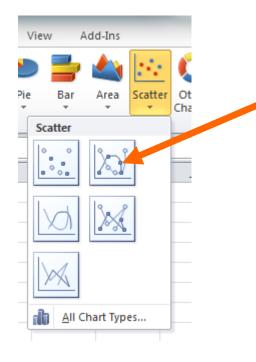
**Click Scatterplot** 



Choose 2nd image



# Modeling Exponential Growth and Decay Using M&M's

 $y = a(b)^{x}$ 

Graph on Separate Graphing paper

## The Exponential Growth of M&M's

Start with one M&M. Place it in a cup, shake it, and then empty it on the desk. If the letter M is showing, place it back in the cup. If there is no M add another candy and place both in the cup. Empty the cup again. For every candy not displaying a M, add another one and place it in the cup. Repeat for up to 20 trials or until you run out of candy. Record the data in the table below.

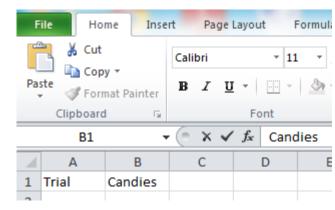
Trial	0	1	2	3	4	5	6	7	8	9	10
Candies	1										

Trial	11	12	13	14	15	16	17	18	19	20
Candies										

## **Graphing Exponential Growth**

#### Open EXCEL Spreadsheet

Type in Trial and Candies in Cell A & B and Enter data from table



Trial		Candies
	0	1
	1	4
	2	9
	3	16
	4	24
	5	32
	6	44
	7	46
	8	59
	9	62

#### Highlight Graph and Click INSERT tab

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Pivo	tTable Tabl	e Picture	Clip Sha Art ·				
	Tables		Illu				
	A1	-	<b>-</b> (9				
	А	В	С				
1	Trial	Candies					
2	0	1					
3	1	4					
4	2	9					
5	3	16					
6	4	24					
7	5	32					
8	6	44					
9	7	46					
10	8	59					
11	9	62					