

<p>Unit 2</p>  <p>Week 1</p>	<p><i>Small Groups: Using Collections to Introduce Complex Classification</i></p> <p>Medium Support</p>	<p>Math SG 2</p>	<p>Standards: MELDS.M.OAT.PS.2 MELDS.M.MD.PS.1 MELDS.M.MD.PS.2</p>
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<p><i>Guiding Math Ideas:</i></p> <ul style="list-style-type: none"> ● Quantity- Collections: Grouping of Objects (Perceptive, Attribute) <p><i>Math Concepts from Unit Learning Progressions:</i></p> <ul style="list-style-type: none"> ● Grouping of objects and describing similarities and differences ● Describing sorting and classifying collections- Self-described or in response to Questions ● Using a number word or some form of counting to answer <i>How Many?</i>
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<p><i>Materials:</i></p> <ul style="list-style-type: none"> ● Grid from Small Group 1 ● Items collected from Nature Walk ● Photo of the filled grid from Small Group 1 ● Fall books on shelves for reference ● Counters ● Sticky- Notes and Marker 	<p><i>Math Vocabulary:</i></p> <ul style="list-style-type: none"> ● Organize: We put things in order to help us find them
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Preparation:

From Small Group 1, re-use the large grid and place on the floor in the Math Center. Re-use Nature Walk Items. Gather materials around the grid.

Procedure:

Introduce the activity.

We have a lot of interesting things in our basket and we have sorted them in some different ways. We found many things on our walk. We worked on Sorting it Out last time. Let's look at our collection again. Do you remember some of the ways we sorted these things when we played Small Group last time?

Dump out the basket full of items.

As children examine the items, ask questions that guide them into new ways to organize the items.

*Here is our big chart that we call a **grid**. I'm going to use it again to sort our collection. Let's take another look.*

Show the photo from Small Group 1. Children recall some groups.

Yes, last time we made a brown group and a big group. What are some different ways we could Sort it Out?

Children suggest ways, some of which may be the same and some different from those they used in Small Group 1.

Group and re-group the items, reflecting children’s thinking. Invite children to categorize things in any way they wish but ask them for reasons behind their groupings.

I see you have put all these things together in this part of our grid. Tell me what you are thinking.

Describe groups on sticky- notes and place them on the grid: Things that have dirt on them. Rocks.

Some children may begin to use 2 attributes:

You have made of group of things that are white and round.

Just as in Small Group 1, some children may be playing with the items, and not categorizing them.

Extend the activity by adding counting.

We have a lot of things in this group. I wonder how many?

Count with the children. Have children place one counter for each item in that section. *6 leaves are in this square.*

As the activity ends, take a photo of the grid, and then place the items back in the basket.

Children may finish at different times and can play with other attribute sets from the Math Center.

Strategies to Provoke Math Thinking:

- Encourage children to name attributes besides color and size as a way to describe more complex or less visible attributes. Writing down their categories helps children learn that items can be classified in multiple ways.
- Use Counters: Associate counting words with counters as they count the objects in a group. Counting is a secondary purpose to this activity but take every opportunity to encourage counting as a part of everyday activities and routines.
- Make cross-curricular connections-Math/Science: Classification is a foundational science skill. This activity also incorporates MELDS Science concepts, and prepares children for STEM activities in Units 5 and 6.

Documentation:

- Note those children who easily organize materials, and those who are overwhelmed by a large pile of various items. Support children who are beginning to sort and organize by providing small amounts of items that have only 1 or 2 attributes.
- Use the photo for your reference to play additional classification activities. What types of categories did children suggest? Which children are ready for sorting by 2 different attributes, such as short and blue things or rough and round things?

Provocation:

Use a category that a child has suggested: White or spotted things. Encourage re-grouping:
We have found some white or spotted things. I wonder-- if we look at the other groups, would we find some white and spotted things there too?