

M&M's Math Lesson



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Excel Midterm
March, 2013

Target Audience



- Originally taught to one student in a special education class
- Modified to fit the needs of an Elementary whole class setting
- Can be adapted to fit the needs of any Elementary grade level



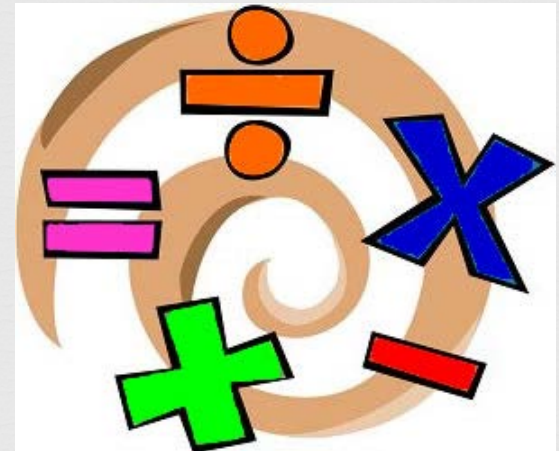
What topic am I teaching?



Numeracy

Over the course of the lesson students will be working on:

- ☞ Characterization
- ☞ Addition
- ☞ Graphing using Excel



Common Core Standards: Math



A.) Standard: Measurement & Data (2.MD)

Represent and organize data.

PI10 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.



Goals / Objectives



Goals

- ☞ Understand how to sort objects based on certain criteria
- ☞ Practice addition facts
- ☞ Utilize Excel to help interpret their data
- ☞ Practice using Excel

Objectives

Students will:

- ☞ *Sort and characterize* M&M's based on color
- ☞ *Add* the given amount of M&M's
- ☞ *Graph* given M&M's using Excel to determine which color they have most/least of

Materials Needed



☞ M&M's

☞ Computers (access to Excel)

