GRADE 1 MATHEMATICS

UNWRAP A STANDARD: *WHAT DO STUDENTS HAVE TO KNOW AND BE ABLE TO DO?*

WHERE ARE WE GOING?

Domain: Measurement and Data
Cluster: Represent and interpret data *(supporting cluster)*
Domain/Reporting Category Weight: 26% - 28% of Grade 3 AASA items

Standard: 1.MD.C.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

Performance/Achievement Level Descriptors

Emerging (1)	Developing (2)	Proficient (3)	Distinguished (4)
I can interpret data with up to three categories. I can ask and answer questions about the total number of data points, how many in each category.	I can represent and interpret data with up to three categories. I can ask and answer questions about the total number of data points, how many in each category, and/or which category has more or less than another.	I can organize, represent, and interpret data with up to three categories. I can ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.	I can collect, organize, accurately represent, and interpret data with up to three categories. I can ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

BUILDING BACKGROUND KNOWLEDGE AND SKILLS: FLASHBACK STANDARD

Standard: **K.MD.B.3** I can classify objects into given categories; count the number in each category and sort the categories by count. (Note: Limit category counts to be less than or equal to 10.)

EXTENDING KNOWLEDGE AND SKILLS: PREVIEW STANDARD

Standard: **2.MD.D.10** 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 the graph

ESSENTIAL KNOWLEDGE/CONCEPTS ***What Do Students Need to Know/Understand?*** **List the underlined nouns.**	**ESSENTIAL SKILLS** ***What Do Students Need to Be Able to Do?*** **List the circled (or *italicized*) verbs.**
	DOK LEVEL **Level of content complexity rather than content difficulty.**
WONDER QUESTIONS ***How can we capture student wonder?*** ***Including open-ended and 'second' questions** ○	**ESSENTIAL VOCABULARY** ***What Do Students Need to Comprehend?*** **List all key vocabulary**
LEARNING OBJECTIVES ALIGNED TO THE STANDARD ***What are the Learning Intentions and Success Criteria that will guide student progress?***	
EVIDENCE OF STUDENT MASTERY? ***How will we know when they know it?*** ***How will we encourage each student to try?***	
SPECIFIC INSTRUCTIONAL FRAMEWORK? ***What will we do to help them know/understand/can do it?*** ***What will we do for students who still don't know it?*** ***What will we do for students who already know it?***	

Providing Pathways to Excellence for Each Student

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Domain: Measurement and Data
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Domain/Reporting Category Weight: 26% - 28% of Grade 3 AASA items

Standard: 1.MD.C.4 **Organize**, **represent**, and **interpret** data with up to three categories; **ask** and **answer** questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

Performance/Achievement Level Descriptors

Emerging (1)	Developing (2)	Proficient (3)	Distinguished (4)
I can **interpret** data with up to three categories. I can **ask** and **answer** questions about the total number of data points, how many in each category.	I can **represent** and **interpret** data with up to three categories. I can **ask** and **answer** questions about the total number of data points, how many in each category, and/or which category has more or less than another.	I can **organize**, **represent**, and **interpret** data with up to three categories. I can **ask** and **answer** questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.	I can **collect, organize**, **accurately represent**, and **interpret** data with up to three categories. I can **ask** and **answer** questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

BUILDING BACKGROUND KNOWLEDGE AND SKILLS: FLASHBACK STANDARD

Standard: **K.MD.B.3** I can **classify** objects into given categories; **count** the number in each category and **sort** the categories by count. (Note: Limit category counts to be less than or equal to 10.)

EXTENDING KNOWLEDGE AND SKILLS: PREVIEW STANDARD

Standard: **2.MD.D.10** **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 the graph

Essential Knowledge/Concepts

What Do Students Need to Know/Understand?

List the underlined nouns.

Data Data Points Graph Category Total Number How many Ask Answer More than Less than Collect Organize Sort Compare Bar graph Picture Graph

Essential Skills

What Do Students Need to Be Able to Do?

List the circled (or *italicized*) verbs.

Interpret Ask Answer Represent Organize Collect Compare Explain

DOK Level

Level of content complexity rather than content difficulty.

DOK 1 DOK 2 DOK 3

WONDER Questions

How can we capture student wonder?

***Including open-ended and 'second' questions**

How do we know there are more apples than bananas?
I wonder what questions can be answered using our data?
Can we create a question that is not answered by our graph?

Essential Vocabulary

What Do Students Need to Comprehend?

List all key vocabulary

More than Less than Data Data points Graph Picture graph Bar graph question Sort Total number

Learning Objectives aligned to the Standard

What are the Learning Intentions and Success Criteria that will guide student progress?

See attached Learning intentions and Success Criteria

Evidence of Student Mastery?

How will we know when they know it?
How will we encourage each student to try?

