

Age level: Preschool (4-5 years)

Subject (s) Area: Fine Motor, Mathematics and Logical

Materials needed: Paper plates, sharpies, small marshmallows, mug cutout, pencils

Standards:

MTH 1.1 Demonstrate an understanding that numbers are always in the same order. 1,2,3 (stable order counting principle), and that the order when counting objects does not affect the total (order relevance counting principle).

MTH 1.2 Use number names with written numerals.

MTH 1.3 Relates numbers and quantities to the everyday environment.

Objectives:

Children will count how many marshmallows they have been given.

Children will compare each group of marshmallows' quantities. (For instance, children will sort marshmallows in groups, one group will have one marshmallow, second group will have 2 marshmallows. Student will compare the different groups of marshmallows' quantities).

Children will relate counting and quantities to the everyday environment.

Learning Activities:

Technology: N/A

Required Vocabulary:

Numeral: a written number

Predict: to guess

Addition: put together

Subtraction: take away

Opening Element: Anticipatory set, setting purpose for learning, assessment of background knowledge, Review, ect.

Teacher should say the following. Boys and girls how many of you get to play with your food? Tell students that today they will get to play with the food, specifically with marshmallows. How many of you like marshmallows? I am going to give each of you a small bag of marshmallows that you will be using, but what I want you to do is predict how many marshmallows you think you have in your bag first? Boys and girls what does it mean to predict. Tell students to predict how many marshmallows they have means to guess how many they think they have. Give students some time to think about how many marshmallows they think they have in their bag.

Instructional Methods:

Guided Practice Strategies: Levels of scaffolding, various elements broken into parts, ect.

Once students have their pile of marshmallows and have predicted the amount of marshmallows they have in their bag, students should count how many marshmallows they have in their bag. Before students do this, teacher should model to students how to count the marshmallows they have been given. Teacher should explain to students that for every number I say, I am going to pick up a marshmallow and place it on my plastic bag. (Model this one to one correspondence to students). Provide children the opportunity to do this (informal assessment).

When students are all done counting their marshmallows in their pile, teacher should model to students how to match the correct number of marshmallows to the correct written number on the plate. Teacher should tell students to place their finger on the section that says 8. Once all students have their finger on the number 8 (informal assessment), teacher knows the children can associate the number 8 with the written numeral 8. Teacher should model to students how to count 8 marshmallows. Model this to students by picking up each individual marshmallow and counting each number for each marshmallow picked up. Place the marshmallow on the section of the plate that is labeled with the number 8.

Do this above step with the students several times. Then, if there are some students who have mastered this concept, teacher can introduce to these students some addition and subtraction (use these terms with the students). If for example, the students have counted out 4 marshmallows and placed these 4 marshmallows on the section of the plate that is labeled with the number 4. Have students keep the 4 marshmallows on their plate. Tell students I want you to place 2 more marshmallows on your plate. Tell students to place the 2 marshmallows on the section that says 2. Now, ask students how many marshmallows do they have total or altogether on their plate. Tell students they just did addition. Tell students when using addition we are putting one group of marshmallows with another group of marshmallows to get a larger amount of marshmallows. Have students find the number on their plate that the 4 marshmallows and 2 marshmallows add up to. Then, have students place the group of 4 marshmallows with the group of 2 marshmallows. Teacher can introduce subtraction to students, if it seems as though these students are engaged and ready to learn subtraction or to take away marshmallows.

Once all kids are done counting and matching the correct amount of marshmallows to the corresponding written numeral, teacher will introduce the craft. Teacher should explain all kids will receive a piece of paper with a mug on it. Tell students what the mug says saying, "The mug says, I have _____ number of marshmallows in my hot cocoa." Tell and model to students they will choose how many marshmallows they would like to put on their hot cocoa craft. Tell students once they have the number of marshmallows they would like to put on, they will put on a small dot of glue on the mug for each marshmallow. Tell students to count how many dots of glue teacher puts on the mug. Then ask students if I put this many dots of glue on my mug, how many marshmallows should I glue on my mug? (informal assessment). Then, tell students they need to write the written numeral in the blank on the mug. (Have an example with marshmallows already glued onto the craft, then ask students to count how many marshmallows are in the hot cocoa. Then, ask students how I could write that number.)

Independent Concrete Practice/ Application: practice of skills in practical ways

Kids will count how many marshmallows they have in their pile. Once they have done that and the teacher has modeled to them how to match the correct amount of marshmallows to the corresponding written numeral, kids will practice this on their own. Teacher will tell students to place their finger on a certain number on the plate. Then, the students should count how many marshmallows to place on their plate. Eventually, students can choose how many marshmallows they would like to put on the plate and put that amount on the correct section that has the numeral labeled.

Once all kids are done counting and matching the correct amount of marshmallows to the corresponding written numeral, teacher will introduce the craft, and students will be responsible for counting their marshmallows and writing the number of marshmallows they chose to glue on their craft in the blank on the mug.