☞ Adding Worksheet

☞ Characterization Sheet

☞ Internet Access



Timeline of Procedure

Day One

Students are broken up into groups

Characterize their M&M's



Day Two

Complete adding sheets

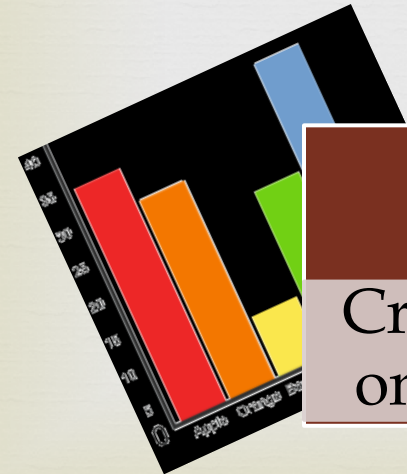
Mini lesson on Excel use



Day Three

Create graphs based on data using Excel

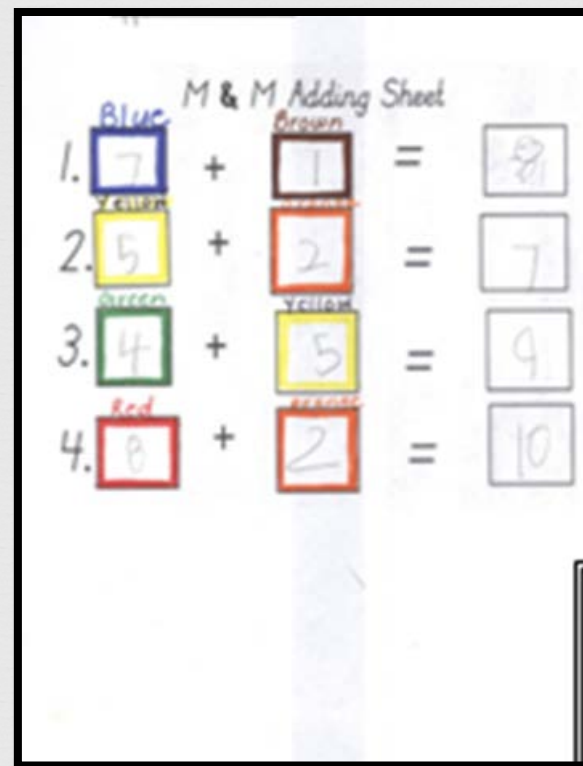
Discussion/Survey of class



Templates used during Lesson



Sorting Sheet



Adding Sheet

Sample Data Tables



Candy	Amount
Red	7
Orange	3
Yellow	5
Green	6
Blue	2
Purple	1
Brown	2
Total:	26

Group One

Candy	Amount
Red	10
Orange	2
Yellow	6
Green	8
Blue	0
Purple	5
Brown	1
Total:	32

Group Two

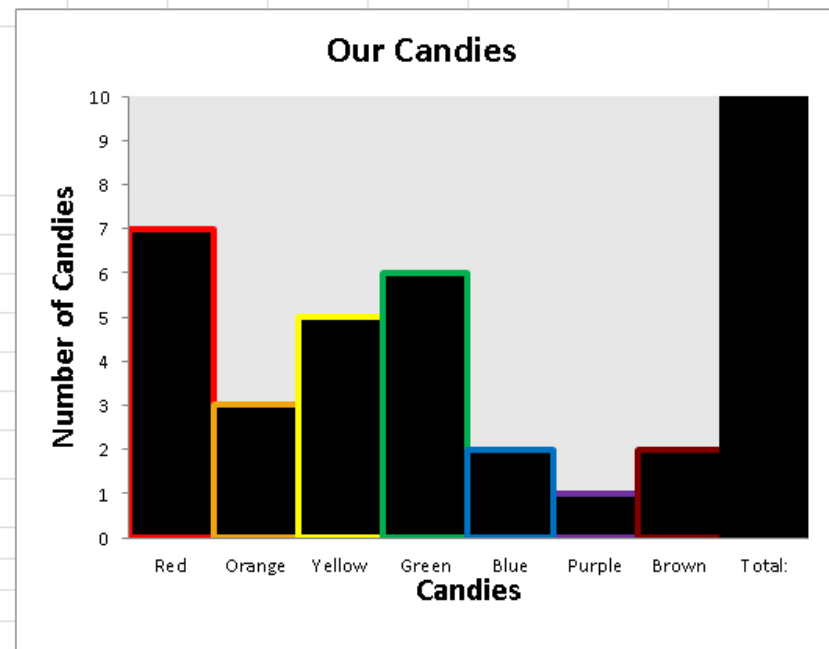
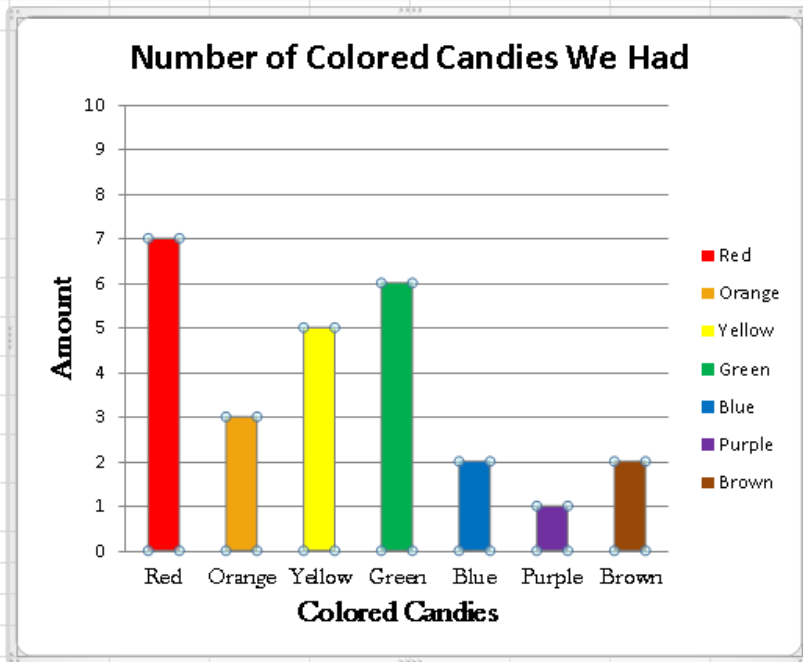
Candy	Amount
Red	1
Orange	7
Yellow	11
Green	1
Blue	9
Purple	2
Brown	4
Total:	35

