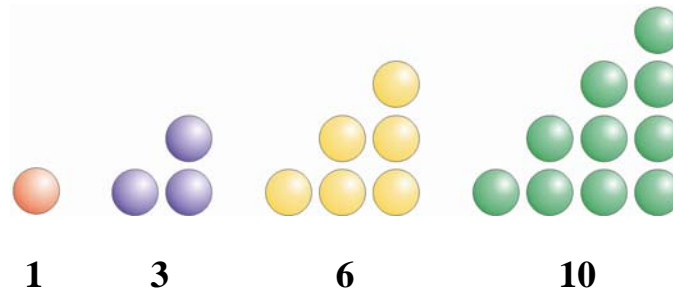


Triangular Numbers

NAME _____

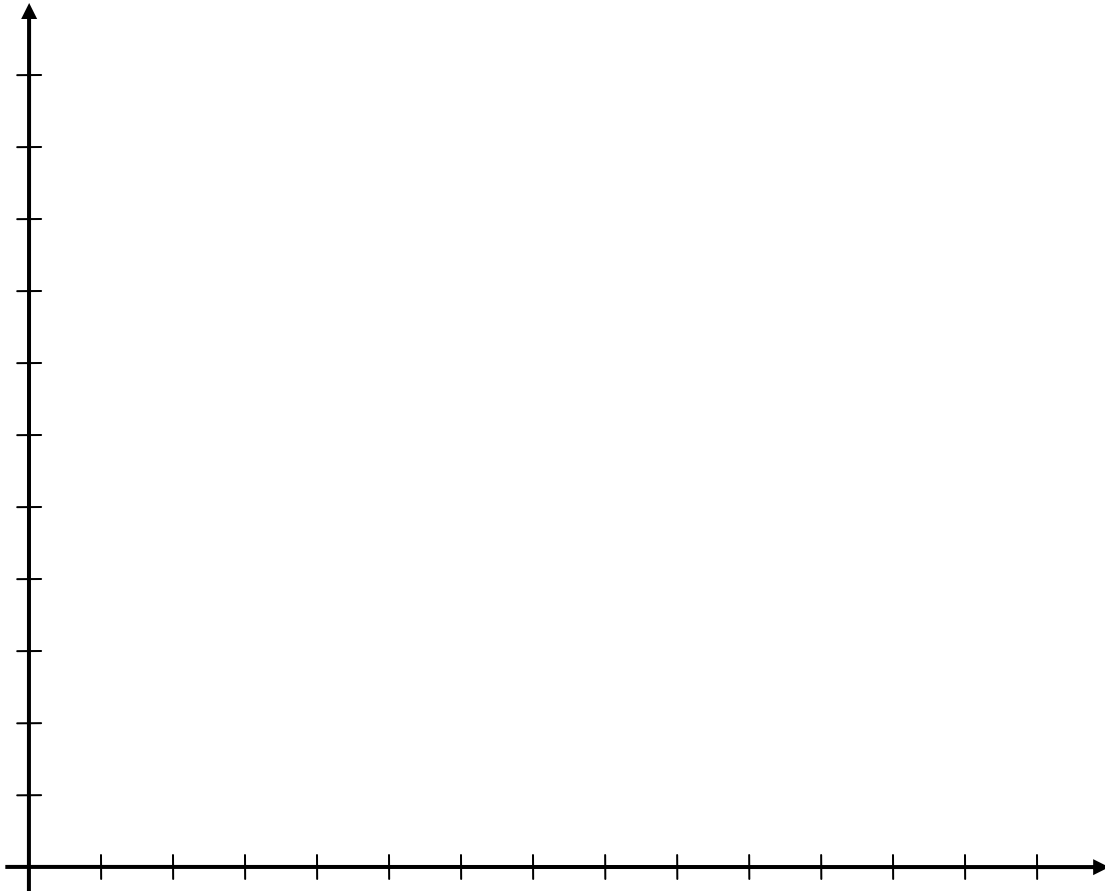
Triangular numbers can be represented by dots arranged in a triangle.



The first triangular number is 1, the second is 3, the third is 6, and so on. Extend the pattern to complete the table below. As necessary, draw additional figures to help you.

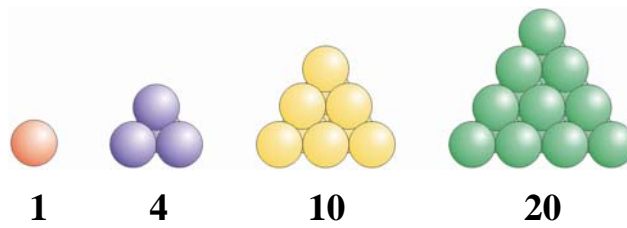
TRIANGULAR NUMBER	DOTS
1	1
2	3
3	6
4	10
5	
6	
10	
30	
100	
n	

Using the numbers from the table on the previous page, graph the results below. Plot the figure number along the horizontal axis, and plot the number of dots along the vertical axis. (Be sure to label both axes.)



Pyramidal Numbers

Pyramidal numbers can be represented by spheres arranged in a pyramid.



The first pyramidal number is 1, the second is 4, the third is 10, and so on. Extend the pattern to complete the table below. As necessary, draw additional figures to help you.

PYRAMIDAL NUMBER	SPHERES
1	1
2	4
3	10
4	20
5	
6	
10	
30	
100	
n	

Using the numbers from the table on the previous page, graph the results below. Plot the pyramidal number along the horizontal axis, and plot the number of spheres along the vertical axis. (Be sure to label both axes.)