Reflective Questions: (Questions asked to help students process or reflect upon content)

Once you have passed each pile of marshmallows out to the kids. Tell them to put a thumbs up once they have a guess for how many marshmallows they have in their bag. Then ask them how they could find out how many marshmallows they actually have in their pile.

Ask students how many marshmallows did they count out and place at their plate?

If students are attempting to do some addition or subtraction with their marshmallows. Ask students how many marshmallows they have on their plate altogether if they have a certain number of marshmallows on one section of their plate and different amount of marshmallows on another part of their plate?

. Explain to students if I choose to glue on 4 marshmallows, how many dots of glue must I use? (They will see that one to one correspondence).

Ask students, if I have 1 marshmallow how could I write the number 1 to show I have 1 marshmallow? Students should say you can just write a straight line down to represent the number 1.

Classroom management/movement

All students will start at the community rug. Then, students will be split into two groups. One group of students will go with the main teacher, and the other group of students will go with the assistant teacher in the classroom. At each students' spots at the table, there will be a plate with numbers on it and a bag of marshmallows. Students will need to leave the marshmallows and plate sitting in at their table, until the teacher tells them further directions.

When students are gluing their marshmallows onto the craft, the teacher should model to students how to do this before they begin to do this on their own. After the teacher is done explaining how to glue the marshmallows onto the craft, the teacher will hand out each child a glue bottle.

Differentiation:

If kids are struggling to count the marshmallows, reduce the amount of marshmallows that particular student must count and sort.

If students are above proficiency and have mastered the skill of cardinality and one to one correspondence. Then, the teacher can introduce the students to addition and subtraction with the marshmallows. For example, if students have 4 marshmallows on their plate at one time, as students to leave the 4 marshmallows on their plate, but add 2 more to their plate. Tell them to place the 2 marshmallows on the section of the plate that is designated with the number 2. Now, ask students how many total marshmallows do they have altogether on the plate. Students can count start at 4 and count until they have taken into account the 2 extra marshmallows. Students should recognize there are 6 marshmallows on their plate. (Teacher should start with lower numbers to add for these students).

Wrap Up:

Tell students they did an excellent job with counting their marshmallows and making their craft. Also, explain to the students that because they did such an excellent job, they can enjoy a real hot cup hot chocolate with marshmallows in it.

Assessment:

Formative: How does your assessment show individual measurability?

During the guided practice time teacher will be checking for individual progress by:

Teacher should explain to students that for every number I say, I am going to pick up marshmallow and place it on my plastic bag. (Model this one to one correspondence to students). Provide children the opportunity to do this (informal formative assessment).

Teacher should tell students to place their finger on the section that says 8. Once all students have their finger on the number 8 (informal formative assessment), teacher knows the children can associate the number 8 with the written numeral 8.

Tell students to count how many dots of glue teacher puts on the mug. Then ask students if I put this many dots of glue on my mug, how many marshmallows should I glue on my mug? (informal assessment). Then, tell students they need to write the written numeral in the blank on the mug. (Have an example with marshmallows already glued onto the craft, then ask students to count how many marshmallows are in the hot cocoa. Then, ask students how I could write that number.)

During the independent/practice time:

Formative Assessment: Students will be choosing how many marshmallows they would like to place on the plate. In order for students to do this, they must be able to find the written numeral on the plate and match it with the correct number of marshmallows.

Formative assessment: When students do the craft, the students must figure out how many marshmallows they want to put on their mug. Once they have figured out the amount of marshmallows they are putting on their mug, students must write the number of marshmallows

they are placing on their mug on the side of the mug. Students must also glue the number of marshmallows that match the written numeral onto the mug.

Summative: Include examples of what you would assess at the end of learning

At the end of this learning a summative assessment that could be done is a series of 3 questions. They are listed below.

1. Show students 10 marbles. Show students the number 10 on the piece of paper. Ask students what number is written on this piece paper that represents the number of marbles there are here.
2. Give students a handful of dinosaurs. Ask students how many dinosaurs are there altogether.
3. In the previous question, have students write the number of dinosaurs they counted altogether.

This summative assessment can take place one on one. This is not a written assessment, it is a verbal assessment. It should not be posed as an assessment to the students. Teacher should just ask the students these three informal questions while the students are playing. Below is the rubric that the teacher will assess students on.

Criteria	Level of Proficiency
Answers all 3 questions correctly	3
Answers 2 questions correctly	2
Answers one question correctly	1

Reflection:

This lesson went well with the kids. Each child really enjoyed the activity because of the hands-on elements throughout the activity. I think it went well to break up into two smaller groups. It is easier for me to differentiate my instruction when it is a smaller group. One thing that I would change about this lesson is I would incorporate more vocabulary into my instruction. For example, to provide students with an understanding of what addition means or subtraction means. Also telling students when we predict something we are guessing. These are some things that I would I alter when I teach this lesson in the future.