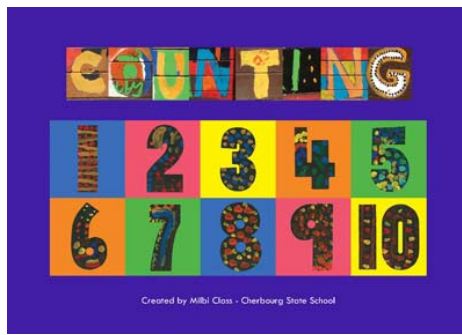# Teacher Track: Classroom Connections
Day 3: Math in Books

Agenda

- Ice Breaker: *Mouse Count*

- Video Analysis: *Mouse Collections* Research Lesson in PreK and K

- Counting Book Analysis

- Finding Good Math in Good Books

- Reflection

Here are some questions to help you analyze the mathematics of a counting book:

- *How high does the book count to? (1-10, higher)*

- *As the numbers change, are the illustrations cumulative (more join or leave the same group) or is each number a new set of things?*

- *Are any hierarchical relationships depicted in the illustrations (one smaller number embedded in a larger number)?*

- *Is zero used appropriately?*

- *If involving higher numbers, does the book introduce patterns or arrays or somehow reinforce the idea of grouping and place value?*

- *Does the book introduce separating and joining concepts (addition and subtraction)? Does it do so at fairly simple level of counting up or down by ones? Are counting-on strategies possible?*

- *Is the <u>counting embedded in a story</u> that helps make a math all around us connection?*

- *Is the counting <u>tied to another informational concept</u>, such as animal study?*

Finding Good Math in Good Books

Title: _____

Author: _____

What's the Math?

Identify specific BIG IDEAS of Math that this book might be well suited to use to introduce or develop understanding for the children in your classroom. Please be as specific as possible. (*For example, instead of stating "number sense" identify "composing and decomposing numbers up to ten," "making reasonable estimates," or …*)

Big Ideas in this Book

What are some open-ended discussion questions or problem situations I can ask that will trigger mathematical thinking or understanding?
(For example, every monkey in Caps for Sale has one hat. Which picture makes it easier to count how many - the one of the monkeys in the tree or the one of the man sleeping with his hats piled on his head? Why?)

What are some extending activities that will allow children to develop and construct mathematical understanding?
(For example, after reading Five Creatures, have children decide how many creatures live in their house and then draw and label a picture modeled after one in the book - collect into a classroom book.)

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Classroom Connections: Reflections

Day 3: Math in Books

Because of this session, my teaching will be informed, and I will…

Start doing —

Keep doing —

Stop doing —