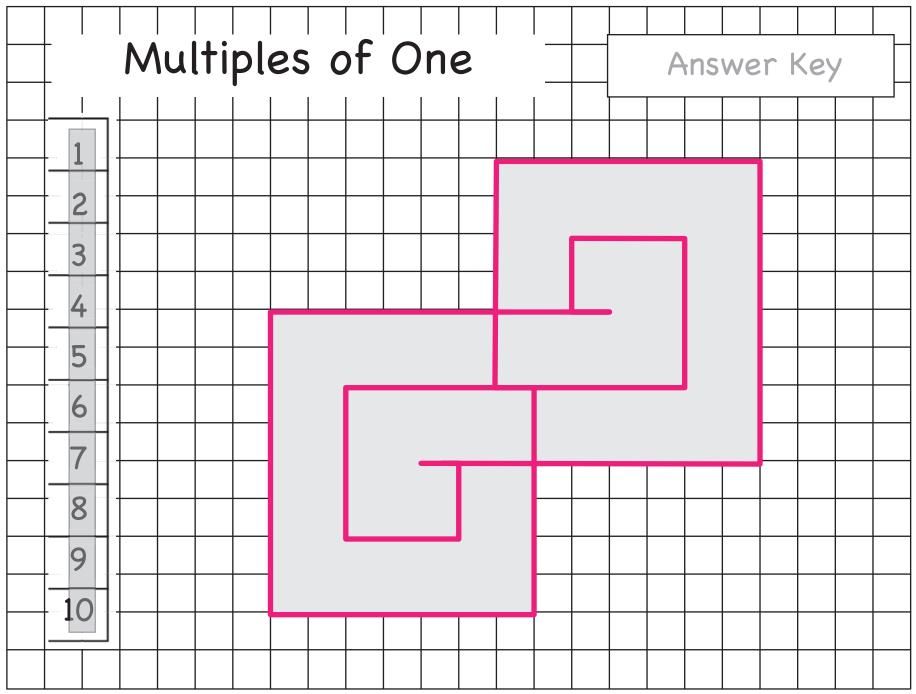


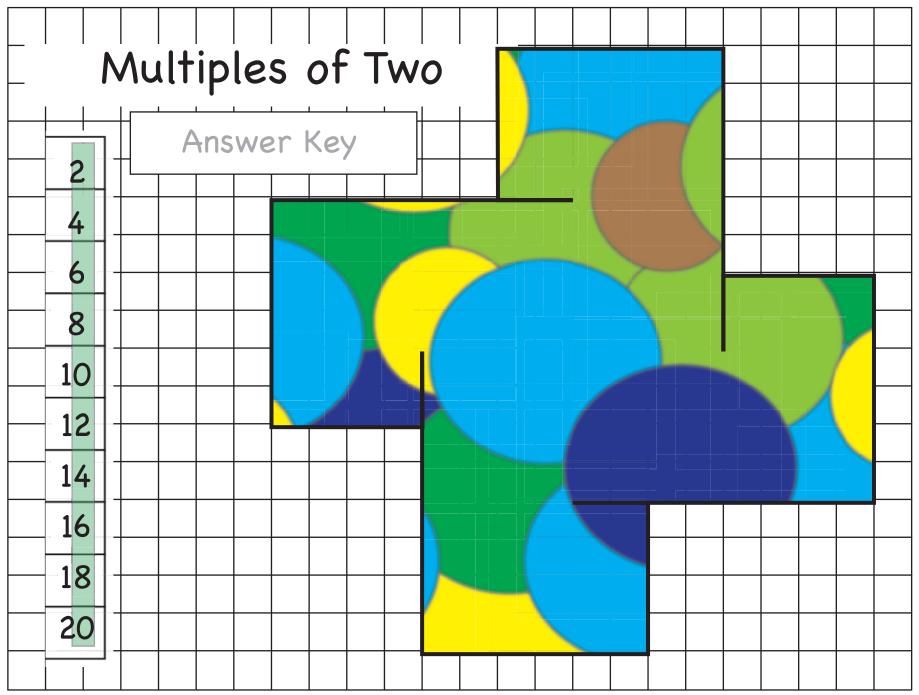
There is a two in the unit's place of 12. Continue the line down two spaces.

The unit's digit in 18 is eight. Draw the line from where you ended in the last step eight spaces to the left.

