

Two rows cross three columns six times.



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

Colorful Collections

A Mindful Exploration of Proper Fractions

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

Thank you again. All the best,

Isabelle

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

# Multicolor Multiplication Teacher Tips

#### Hi Teachers!

I hope you and your students enjoy this fun, free sample of Multicolor Multiplication, part of the Art of Multiplication series from UnCommon-Core.com. I love the idea of children experimenting with all different kinds of pens, pencils, markers, tapes, or what have you to make marks.

How often do we encourage students to do math with a pen? Using pens brings an immediacy to the activity – students have one chance to get it right!

This free sample includes:

- Detailed instructions that can also be used as
- A practice page.
- Two activity pages showing
- Horizontal and vertical grids for each set of factors.
- An answer key.

Once students get the hang of making the two color grids, the multiplication problem, and the same problem written in English, they may want to try making some of their own.

Please let me know your suggestions for the complete set which will be sold in my TPT store.

All the best,

Isabelle

#### Making Copies:

Always make test copies to make sure that your printer is set up correctly.

As you make copies, keep in mind that students will be making lines with all kinds of colorful pens, pencils, tape, or crayons. Many of these may show through the paper and be seen on the back of the page. You may choose to make single sided copies, or use thicker printer paper.

#### Watch out!

These free, introductory pages have dots on the grids showing students where to start their lines. Lines do not have to be perfect. The end result will look hand made.

The results model multiplication like an array. At first it may seem like an area model, however remind your students that they are counting places where two lines cross. They are not counting the cells created by the lines.

# Multicolor Multiplication Introductory Pages

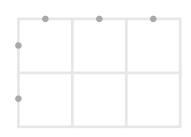
When introducing Multicolor Multiplication activities to your students, start small. Give your students simple pages with easy tasks and single digit problems. This ensures that everyone is able to practice the activity and understand which parts of the model corespond to which parts of the equation.

Offer support by having students work in pairs or in small groups with an aide. Ask these students to explain the instructions step by step giving reasons for each step.

Challenge students who are ready for more by inviting them to continue the activity using different materials or methods. They could use markers, crayons, pencils, or gel pens to make the grid. They could also experiment with washi tape, chenille sticks, sparkle glue (let dry!), pasting strips of paper, or using ribbons to make the grids. Ask them to create mini-posters explaining how this activity is related to skip counting, repeated addition, or linear models.

Draw rows and columns starting with the dots on each grid. Count the number of times the lines cross to find the product.

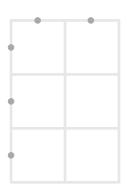
2×3=



Two rows cross three columns

times.

 $3 \times 2 =$ 



Three rows cross two columns

times.

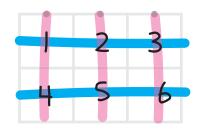
### Step by Step

- 1. Use blue to draw horizontal lines starting from each dot on the left hand side of the grid.
- 2. Highlight the number in the equation and the sentence that describes the number of rows in blue.
- 3. Use pink to draw vertical lines down from each dot on top of the grid.
- 4. Highlight the number in the equation and the sentence that describes the number of columns in pink.
- 5. With a fine tip marker or pen, count the number of times the rows and columns cross.
- 6. Write the total in the equation. Highlight it in purple.
- 7. Complete the sentence. Highlight the product purple.
- 8. Review each step. Reflect on how you solved the problem.

Make a two color grid. Count the number of times the rows and columns cross.

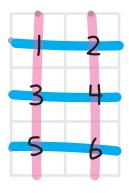
Write the multiplication sentence. Then write the same sentence in English.





Two rows cross three columns six times.





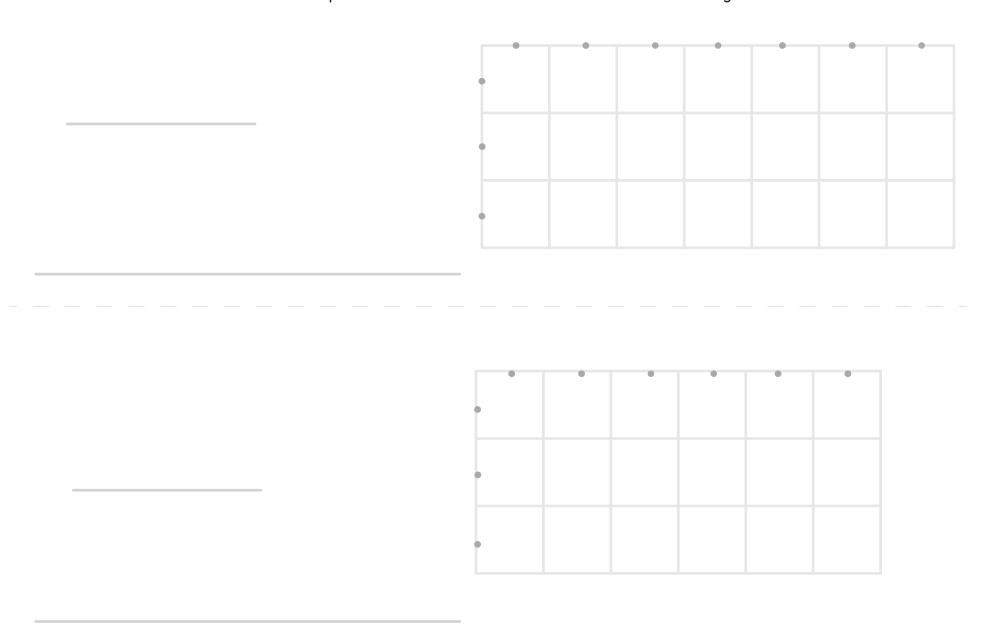
Three rows cross two columns SiX times.