Group Three

Candy	Amount
Red	1
Orange	10
Yellow	9
Green	6
Blue	4
Purple	8
Brown	2
Total	40

Group Four

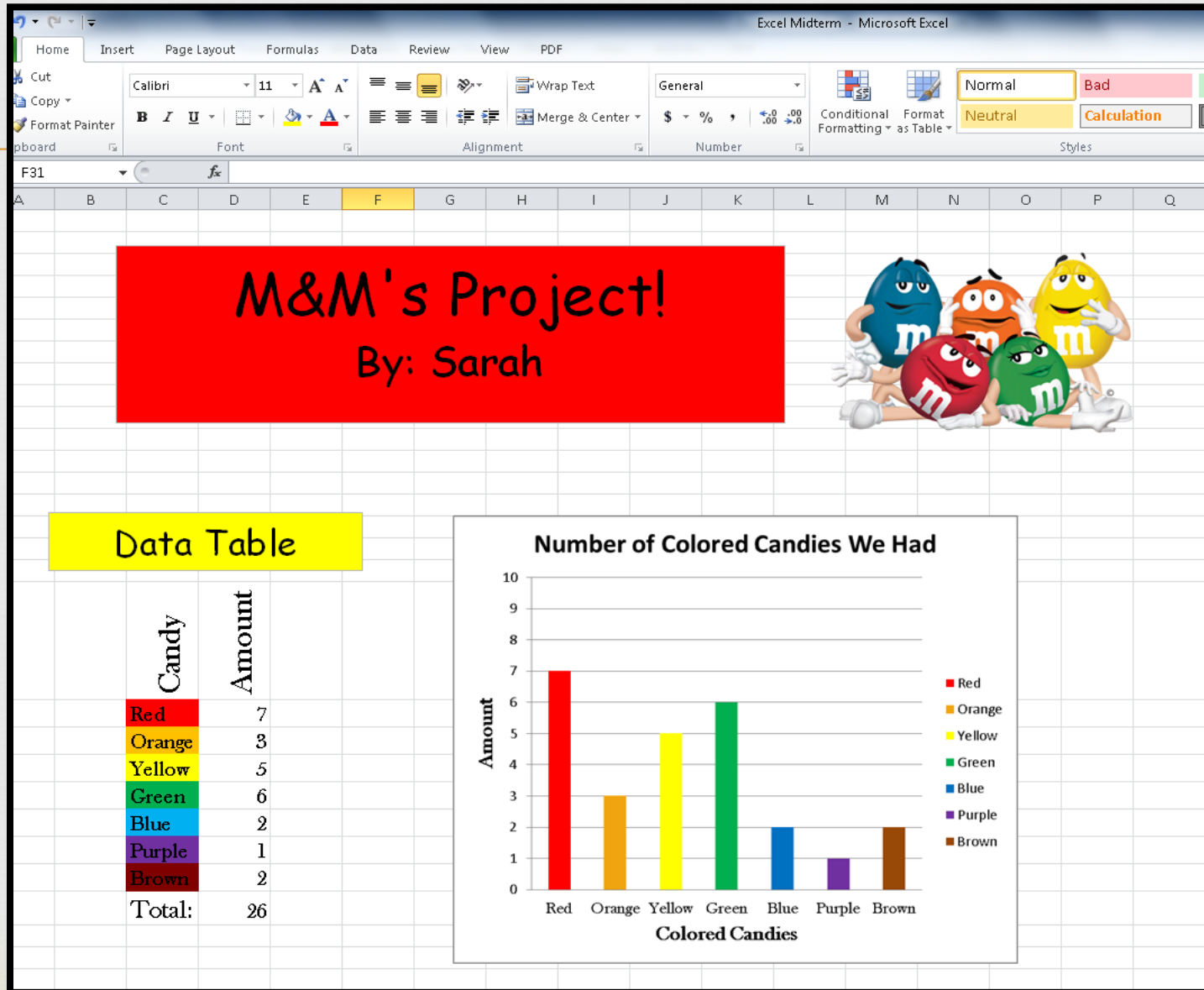
Sample Graphs: Group One