See attached Diagnostic Formative Assessment (DFA)

Specific Instructional Framework?

What will we do to help them know/understand/can do it?
What will we do for students who still don't know it?
What will we do for students who already know it?

See attached Thinking Routines and Focus for Small Group Learning

WHERE ARE WE NOW?

How will we know when they know it?
How will we encourage each student to try?

Item #1: Alignment to PLD 1.MD.C.4.**0** (Flashback to **K.MD.B.3**)

Your teacher has given you a baggy with red triangles and blue circles.

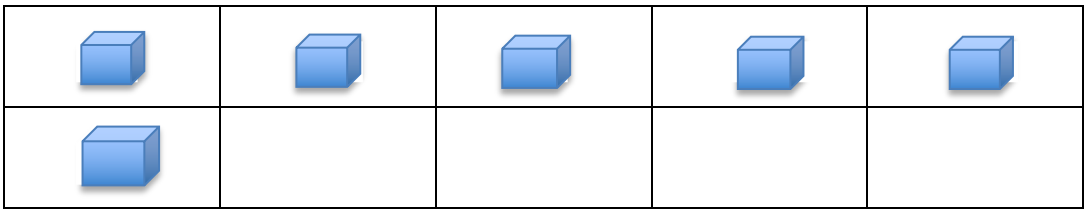
PART A. Sort the shapes with the same shape and color into the labeled boxes below.
PART B. How many blue circles do you have in the box?

Blue Circles	Red Triangles

How many blue circles do you have in the box? _____

Item #2: Alignment to PLD 1.MD.C.4.**1**

Katrina placed her blocks in the chart below.



How many blocks are there? _____

Item #3: Alignment to PLD 1.MD.C.4.**2**

Mr. Lopez has purchased fruit for his family.

	
	
	
	
Bananas	**Apples**

PART A. How many bananas did Mr. Lopez purchase for his family? _____

PART B. How many apples did Mr. Lopez purchase for his family? _____

PART C. Did Mr. Lopez purchase more bananas or apples? _____

Item #4: Alignment to PLD 1.MD.C.4.**3**

Doris wanted to know how many cats and dogs living with her friends. The table shows each dog and cat recorded by Doris.

Circle the chart that shows the correct number of cats and dogs.

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Item #5: Alignment to PLD 1.MD.C.4.**3**

Carol went on a class trip to a farm. She recorded the number of horses and number of cows she saw at the farm.

PART A. Organize the number of pigs, cows, and horses in the graph below.

Horses					
Cows					
Pigs					

PART B. How many pigs did Carol see at the farm? _____
PART C. How many cows did Carol see at the farm? _____
PART D. How many horses did Carol see at the farm? _____
PART E. How many more cows than horses did Carol see at the farm? _____

Item #6: Alignment to PLD 1.MD.C.4.**4**

La Tanya and her classmates in Flagstaff, AZ recorded the weather during March of this year. They recorded their findings in the table below.

Sunny										
Cloudy										
Rainy										
Snow										

PART A. How many rainy days did they have in March? _____
PART B. How many more rainy days did they have than cloudy days? _____
PART C. How many days did they record the weather? _____

My Learning Intention and Success Criteria **1.MD.C.4**

WHAT DID WE LEARN TODAY?

My Learning Intention: I am learning to organize, represent, and interpret data.		
My Success Criteria	**Post**	**Why am I learning this?**
I can count the number of items in a category.		
I can correctly place data in a table.		
I can read data from a picture graph.		
I can answer questions about data in a table.		
I can create a picture graph based on data.		
What do I want to remember?		

WHO BENEFITED AND WHO DID NOT?

Guided Group Lesson

Standard:1.MD.B.4 I am learning to **Organize**, **represent**, and **interpret** data with up to three categories; **ask** and **answer** questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

Group Members	Emerging	Developing	Proficient	Distinguished

Warm-Up:

With a partner, students are provided a bag of attribute blocks and place them in an attribute sort chart. Students then use the chart to determine how many of each type block was in their bag.

Vocabulary

More than Less than Data

Data points Graph Picture graph

Bar graph question Sort

Emerging	Developing	Proficient	Distinguished
Students play a game of 'be the teacher'. Each team is provided a picture graph with two or three categories. The teams are tasked with creating two questions that other teams will have to answer.	Pairs of students play a game of *Where do I Belong* matching sets of data, associated picture graph, and associated question answered in the graph.	Students collect, organize, accurately represent, and interpret data into three categories based on data provided by their teacher.	Students design a survey to be given to classmates based on a topic chosen by the team. They then organize, accurately represent, and interpret the data into categories based on data. Students then summarize what is revealed in the data.

Observations:	Next Steps:
What you notice about your students during small group instruction.	What will you do with these students next? Change groups, repeat, etc.