**Name:** Bethany Niswonger

# Lesson Plan

**Learning Segment Focus:** Data Collection     **Lesson** 1     **of** 3

**Course & topic addressed:** Mathematics     **Date:** November 6, 2020 **Grade:** K

## Student Outcomes

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| Specific learning **objectives** for this lesson. | Students will count and classify objects using non-measurable attributes: color. |
| Justify how learning tasks are appropriate using examples of **students' prior academic learning**. | Students should have an understanding of color identification and an understanding of cardinality. |
| Justify how learning tasks are appropriate using examples of **students' personal, cultural, linguistic, or community assets**. | This activity is appropriate for this grade because it uses basic primary, secondary, and tertiary colors as well as counting and cardinality of numbers 1-10. |

## State Academic Content Standards

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| List the **state academic content standards** with which this lesson is aligned. Include abbreviation, number & text of the standard(s). | AR.Math.Content.K.MD.B.3: Classify, sort, and count objects using both measurable and non-measurable attributes such as size, number, color, or shape<br>Note: Limit category count to be less than or equal to 10. Students should be able to give the reason for the way the objects were sorted. |

## Key Vocabulary

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| What **vocabulary terms/content specific terminology** must be addressed for students to master the content? | Number, color, more than, less than, the same as, equal to, most, least. |

## Academic Language Support

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| What are the **Academic Language Function(s)** (the content and language focus of the learning task represented by the active verbs within the learning objectives/outcomes) and explain how they are utilized in the lesson plan?<br>What planned **Academic Language Supports** will you use to assist students in their understanding of key academic language to express and develop their content learning and to provide varying supports for students at different levels of Academic Language development? How do these supports address all three **Academic Language Demands (vocabulary, syntax, and discourse)?** | |

## Materials

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| Materials needed by **teacher** for this lesson. (such as books, writing materials, computers, models, colored paper, etc.) | A variety of M&M's and containers to distribute them to students. The excel template that corresponds with the lesson. |
| Materials needed by **students** for this lesson. (computers, journals, textbook, etc.) | M&M's, the corresponding worksheet, a pencil. |

**Lesson Timeline with Instructional Strategies & Learning Tasks**

| Amount of Time | Teaching & Learning Activities (This should be a BULLETED LIST) | Describe what YOU (teacher) will be doing and/or what STUDENTS will be doing during this part of the lesson. (This should be VERY DETAILED) |
|---|---|---|
| 5 Minutes | **Introduction**: Distribution of worksheet and M&M's | I will hand out the worksheet as well as the M&Ms as I explain the task and remind the students not to eat their M&M's so we can collect their data. Students get out their pencil and preview the worksheet. We will discuss the task and make predictions of our experiment. I will ask questions such as: Which color do you think will appear the most, the least, will one flavor have more of one color than another flavor? Etc. |
| 30 Minutes | **Instruction:** Students will collect data on each color of M&M by flavor, recording the outcome on the provided worksheet.<br><br>Students will report their data findings to me, as I fill in the excel worksheet on the projector for them to see, the graphs will generate automatically. | Students will collect data on each type of M&M. They will count and report how many of each color they have, by type. They will record this data on the worksheet provided, which breaks down the M&M's by type and then by color.<br><br>Students will enjoy their M&M's while they report their findings to me. I will record the data into the excel worksheet. |
| 10 Minutes | **Closure:** We will discuss our findings | We will review our data and find answers to the questions we proposed at the beginning of the lesson. Were our guesses correct or incorrect? Do we think this data is accurate for all M&M's, or could we do this experiment again with different M&M's and find different results? |

## Accommodations/Modifications

| How might I **modify** instruction for:<br>*Remediation?*<br>*Intervention?*<br>*IEP/504?*<br>*LEP/ESL?*<br>(All students who have plans mandated by federal and state law.) | I would offer additional assistance to those who needed it. I would also consider doing this as a group activity to provide additional assistance. |
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## Differentiation

| How might you provide a variety of techniques (enhanced scaffolding, explicit instruction, contextualized materials, highlighters/color coding, etc.) **to ensure all student needs are met?**<br>(All students who are not on specific plans mandated by federal and state law.) | Similar to above, but I would also make sure that there were no students with allergies and find alternative materials to suit their needs. |
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## Assessments:  Formative and/or Summative

| Describe the **tools/procedures** that will be used in this lesson to monitor students' learning of the lesson objective(s) (include type of assessment & what is assessed). | ■ Formative /□  Summative | Discussion before and after the task will assess their understanding of data collection and the way the results can be used. |
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| | □  Formative /■  Summative | The worksheets the students turn in will assess their understanding of cardinality. |
| | ■ Formative /□  Summative | The students participating, engaging with peers and completing the activity will assess their understanding of data collection in general. |

## Research/Theory

| Explain **connections to theories and/or research** (as well as experts in the field or national organization positions) that support the approach you chose and justify your choices using **principles of the connected theories and/or research.** | |
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## Lesson Reflection/Evaluation

| What went **well**?<br>What **changes** should be made?<br>How will I **use assessment data** for next steps? | *TO BE FILLED IN AFTER TEACHING* |
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Include supporting material such as slides, pictures, copy of textbook, and handouts for any activities students will be using as part of your lesson.