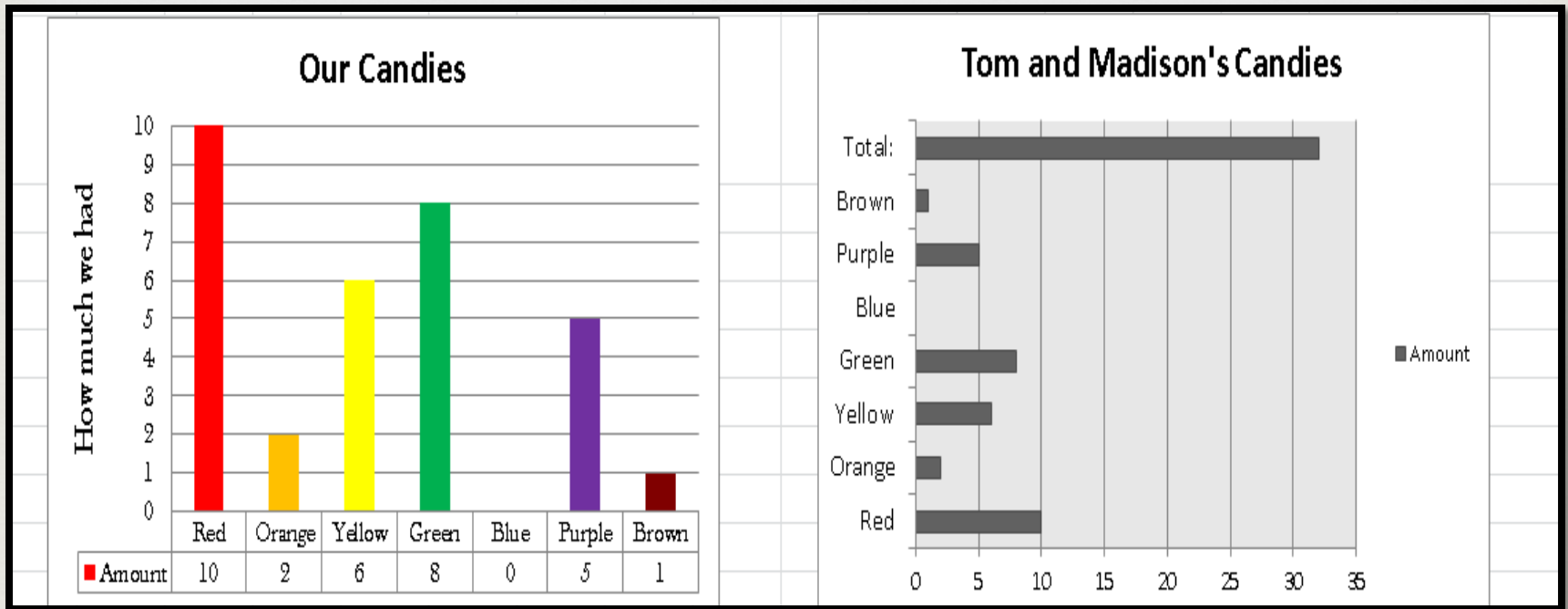
Pair One:
Sarah Abbate

Pair Two:
Jessica Andrews

Group One Spreadsheet



Sample Graphs: Group Two



Pair One:
Tom Williams

Pair Two:
Emma Pike

Group Two Spreadsheet

