More patterns!   name:_____

                                                              class time:_____

1. Go to http://www.shodor.org/interactivate/activities/Chairs/

A. Set the choices to: Mode: [Exploration ▼]   Table: [Four Chairs ▼]   Arrangement: [Straight Line ▼]
Use the Increase Length and Decrease length buttons, and draw out the tables and chairs for
Length 1   Length 2   Length 3   Length 4

Figure out a formula that tells you if the length is *n*, how many chairs will there be? Explain how your formula fits with the pictures you drew

B. Now set the choices to Mode: [Exploration ▼]   Table: [Six Chairs ▼]   Arrangement: [Straight Line ▼]
Use the Increase Length and Decrease length buttons, and draw out the tables and chairs for
Length 1   Length 2   Length 3   Length 4

Figure out a formula that tells you if the length is *n*, how many chairs will there be? Explain how your formula fits with the pictures you drew

2.A. Go to http://www.visualpatterns.org/. Look at pattern 2, and figure out the formula for how may cubes it takes to make step n. Write your formula and explain it (verbally) to someone else.

B. Go to http://www.mathtalks.net/pt-1-4.html and scroll down to PATTERN TALK 2, and read some middle school student formulas and explanations. On the back of this page, write about one of the middle school student formulas that was different from the one you came up with, and how that student grouped the cubes to get their formula.