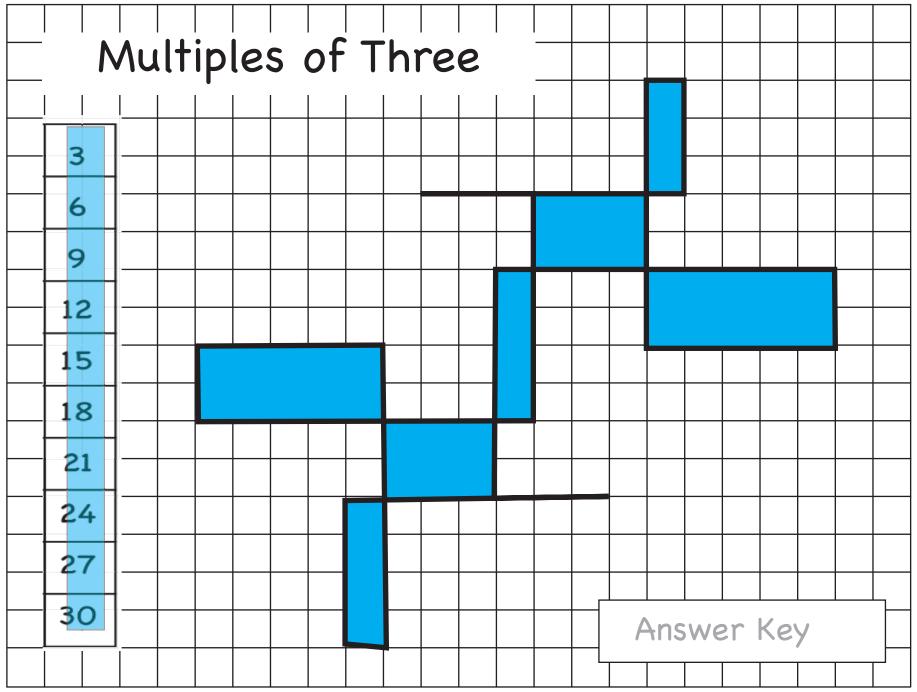
Keep going down the list as many times as needed to get back to where you started.



