

# Monarch Math

## Gather, Organize, Interpret Data

### Academic Standard:

**1.DA.1:** Organize and interpret data with up to three choices (What is your favorite fruit? apples, bananas, oranges); ask and answer questions about the total number of data points, how many in each choice, and how many more or less in one choice compared to another.

### Materials:

Printed Monarch photos

Data collection sheet

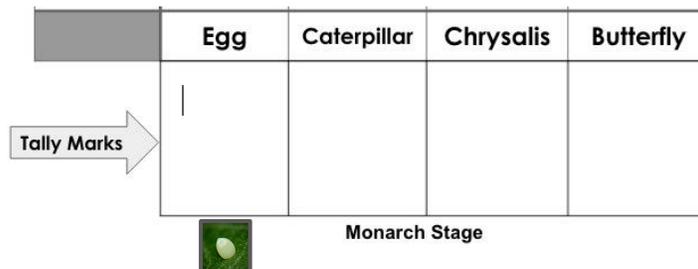
Pencil

Crayons

### World Connection:

We want to find out how many of each stage of the Monarch butterfly's life cycle is in our pollinator garden. Let's pretend that this is our garden (photos on floor in middle of group). Each of you will gather data, information, by picking a photo and placing it on the board under the tally mark chart. Then make a tally mark on the chart. (Explain that tally marks help us to gather data when we can't take objects with us to sort.)

1. Draw a chart on the board matching the tally mark section of the data collection sheet.



	Egg	Caterpillar	Chrysalis	Butterfly
Tally Marks				

Monarch Stage

2. Gathering Data: Place photos on the floor in the middle of the group. Have each student pick a photo and place it below the tally chart.
3. Organizing Data-Tally Marks: Make a tally mark in the chart on board and students do the same on their paper. Do this until all students have placed a photo on the board.
4. Organizing Data-Graph: Students take the data from the tally chart and create a graph.
5. Interpret Data: Ask students, "What story does this data tell you?" To prompt them ask them questions about most, least, how many more, how many less, etc. Have them write and complete the sentence on the back of their graph paper:

I learned \_\_\_\_\_.

Name: \_\_\_\_\_

<b>Number of Each Stage</b>	<b>12</b>				
	<b>11</b>				
	<b>10</b>				
	<b>9</b>				
	<b>8</b>				
	<b>7</b>				
	<b>6</b>				
	<b>5</b>				
	<b>4</b>				
	<b>3</b>				
	<b>2</b>				
	<b>1</b>				
	<b>Egg</b>	<b>Caterpillar</b>	<b>Chrysalis</b>	<b>Butterfly</b>	
					

**Monarch Stage**







