

Matthew O'Keefe	Alexi Larson	Amelia Hilterbrand	Eric Kimball	Mia Hunt	Michaela Prasad
Tovah Dunn	Isabella Giordano	Danjelle Murphy	Emma Hansen	Aleah Gaudin	Madeleine Ch...
Molly Sheridan	Jacob McConnell	Connor Bailey	Syrenna Lison	Sawyer Nunley	Salina Esau
Elise Dunaway	Erica Okada	Travis Boyce	Courtney Lars...	Julio Gutierrez	Kyra Hauser
Parker Smith	Lily Chidester	Karen Diaz	Makenna Sutt...		
Norvin Davis	Sara Vermaas	Morgan S Bea...	Charles Gochr...		
Lily Nance	Marianna Math...	Jacob Burrola	Katelyn Scovi...		
Savannah Spr...	Hameem Gora	Trey McEuen			

## Welcome!!

### Period B7

Please find your assigned seat from the diagram below. Assigned seats help me learn your names much more quickly. :)

hallway/lockers

### Mrs. Hansen's desk

Back of Room

# Questionnaire

Please fill out this questionnaire thoughtfully and honestly. This will help me, Mrs. Hansen, get to know you better. :)

# Disclosure & Remind

SM3H

### Schemel's Logo

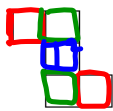
any size # in the logo.

For the following sequence of figures, assume the pattern continues to grow in the same manner. Describe what the  $n^{\text{th}}$  figure will look like and determine the number of blocks that would be needed for this figure with a rule or formula.

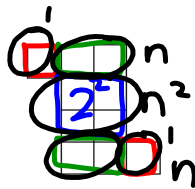
$$n = x^2 + (x+2) + x$$

x or n is the size #

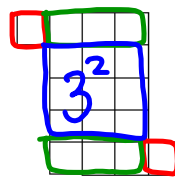
$$n(n+2) + 2$$



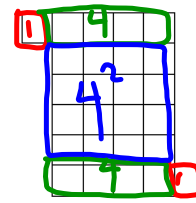
Size 1



Size 2



Size 3



Size 4

$$x^2 + 2x + 2$$

$$n^2 + n + n + 1 + 1$$

\*Make a poster of your groups answers and thinking. Link the diagram to your rule or formula to determine the number of cubes in the  $n^{\text{th}}$  tower. Be ready to explain your group's thinking to the class!

blocks figure

Size	# blocks
1	5
2	10
3	17
4	26

Handwritten annotations: Red arrows point from 10 to 5, 17 to 7, and 26 to 9. Green arrows point from 5 to 2, 7 to 2, and 9 to 2.