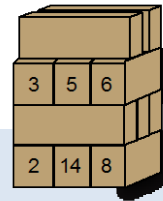


Factor Disaster: What's Your Multiple?



Strands:

Number & Operations

X

Algebra

Measurement

Geometry

Data & Probability

Materials:

- Jenga Classic Game Set modified as described.
- 1 six-sided die

Where?

Outside

Inside

On-line

On-site

| |
|---|
| |
| X |
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Combine the fun of Jenga with strategy, number sense, factoring, and multiplication as you remove a block with a multiple of the number you roll. For grades 3 and up.

Before You Play:

- Use a Jenga Classic game set. Number each block using 1 through 54 with the same number appearing on both small ends of the block. Make it clear which block is 6 and which is 9 by drawing a line under each number.

Set-Up:

- Empty the blocks on a flat surface.
- Build the tower by placing layers of three wooden blocks in the loading tray. Place each row of blocks at a right angle to the one next to it. Stack the blocks so the numbers will be right side up when the tower is standing.
- Carefully stand the loading tray upright, then remove it so the tower stands by itself. Begin the game with a solid, 18-story tower.
- Each player rolls a die. The player with the highest number goes first.

Object of the Game:

To increase your number sense and practice multiplication, factoring, finding multiples of the numbers 1 through 6, and identifying prime and composite numbers.

On Your Turn:

1. Roll the die. Using only one hand, carefully remove one block that meets the following conditions:
 - The block is BELOW the highest complete story.
 - The number on the block is the number you rolled or a multiple of the number you rolled.
 - If you roll 1, you can remove any block below the highest complete story.
2. Stack the block you removed on top of the tower at a right angle to the blocks in the level below it.
3. Your turn ends 10 seconds after stacking the block or as soon as the next player touches a block. Play moves to the left.

Removing and Stacking Blocks:

- As play proceeds and the weight of the tower shifts, some blocks become looser than others and are easier to remove. You may touch blocks to find a loose one. If you move a block out of place and choose not to remove it from the tower, fix it (using only one hand) before touching another block.
- While stacking, always complete a 3-block story before starting a higher one.
- Keep removing and stacking blocks until someone topples the tower.

To Win:

The last player to stack a block without toppling the tower wins!

Think About It:

1. How can you determine if one number is a multiple of another?
2. How are multiplication and addition related?
3. How can you multiply instead of counting up?

Variations:

Prime Numbers Rule!

When you roll a 1, you can only remove a block labeled with 1 or a prime number greater than 6. All other rules remain the same.

Take Down the Tower!

Once a block is removed, it is not put back on top. All other rules remain the same.

Helpful Hints:

- Look for similarities in the multiples of certain numbers. How do you know that a number is a multiple of 2?
- Try to use multiplication or division before you use counting.