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Guiding Math Idea:

- Finding Math in Stories: Seriation; Sets, Creating Groups
- Problem Solving: Data collection and beginning analysis

Math Concepts From Unit Learning Progressions:

- Math words and math ideas appear in storybooks
- Counting groups of objects or persons and assigning a number name.
- Gathering data to solve problems
- Growing use of classification and sorting strategies [seriation]

Adaptations for Using Large Group In Alternate Schedule Slots:

- Solve a problem in your classroom that involves size or seriation. Use this story to talk about sizes and matching and solve problems. Line up different sized chairs and talk about how people need to be comfortable in their chairs and in your classroom. As an example, sit in a child-sized chair.
- Act out the story after reading the book.
- There is a winter version of this book: *The Three Snow Bears* by Brett. If you prefer, use this version of the story to match the season. The pictures are not as straightforward and simple, but the ideas of 3 and sizes are the same.

 Materials: Goldilocks and the 3 Bears As Retold by Delmege, Illustrated by Gavin Scott* seriated items (small medium large) to represent 3 bowls, 3 chairs, 3 beds several number 3s from math materials – wooden, plastic, magnetic, etc. chart paper and marker Peter's Chair from Unit 1 	 Math Vocabulary: big- something that is large small or tiny- something that is little. medium- something that is not big or little, but in between. solution: An idea for solving a problem.
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Preparation:

Assemble the items in groups of 3. If bowls, chairs, or toy beds are not available, use: small, medium and large rectangular prism blocks, wash rags, or towels or 3 sizes of paper to represent beds; 3 sizes of cubes or boxes for the chairs; cups or bowls from Dramatization. Write *Problems and Solutions* on the chart paper.

Intro to Centers:	<i>Spread out the groups of 3 things in front of you, along with the numeral 3.</i>
"Here is a story about a little girl who had a problem or maybe it was some bears who had a problemDo you know this story?"	
"In this story there is an important number. Does anyone know what it is?"	Read the book, being careful to point out the groups of 3 things. When reading about the different items (bowls, chairs, beds) use the show the gathered items. Explain the terms big/large, tiny/small, medium etc. as needed.
"I have some things here in front of me that we can pretend came from the story. Can you help me count them?"	Show the plastic numeral 3 and with the children count the groups of 3 items.
"Some things are small Some things are medium Some things are big."	Mix up the items and have children separate them. Children identify and seriate the items. Talk about the different sizes, note if children order them by size, etc.
"We have been talking about how math helps us solve problems. Is there a problem in this story that math could help us solve?"	Children name possible problems for Goldilocks. Write down on the chart paper. Ask the group for ideas about how math might help Goldilocks solve her problem.
"I'm going to write down our ideas on this paper that says Problems and Solutions . A solution is an idea for solving a problem."	S uggest ways that Goldilocks could have solved her problems in different ways: Not entered the house Waited until bears came home, etc. Asked the bears to share
	Write down the ideas from the group. Measuring the chairs before she tried them. Measuring the beds before she messed up the "too hard" and "too soft" ones, etc.

"I have an idea. Goldilocks ruined the tiny chair because she was too big for it. We have been talking about measuring and measuring tools in our classroom. I wonder, would measuring have helped Goldilocks solve her problem? How could math have helped her with the problem of finding the right size chair?"	Help children recall the story.
"We read another story about a child and a too small chair. Do you remember a story about a boy named Peter?"	Show the book Peter's Chair. Frame Peter's Chair story in terms of a problem. Talk about Peter's problem (he did not want to share his chair but it was too small for him.
"We can solve problems in a lot of ways, can't we? If you think of a problem that math can help us solve, tell me during Centers [or another time] and I will write it down on our Problem Solving Sheet."	Display the chart paper and add ideas from the children to discuss later, such as in LFOAI or SWPLM.

Strategies to Provoke Math Thinking:

- Linking Unit Concepts: Unit 2 had numerous activities for children to create small groups. Unit 3 featured small groups and featured the idea of subitizing. Other concepts that demonstrate growing skills across Units are: Associating a group with a number name; beginning understandings of time; and transitioning from rote to rational counting. Refer to Unit Overview documents to see how our math concepts build throughout the year.
- Continuity across Curricular Units: Peter's Chair had the same "problem" that Goldilocks presents—the chair was "too small" for Peter, and someday it would be "just right" for his new sister. Recall stories from the past and relate them to current stories to help children generalize and apply concepts such as relative size or number in multiple contexts.

Provocation:

• 3 is s a powerful image in fairy tales and legends- 3 Wishes, 3 Billy Goats, 3 Little Pigs. Create a "3s" stories with children. Create "story starter" blank notebooks. For instance, "Once upon a time there were 3....." Encourage children to write or tell their stories of "3"

*This version of Goldilocks has clear pictures of groups of 3 things, and not too much visual clutter, but any version of the book will do.