Tom's M&M Project

Candy	Amount
Red	10
Orange	2
Yellow	6
Green	8
Blue	0
Purple	5
Brown	1
Total:	32

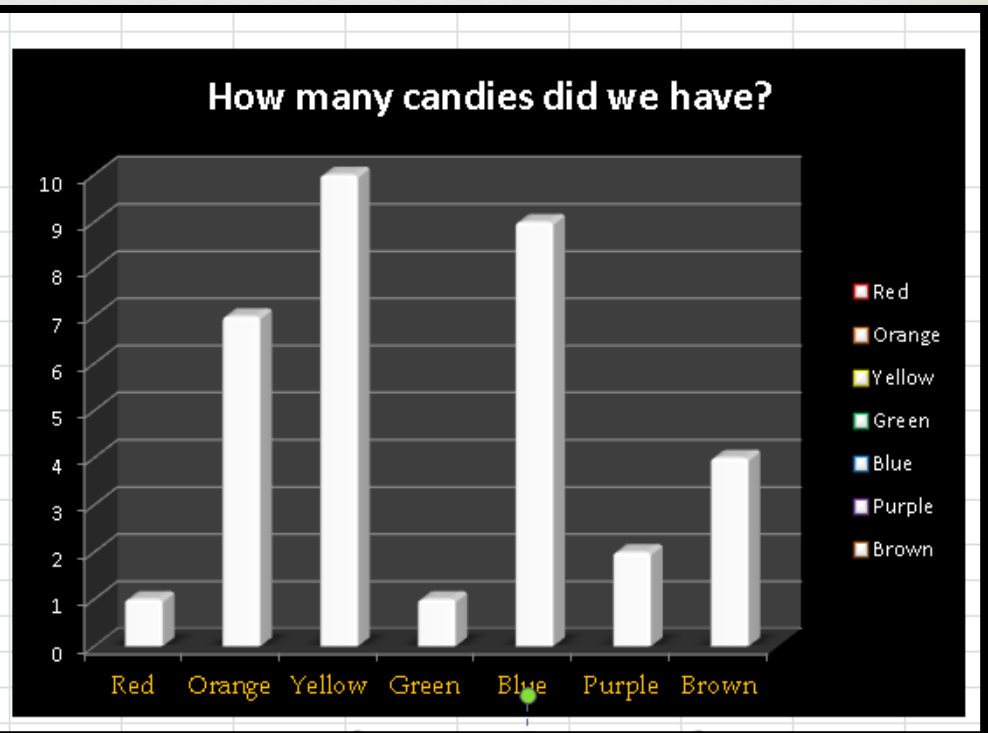
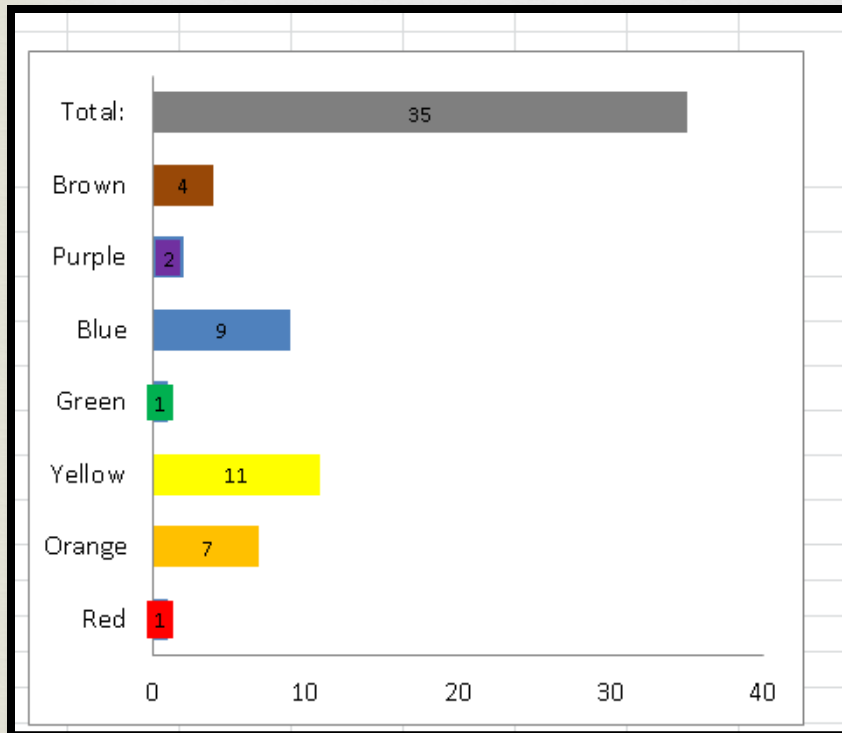
Our Candies

