

Names: \_\_\_\_\_

Patterns, patterns, everywhere!

- 1.) Build the first five triangular numbers using the cubes or number chips.
- 2.) What are some patterns you notice? Feel free to combine triangular numbers, use colors strategically, etc.
  - a.
  - b.
  - c.
- 3.) Make a 20 second video (minimal talking) and post to You tube.
  - a. Label your video by Group number
  - b. Go to: <https://www.youtube.com/channel/UC6Yv9BLSkf8j6diaFzG1w5g>
  - c. Make sure you're signed as  
username: **cmsmontclair**  
Password: **msu@spring2017**
- 4.) Take notes on the videos here on what pattern each group presented:
  - 1.
  - 2.
  - 3.
  - 4.
  - 5.

5.) Take a look at Pascal's triangle

a. How do you think it was built?

b. List all of the patterns you see

i.

ii.

iii.

iv.

v.

6.) HW due Thursday (remember to bring the crayons back please)

a. The modulus assigned to me: \_\_\_\_\_

b. Here are the color codes:

i. 0 is \_\_\_\_\_

ii. 1 is \_\_\_\_\_

iii. 2 is \_\_\_\_\_

iv. 3 is \_\_\_\_\_

v. 4 is \_\_\_\_\_

vi. 5 is \_\_\_\_\_

c. Color your Pascal's Triangle such that all cells equivalent to mod 0 is colored the same color. Bring your completed Pascal's triangle to class on Thursday.