**Learning Plan**

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| **Name**: Natasha Roslosnik | **Age of Children**: 3 – 5  | **Date**: November 14, 2021 |
| **Title**: Unusual Measurements  |

***Learning Standards and Outcomes***

***Learning Standard:*** *Be specific (begin with the State/Agency Early Learning Standards or the State K-3 Content Standards)*

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| **Teaching Strategies Gold Objective****Primary Objective**Mathematics22. Compares and measures**Related Objectives**Social-Emotional2. Establishes and sustains positive relationships c. Interacts with PeersLanguage8. Listens to and understands increasingly complex language b. Follows directionsCognitive11. Demonstrates positive approaches to learning a. Attends and engagesMathematics20. Uses number concepts and operations a. Counts |

***Child Outcome:*** *List understandings, skills, and/or dispositions. Use the format, “The student will be able to ….”*

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| The student will be able to:* Measure Items
* Count
* Compare
* Work With Peers
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***Learning Experience***

***Describe the Learning Activity/Opportunity*** *(specifically address how this learning opportunity will utilize everyday items and materials that could easily be found or located in a family’s home or surrounding outdoor environment:*

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| This activity helps children with the abstract concept of numbers and measurements. It can be done anywhere, in the classroom, car, home, park or playground; anything can be measured! Children just need the ability to freely move their hands to measure the item that catches their eye.  |

***Resources Needed*** *(e.g., materials, etc.):*

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| The only official item that is needed us two hands. To improve upon this lesson (or make it more structured) you could use:* Paper and writing tool (to track measurements)
* Books of various sizes
* Toys
* Blocks
* Pillows
* Rugs
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***Procedures:***

1. ***ENGAGE*** *(How will you set a purpose for the learning opportunity, focus children's thinking on the learning outcomes, connect and engage children’s interests and prior learning or build interest.. what is your hook?!)*

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| How do measurements help us? What is a measurement? Does anyone know? A measurement is the size, length, or amount of something. But how do we measure things? It all depends on what we are measuring. We measure weight in pounds, ounces, or (if something is very large) tons! In the United States we use miles to measure distance and inches or feet to measure height. You might be asking yourself, “what is a mile?”. A mile is a distance that we might walk, run, ride our bikes, or drive. One mile is equal to 5,280 feet! But there are plenty of ways to measure an item! Today, we are going to have fun with measurements. We will measure items with our fingers and hands!  |

1. ***EXPLORE*** *(Describe how you can actively encourage children in building their own understandings of learning outcomes)*

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| After learning about the different units of measurement, we will discuss measurements that we are familiar with (how tall we are and how much we weight to start). I will ask the students if they can see anything around that they can measure (body parts, books, toys, pants or shoes). By having students actively measure items directly on or around them, they will be engaged in this activity. We will then break into groups of two and come up with ways to remember the measurements (writing down the numbers or making a drawing of circles to represent hands for example). Once we are all back together, we will discuss how we know the measurements are accurate. I will ask the students if the measurements would be different if another student did the measurement (possibly with smaller hands) or if I did it (with my larger adult hands). The action of different measurements (with larger and smaller hands) will be done, and we will compare the results. Explaining to the children that compare means note the similarity or dissimilarity.  |

1. ***MAKE SENSE*** *(Describe how you will support students in communicating what they have learned and support them in figuring out what it means through further practice)*

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| I will go around the room watching students measure and seeing if they seem to understand the concept, if they seem to be remeasuring the same areas, or if they don’t seem to be getting it at all. I will scaffold the learning based on their ability. For students who seem to be getting it, I will ask them if they can measure items a different way (for example: asking if they can measure using their fingers, feet, or arms). For the children who seem to be measuring the same area multiple times, I will give them little pieces of tape or a small toy as a mark so they know where to go next. For the children who are not getting it, I will help guide their hands to show where they should measure and count out loud with them. To add a bit of fun, I will ask each group of children “how many hands tall is your leg?”, listening for their measurements or watching them do it again. I will also challenge them to measure their table with their longest finger and shortest finger, reporting back with the answer.  |

1. ***CLOSE*** *(Describe how you can bring closure, determine learning attained and provide synthesis)*

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| To wrap up the lesson, we will talk about our measurements, discuss the unusual methods we used (hands, fingers, feet, arms, other toys, or whatever they came up with), and see if our measurements were similar (for similar items such as tables). I will ask the children if everyone had the opportunity to measure an item. I will then ask them if they think that the measurements would change if a person with smaller or larger hands did the measurements. I will know that learning has occurred when I see the children comparing objects around the room and using “taller/smaller” language. I will also know that leaning has occurred when children show interest in more standard units of measurement such as using a toy scale, a weight scale (comparing weights in class), or exploring the rulers and measuring tapes.  |

1. ***FOLLOW UP*** *(Describe how you can build on the lesson in the future to reinforce concepts taught, as well as how you can build from student interest by following their lead)*

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| One way to improve this lesson would be to start off by measuring the hands of the children (for example: one hand is five inches OR one hand is five fingers tall). If we were to do this, we would know that five hands is equal to twenty five inches – this could be a fun way to introduce addition or multiplication concepts to children. Another way to improve upon this lesson would be to give children rulers or measuring tape while they are using their unusual measurement techniques. The children could guess how large they thing an item is and then check the actual results with the measuring tools.  |