Amount	Red	Orange	Yellow	Green	Blue	Purple	Brown
How much we had	10	2	6	8	0	5	1

Our Data Table

Our Graph

Sample Graphs: Group Three

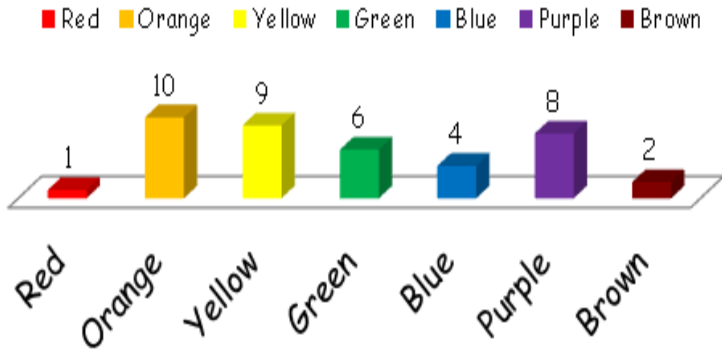


Pair One:
Andrea Donner

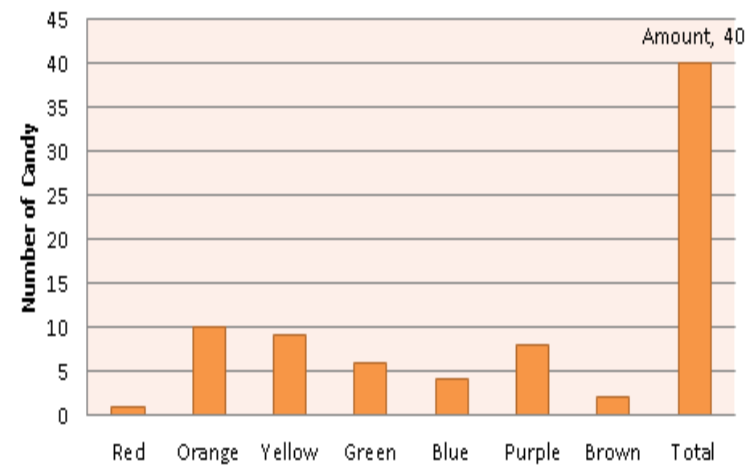
Pair Two:
Chris Otto

Sample Graphs: Group Four

Which color did we have the most of?