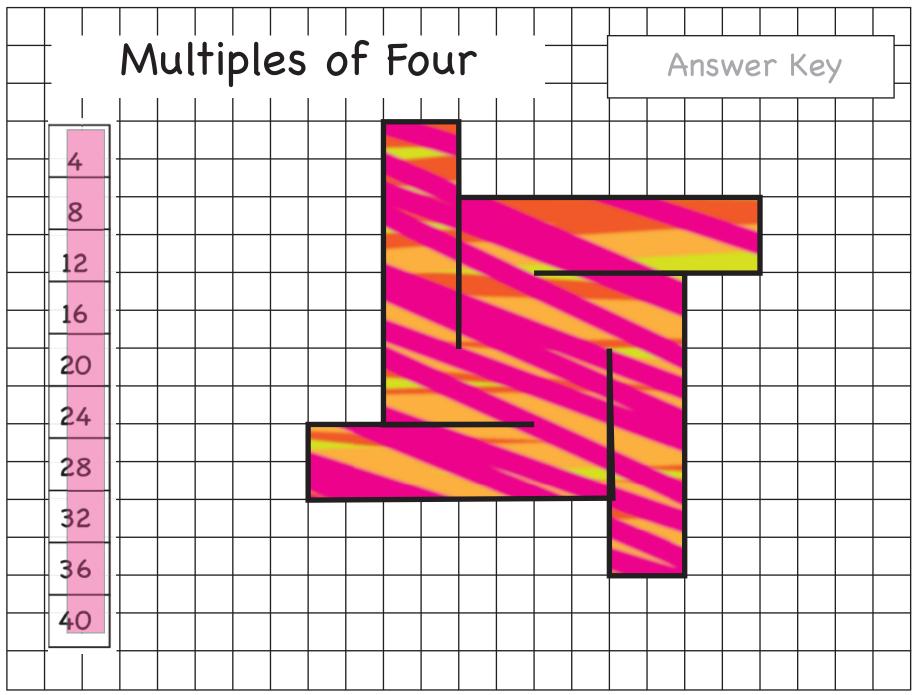


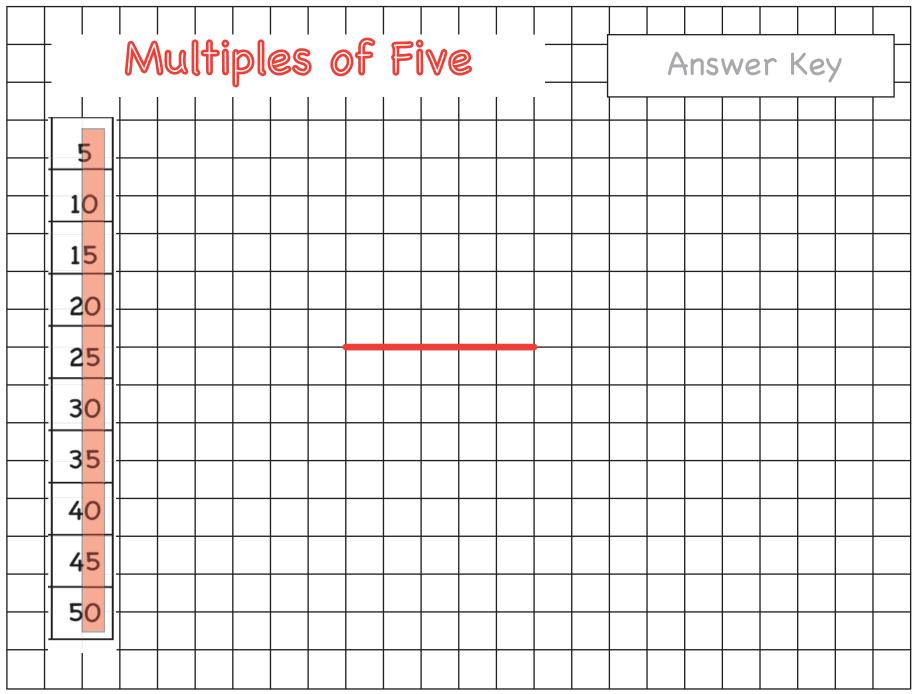


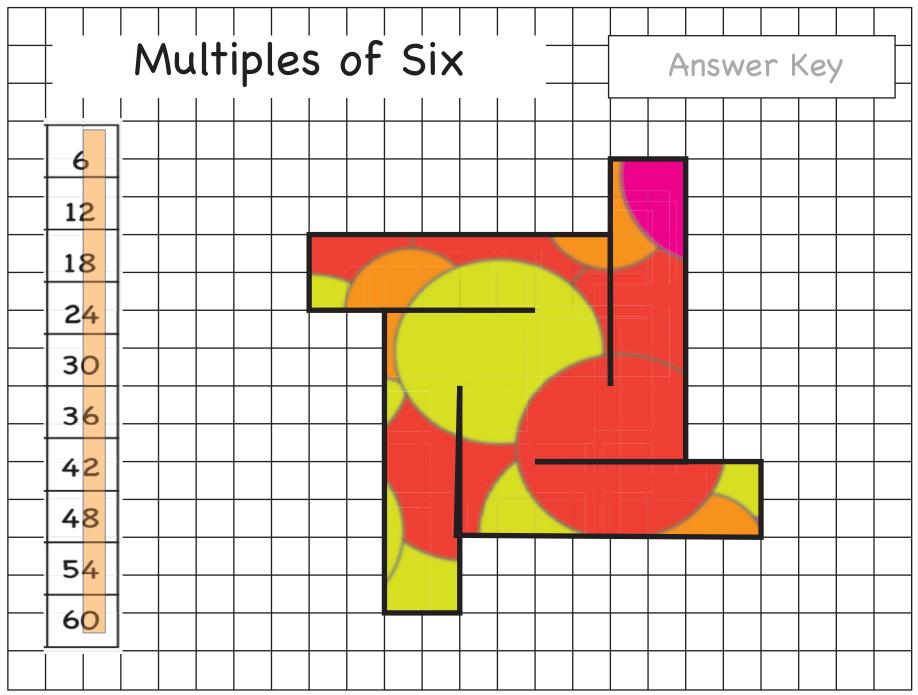
^{© 2024} UnCommon-Core.com

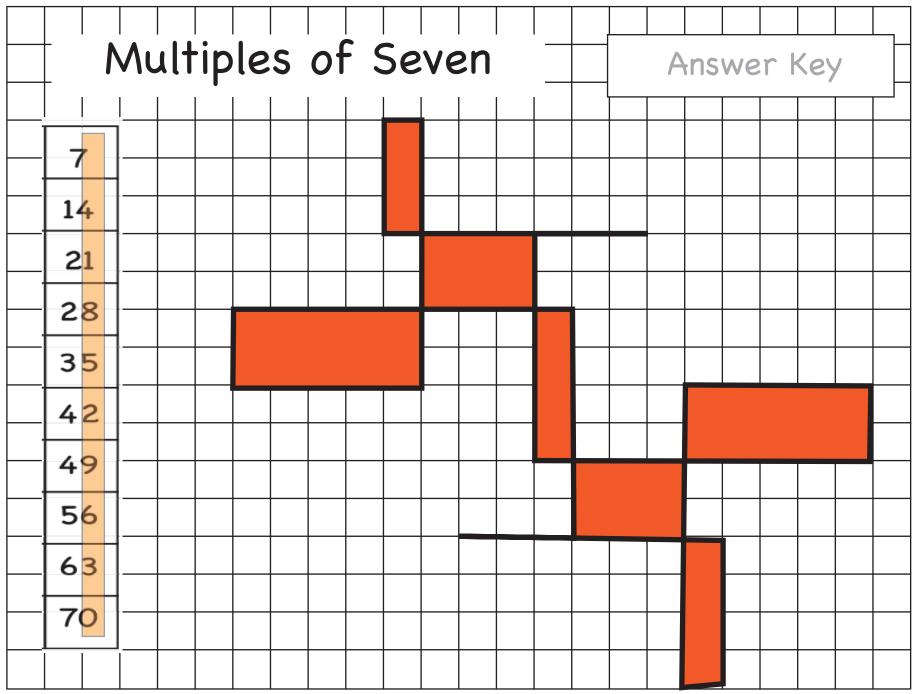


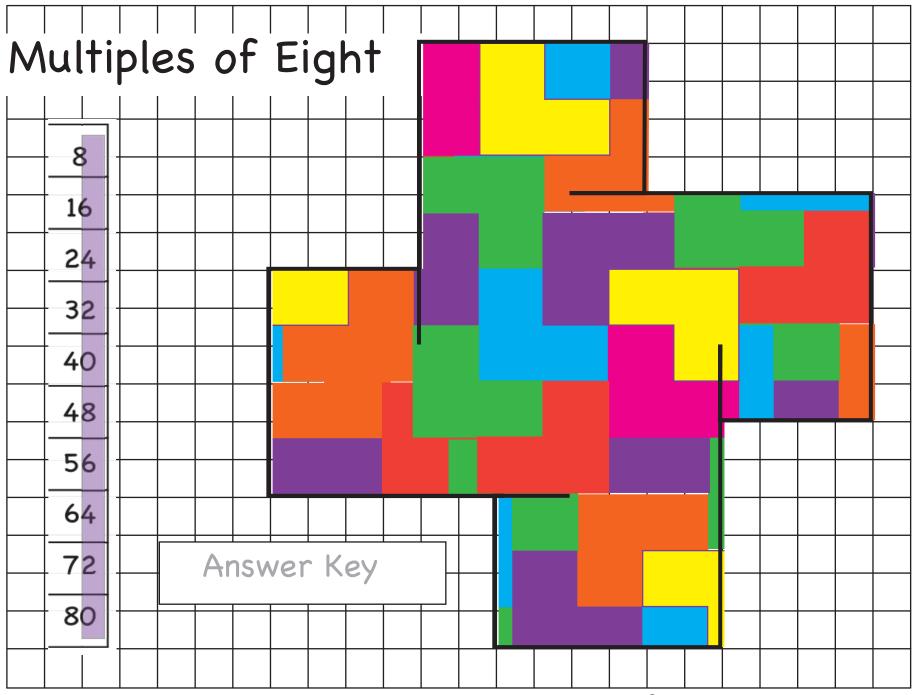
^{© 2024} UnCommon-Core.com

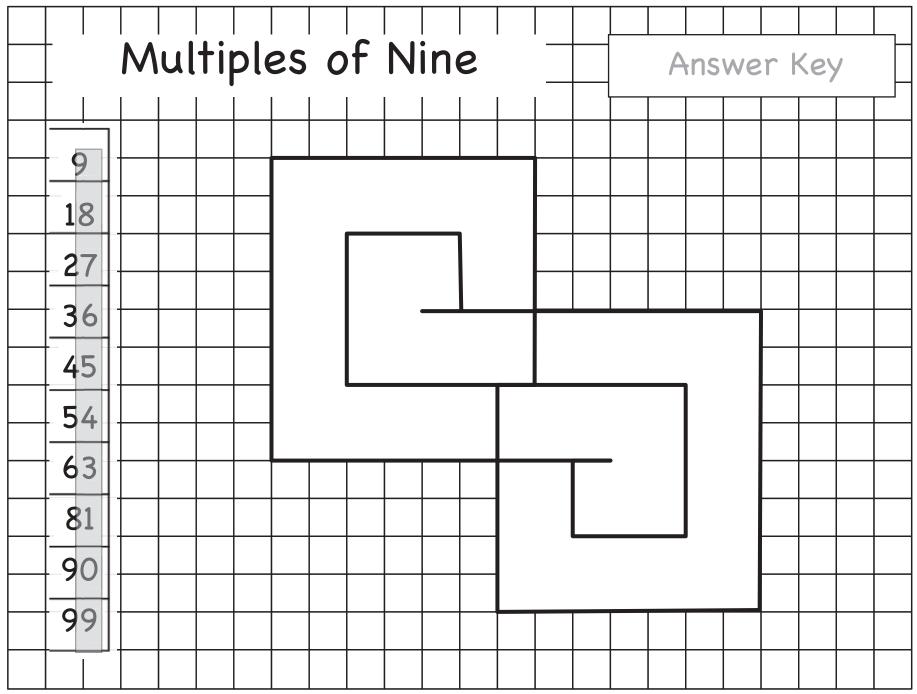


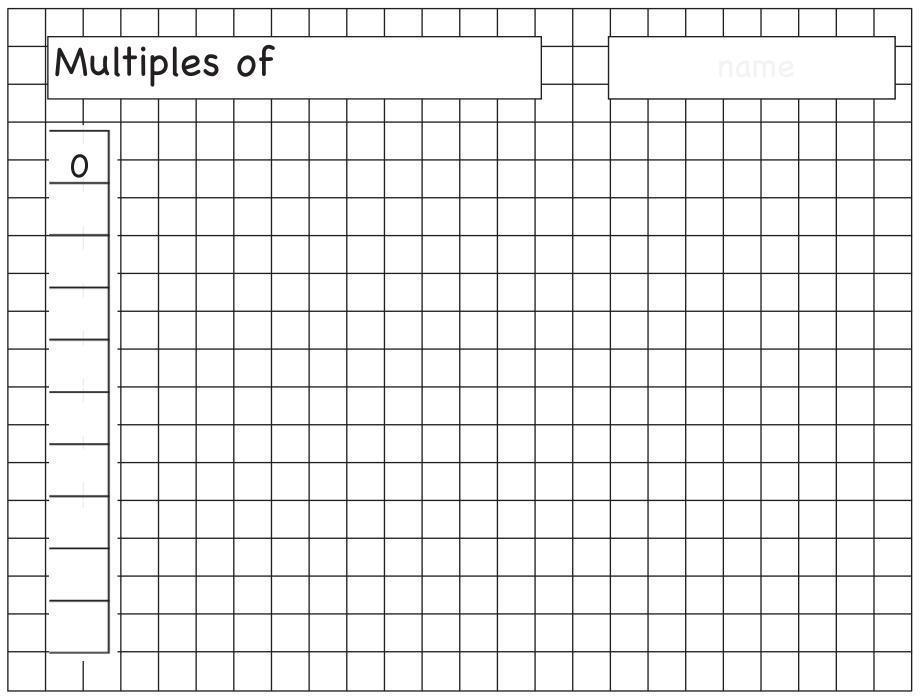


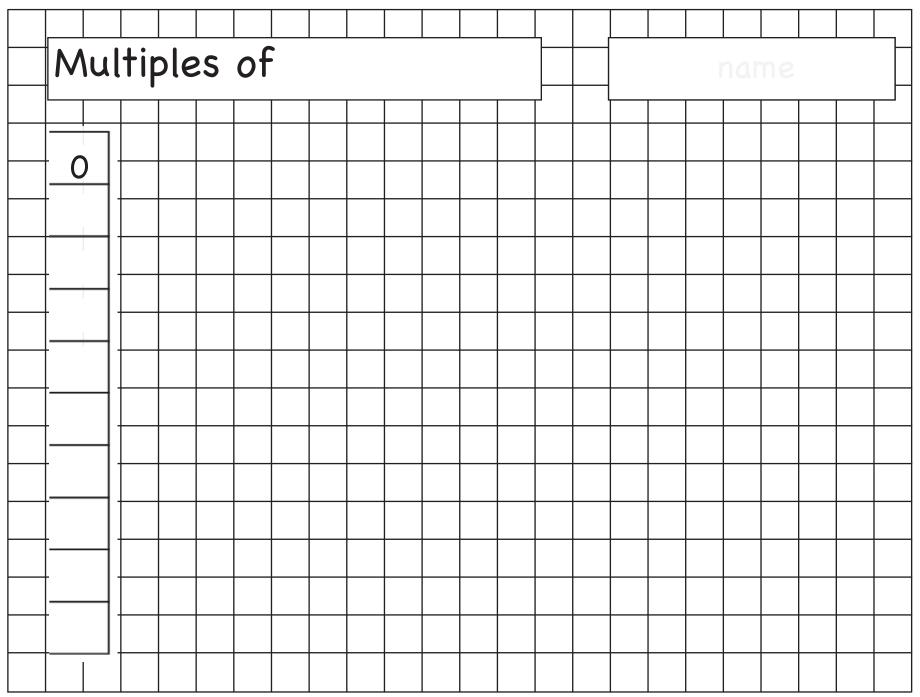




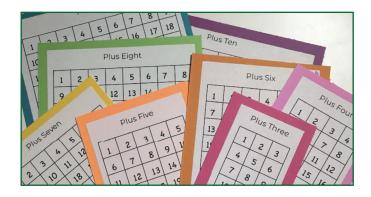


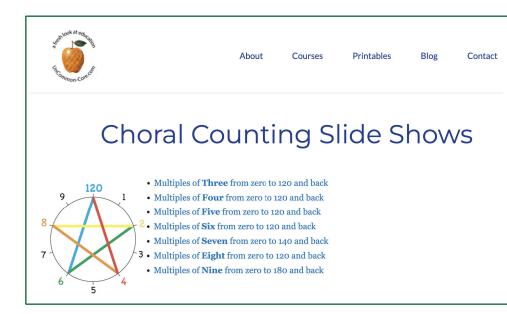