***List a minimum of 3 new vocabulary words that children will develop as part of this learning plan:***

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| 1. Measurement – the size, length, or amount of something.
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| 1. Mile – a distance that we might walk, run, ride our bikes, or drive. One mile is equal to 5,280 feet!
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| 1. Compare – Note the similarity or dissimilarity
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| 1. Obtain – Get, acquire, or secure
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***List a minimum of 3 open-ended question for each lesson phase that you can ask children as part of this learning plan:***

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| 1. How do you know your result is accurate?
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| 1. Can you describe the process you used to obtain your measurement?
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| 1. How would you measure something that is bigger than you?
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***Describe why this activity is developmentally appropriate for this group of children. Be sure to clearly address each of the three components of developmentally appropriate practice (DAP)***

1. ***age appropriate***
2. ***individually appropriate***
3. ***culturally appropriate***

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| This activity is age appropriate as measuring concepts start at an early age. Children start to notice when something is larger or shorter, bigger or smaller, and make comparisons in the world around them. By introducing measurement concepts in a fun way (making their hands the tools), children can start to see mathematical concepts around them. This lesson is individually appropriate as it can be easily adapted to scaffold mathematical concepts. For children who are just learning about math and measurements, they can use one-to-one correspondence to count and measure. For children who have a firm grip on one-to-one correspondence and understand measurements, simple addition concepts can be added to the equation. It is also individually appropriate as children are given the freedom to measure items that are interesting to them. This lesson is also culturally appropriate. Children worldwide have hands that they can use for measuring and items around them to be measured.  |

***Describe how in this activity you promote the following (please utilize specific examples and avoid overly vague generalizations or connections:***

1. ***Promoting Analysis and Reasoning:*** *(List specific examples of questions and/or open-ended prompts that address the following indicators of analysis and reasoning:* why and/or how questions, problem solving, prediction/experimentation and/or classification/comparison) \*these are pre-planned opportunities

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| During this activity I can ask the children:* What else can you measure?
* Are there any other unusual units of measurement that you would like to use?
* If an item is smaller than your hand, how can we measure it?
* Is there another way to measure the same item? (Promoting tall and wide concepts)
* How do we know these measurements are accurate?
* How did you track your measurements?

Children can work in pairs, small groups, or by themselves to brainstorm ways we can capture measurements, think of different measurement techniques, and think about how we can track our measurements. This will help them with their collaboration skills, conversational development, and mathematic development.  |

1. ***Promoting Opportunities for Creating:*** *(List specific examples of how your lesson plan provides opportunities for each of the following indicators:* brainstorming, planning and/or authentic production)

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| This activity promotes brainstorming as children work together or by themselves to think of ways to measure items, come up with items to be measured, and figure out how to track measurements. Students also use brainstorming skills as they think of ways to measure very large items (that are taller than them). As children start measuring, they think of items that they would like to measure as well as the method they would like to use (hands or fingers for example), their thoughts prior to the activity are ways of planning. When children measure and record items and report the results back to the large group, they are engaging in authentic production. Children are also able to discuss various methods of measurement they used, if everyone in the class would end up with the same results, where errors or discrepancies might have occurred, and explore mathematical concepts together.  |

1. ***Promoting Opportunities for Integration:*** *(List specific examples of questions and/or open-ended prompts that address the following indicators of integration:* connecting concepts, and/or integrating previous knowledge) \*these are pre-planned opportunities

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| When starting this activity, I will connect concepts by asking children if they are familiar with any units of measurement. I will then provide them with some common measurements (a gallon of milk, a liter of juice, we weigh ourselves in pounds, and measure out heights in feet and inches). I will then ask if the child if they know their heights or weights. Examples* Are you familiar with measurements? How many different forms of measurement can you think of?
* Does anyone know how much they weighted or how tall they were as a baby?
* Does anyone know how much they weigh now?
* Who in this room is the tallest? How about the shortest?
* How can we measure liquid?
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1. ***Promoting Opportunities for Connections to the Real World:*** *(List specific examples of questions and/or open-ended prompts that address the following indicators of analysis and reasoning:* real-world applications, and/or related to students' lives) \*these are pre-planned opportunities

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| While talking with children, I will ask them how they decided what units of measurement to use (was it small so you used your fingers or larger and it was decided to use their hands). I will also ask how they are tracking their measurements. I will ask children why they think measurements are important. What do we do with measurements in the real world? How can knowing exactly how tall or wide an item is (or will be) help us? Finally, I will ask children what measurements are important in their life. How do they feel when new measurements inform them that they have grown? Is it exciting to see personal changes? Can it be fun to compare heights with friends and family members?  |

***I certify that the lesson I am submitting does not utilize a worksheet or rote learning experience. My lesson is focusing on promoting concept development through high quality interactions and everyday materials easily obtained in a family’s home or surrounding outdoor environment. The outcome of my lesson is not a “cookie cutter” product.***

***\_\_X\_\_ Yes***

***\_\_\_\_ No***