



Work Place Instructions 5C Line 'Em Up page 1 of 2

Each pair of players needs:

- one 5C Line 'Em Up Record Sheet
- one 1–6 die and one 4–9 die
- about 100 colored tiles
- 12 red linear pieces
- base ten area and linear pieces (for Game Variation B)

- 1 Players take turns rolling one die to see who goes first, and then write their names on the record sheet they're sharing.
- 2 Player 1 rolls both dice, multiplies the two numbers, and writes an equation on his side of the record sheet to show the product.
- 3 Player 1 counts out that many tiles and imagines they are bugs or anything else that might be divided into different numbers of lines.
- 4 Player 1 divides his tiles into 2 lines first. Then he divides them into 3, 4, 5, and 6 lines.
 - The player uses red linear pieces each time to show the number of lines he's making.
 - Each time, he records an equation showing the division, making sure his partner is helping and agrees with his equations.

Unit 5 Module 3 | Session 3 *half-class set, plus more as needed, stored in the Work Place bin*

NAME Jorge | DATE _____

5C Line 'Em Up Record Sheet

Player 1 Jorge | Player 2 _____

Round 1									
$5 \times 7 = 35$									
35	$\div 2 =$	17	R	1		$\div 2 =$		R	
35	$\div 3 =$	11	R	2		$\div 3 =$		R	
35	$\div 4 =$	8	R	3		$\div 4 =$		R	
35	$\div 5 =$	7	R			$\div 5 =$		R	
35	$\div 6 =$	5	R	5		$\div 6 =$		R	

- 5 Player 2 repeats steps 2–5.
- 6 After both players have completed two rounds they each add up all their remainders. The player with the higher total wins.

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Game Variations

A Use 2 dice numbered 1–6 instead of 1 die numbered 1–6 and 1 numbered 4–9.

If the product of the roll is 5 or less, players won't be able to divide it into 6 equal lines, and the amount will be a remainder. For example, if a player rolls 2×2 for a product of 4, she won't be able to divide that amount into 5 or 6 equal lines, and will wind up with the following results:

- $4 \div 2 = 2$
- $4 \div 3 = 1 \text{ R}1$
- $4 \div 4 = 1$
- $4 \div 5 = 0 \text{ R}4$
- $4 \div 6 = 0 \text{ R}4$

B Use 2 dice numbered 4–9 instead of 1 die numbered 1–6 and 1 numbered 4–9.

If players use this game variation, they will need to use base 10 strips and linear pieces instead of the colored tiles and red linear pieces to model and solve at least some of the division combinations.

Connor OK, I rolled an 8 and a 9, and 9×8 is 72. Wow—that's a big number. Maybe I'll get some big remainders! I'm going to use the base ten pieces for this one—the tiles will take way too long.



Connor 72 divided by 2. It's 3 strips in each row, and we've got 12 left over. That's going to split into 6 and 6, see?

Rafael Yup, so $72 \div 2$ is, let's see, 30 and 6 more for each. It's 36 with no remainder.

Connor You're right!



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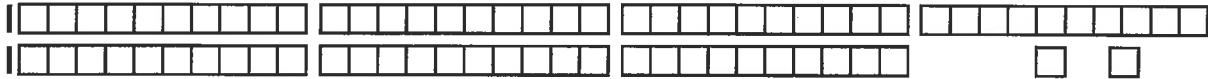
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NAME _____

DATE _____

**5C Line 'Em Up Record Sheet**

Player 1 _____

Player 2 _____

Round 1							
	$\div 2 =$		R		$\div 2 =$		R
	$\div 3 =$		R		$\div 3 =$		R
	$\div 4 =$		R		$\div 4 =$		R
	$\div 5 =$		R		$\div 5 =$		R
	$\div 6 =$		R		$\div 6 =$		R

Round 2							
	$\div 2 =$		R		$\div 2 =$		R
	$\div 3 =$		R		$\div 3 =$		R
	$\div 4 =$		R		$\div 4 =$		R
	$\div 5 =$		R		$\div 5 =$		R
	$\div 6 =$		R		$\div 6 =$		R

After you have played both rounds, add all of your remainders. The player with the higher total wins.

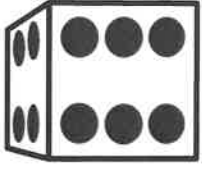
Total remainders for player 1

Total remainders for player 2

I rolled _____ and _____.

number

number



_____ X _____ = _____

number

number

number

If I divide them by _____, there are _____

2/3/4/5/6

number

in each row. When I divide them into

_____ rows, there is a remainder of _____.

2/3/4/5/6

number

My total is _____ and your total is _____.

number

number

_____ < = > _____, SO _____ win!

number

number

you/I

When I make _____ lines, there are _____ tiles
more/less

in each line because _____
_____.