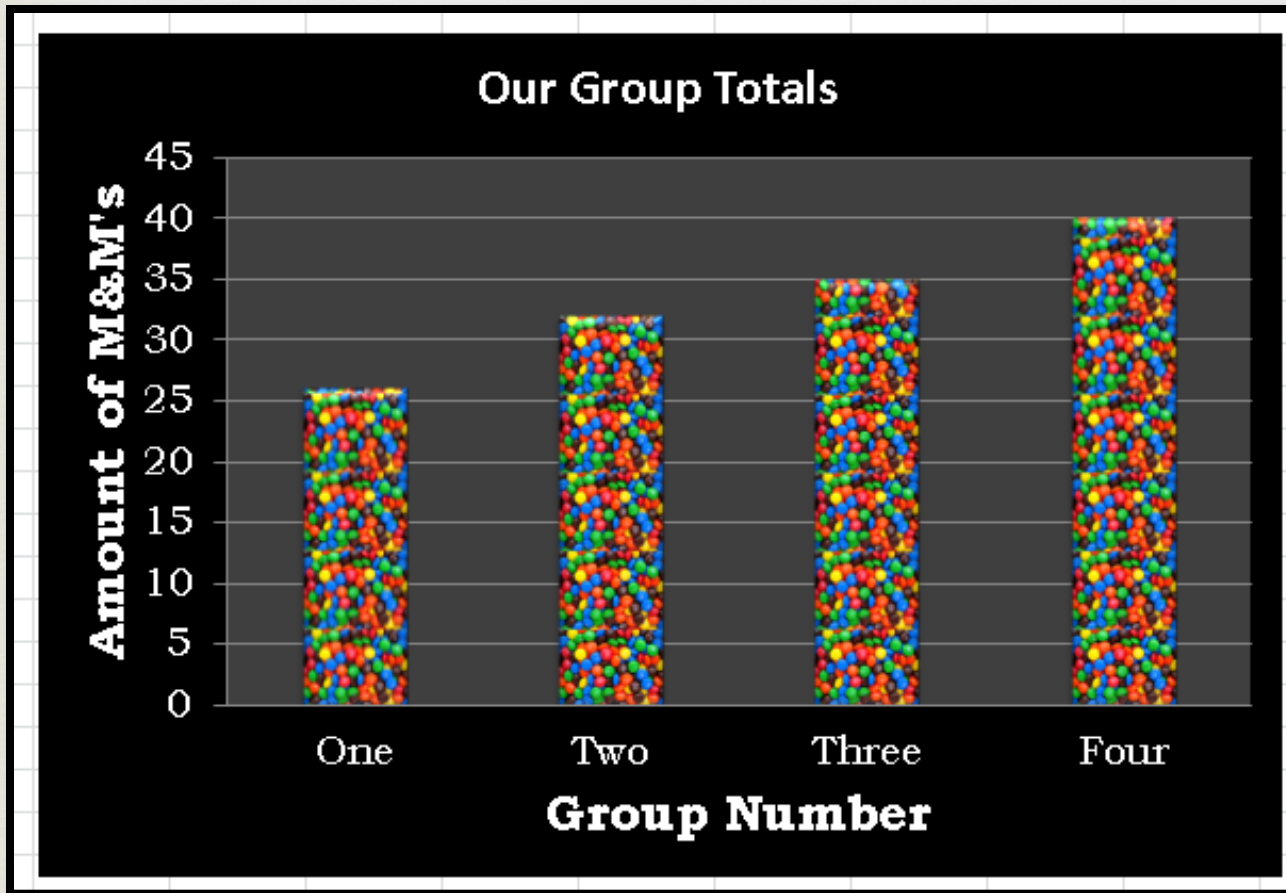
Bill and Henry's Candies



Pair One:
Sophia Collins

Pair Two:
Bill Gardner

Whole Class Graph



Students can analyze the graph to see which group had the most/least amount of M&M's given.

Evaluation: Rubric

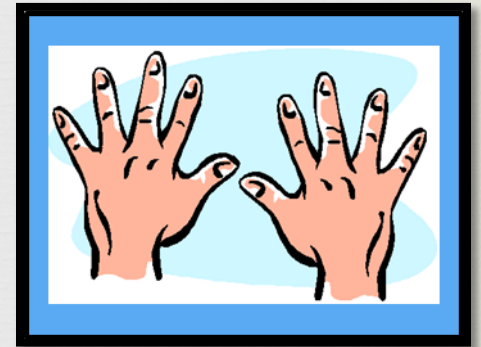
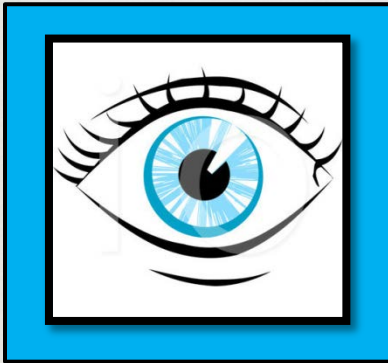
	1: Needs Work	2: Good Job	3: Excellent!
Characterization Sheet	Sorts only a few M&M's correctly (1-2)	Sorts most M&M's correctly (3-5)	Sorts all M&M's correctly (All 6)
Math Worksheet	Completes only one problem correctly	Completes most problems correctly (2-3)	Completes all problems correctly (All 4)
Graph	<ul style="list-style-type: none">• Does not label X & Y axis• Includes correct data for a few colors (1-2)	<ul style="list-style-type: none">• Confuses the labels for the X and Y Axis• Includes correct data for most colors (3-5)	<ul style="list-style-type: none">• Labels both X & Y axis' correctly• Includes correct data for all colors