### Step by Step

- Use blue to draw horizontal lines starting from each dot on the left hand side of the grid.
- 2. Highlight the number in the equation and the sentence that describes the number of rows in blue.
- 3. Use pink to draw vertical lines down from each dot on top of the grid.
- 4. Highlight the number in the equation and the sentence that describes the number of columns in pink.
- 5. With a fine tip marker or pen, count the number of times the rows and columns cross.
- 6. Write the total in the equation. Highlight it in purple.
- 7. Complete the sentence. Highlight the product purple.
- 8. Review each step. Reflect on how you solved the problem.

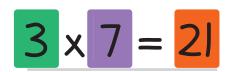
Make a two color grid. Count the number of times the rows and columns cross.

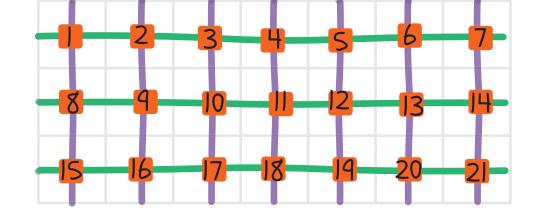
Write the multiplication sentence. Then write the same sentence in English.



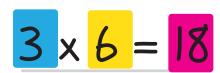
Make a two color grid. Count the number of times the rows and columns cross. Write the multiplication sentence. Then write the same sentence in English.

name

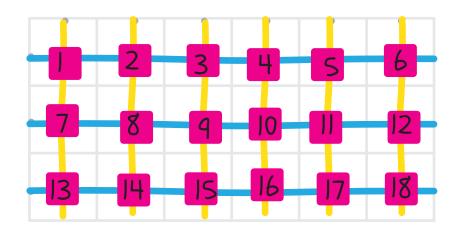




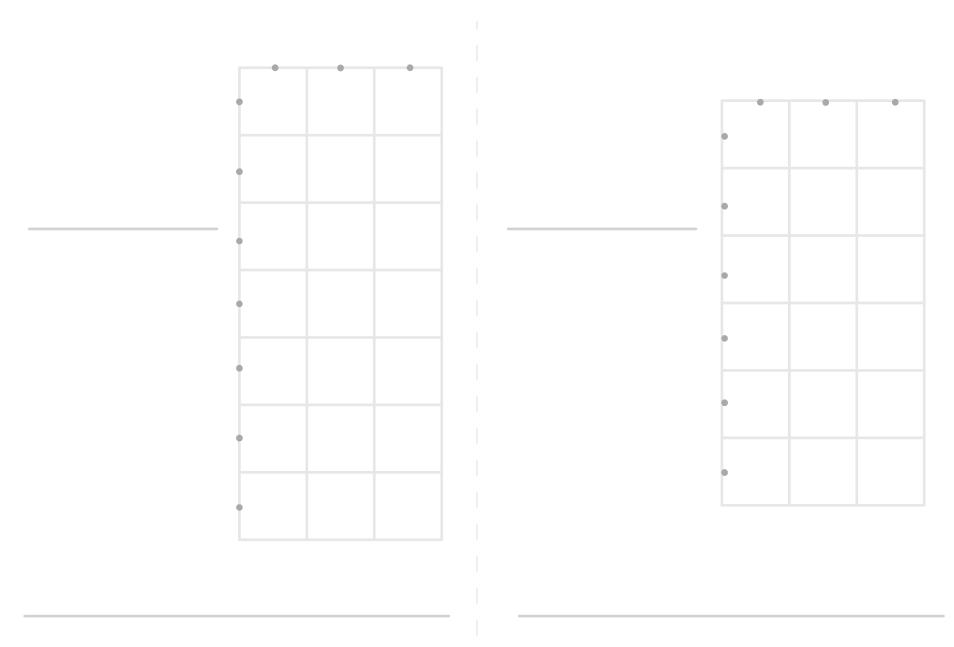
Three rows cross seven columns twenty-one times.





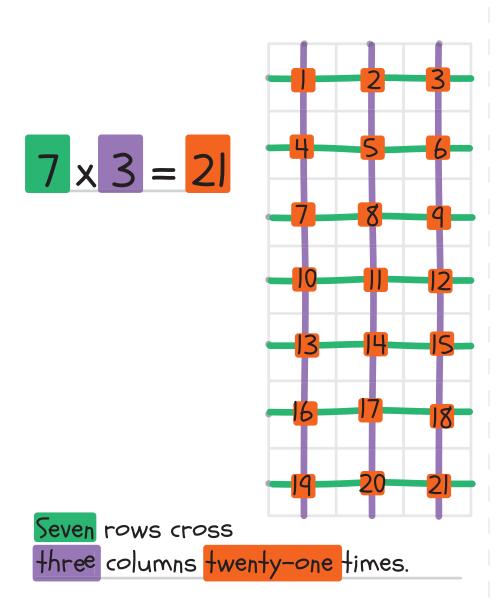


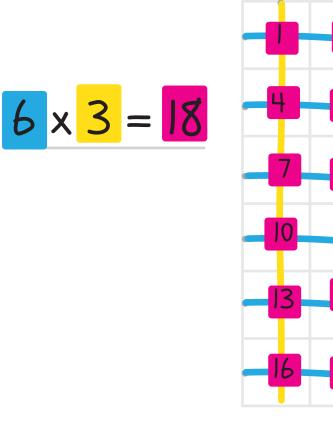
Make a two color grid. Count the number of times the rows and columns cross. Write the multiplication sentence. Then write the same sentence in English.

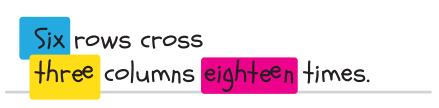


Make a two color grid. Count the number of times the rows and columns cross. Write the multiplication sentence. Then write the same sentence in English.

name







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