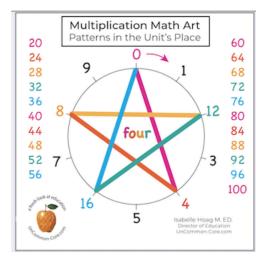


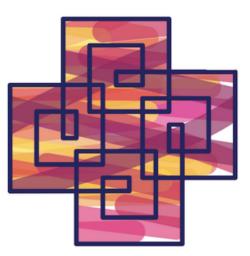


Try These Related Activities!









Terms of Use

By downloading this product, you agree that the contents are the property of Isabelle Hoag M. Ed., Director of Education at <u>UnCommon-Core.com</u> and licensed to you only for classroom/personal use as a single user.

I retain the copyright, and reserve all rights to this product.

YOU MAY:

- Use this product with your own students, in your classroom, or for your own personal use.
- Reference this product in blog posts, professional development workshops, at seminars, or other similar venues, ONLY if both credit is given to me as the author and a link to <u>UnCommon-Core.</u> <u>com</u> or my TPT store <u>UnCommon-Core dot com</u> is included.
- Please direct others to <u>UnCommon-Core dot com</u> where they can download their own copy.

YOU MAY NOT:

- Claim this work as your own, alter the files in any way or remove copyright/watermarks.
- Sell the files or combine them into another unit for sale or for free.
- Post this document for sale or free elsewhere on line including Google Doc links on blogs.
- Make copies of this product to share with others.

Thank you for following universally accepted codes of professional ethics while using this product. If you have any issues with the file, or notice an error please contact me and I will be happy to help sort it out.