Evaluation: Behavior Checklist

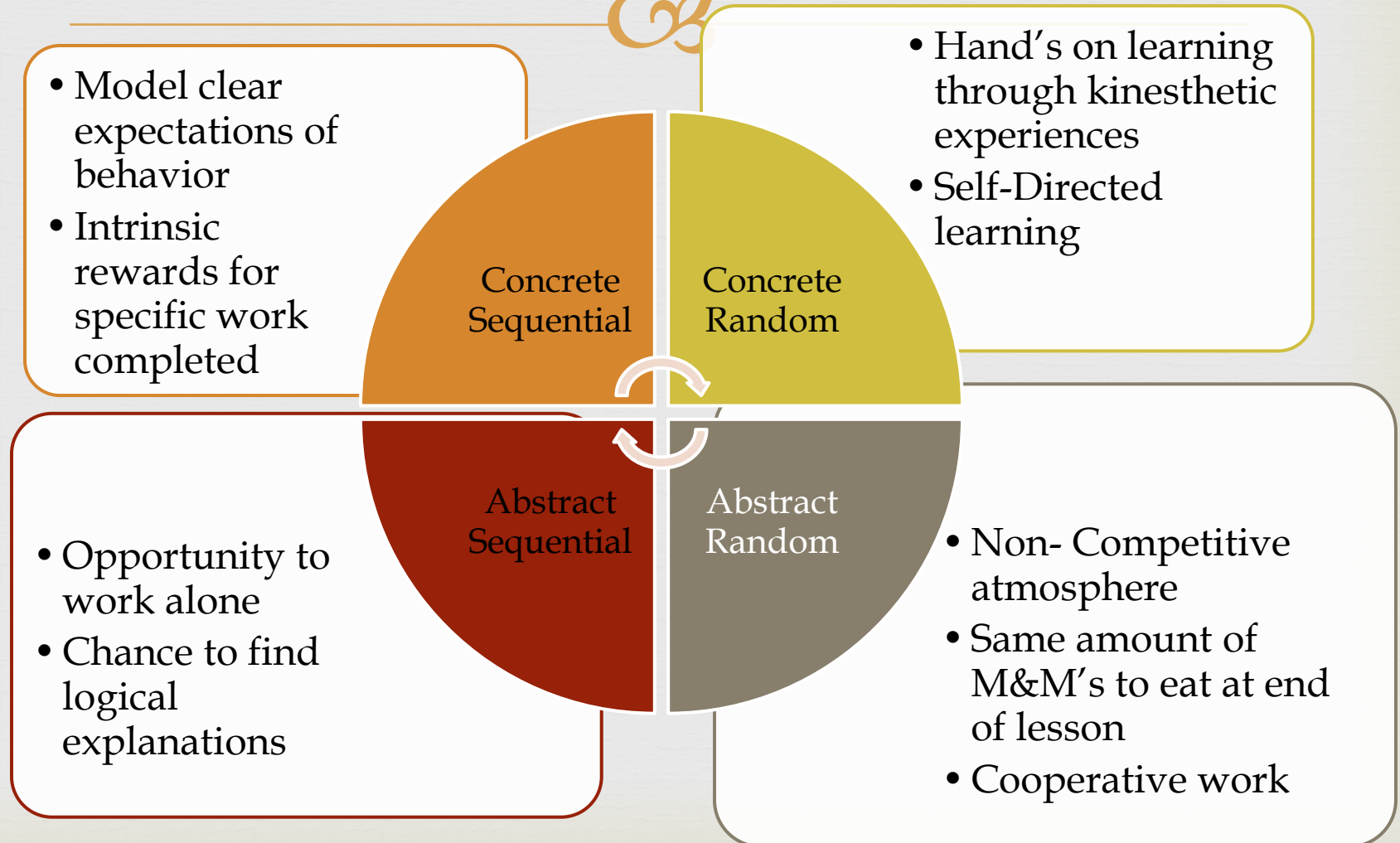


☺ Yes ☺	☹ No ☹
Both partners contributed in sorting their M&M's	Both partners did not contribute in sorting their M&M's
Students were respectful of each other's feelings and opinions	Students were not respectful of each other's feelings and opinions
Both partners were on task (Not eating M&M's while working or throwing M&M's around the room)	Both partners were not on task

Multiple Intelligences



Gregorc's Learning Styles



References



Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.

Gregorc, A. (1985). *Gregorc style delineator. a self-assessment instrument for adults*. Columbia, CT: Gregorc Associates, Inc.