

**Session 2 Kentucky PATTERNS
Logistics/ Pre Planning Need**

Item	Materials Needed
Presenters Outline	Markers, chart paper, Large post its for reflection (5x3) Some smaller
Powerpoints--	KCM facilitators Learning Lab 2 PPT
Handouts packet including <ul style="list-style-type: none"> • agenda, • notes page, Math all around reminder • powerpoint • research Lesson – • <i>napping house manipulatives</i> • 	Let's Do Math : Materials Pattern blocks or assorted pattern & attribute blocks, Pattern block template; Books: <i>Pete the Cat and Jan Brett, The Mitten plus Napping House</i>
Video:	<i>Focus on the Child Patterns plus Napping House Research Lesson</i>

For Associate Facilitators

Introductory narrated PPT

Readings

- MC Big Ideas Book: Patterns*
- chapter from *Don't Leave the Story in the Book*, Hynes-Berry 2011.
- chapter on Patterns From Teaching Numeracy, Language and Literacy with Blocks, A.Newburger & E. Vaughan,2006

PRESENTERS OUTLINE

Time	REFLECTIONS ON OUR PRACTICE	Rationale
30 min 8:30-9 PPT 1,2		<ul style="list-style-type: none"> • Joining the debriefing on the research lesson with post-its should make it easier for participants to be frank—since the comments are anonymous. • Breaking into small groups to look at a cluster of responses around one topic will assure that everyone will get a more in-depth chance to reflect and to see that their experience was shared by others. • Having participants indicate didn't do or not applicable in an anonymous fashion will reinforce that we are collecting data to analyze, not judging anyone
5 mn for posting 10 mn small group disc 15 mn sharing	<p>Post it reflections on People Sort research lesson</p> <p>4 chart papers with Headers posted around room.</p> <p>Split into groups who read a set of post-its on the same topic and then summarize the remarks.</p>	<p>As group enters, they use post-its provided to answer the 4 questions, put on the appropriate chart paper board.</p> <p>Encourage everyone to comment on all 4 points if the point doesn't apply, have them put up a smaller blank post-it—no names</p>

Readings

☐ *MC Big Ideas Book: Patterns*

☐ Chapter from *Don't Leave the Story in the Book*, Hynes-Berry 2011.

☐ Chapter on Patterns From *Teaching Numeracy, Language and Literacy with Blocks*, A.Newburger & E. Vaughan,2006

PRESENTERS OUTLINE

Time	REFLECTIONS ON OUR PRACTICE	Rationale
30 min 8:30-9 PPT 1,2	<p>Post it reflections on People Sort research lesson</p> <p>4 chart papers with Headers posted around room.</p> <p>Split into groups who read a set of post-its on the same topic and then summarize the remarks.</p> <ul style="list-style-type: none"> • What satisfied or delighted you when you did the Research Lesson, including how children responded, evidence of learning in their skill in observing, naming, and classifying ? • Any "tailoring" or adapting the lesson I did to make the lesson more appropriate for my class ? • Things I found challenging about doing the People Sort, something I might do differently another time • Comment on how you have become aware of opportunities to mathematize sorting activities in the daily life of the classroom or on how you see children observing, naming and classifying? 	<p>Joining the debriefing on the research lesson with post-its should make it easier for participants to be frank—since the comments are anonymous.</p> <ul style="list-style-type: none"> • Breaking into small groups to look at a cluster of responses around one topic will assure that everyone will get a more in-depth chance to reflect and to see that their experience was shared by others. • Having participants indicate didn't do or not applicable in an anonymous fashion will reinforce that we are collecting data to analyze, not judging anyone <p>As group enters, they use post-its provided to answer the 4 questions, put on the appropriate chart paper board.</p> <p>Encourage everyone to comment on all 4 points if the point doesn't apply, have them put up a smaller blank post-it –no names</p> <p>Facilitators circulate and listen in so as to be prepared to facilitate sharing</p>
9:00-10:15 75 minutes	<p>LET'S DO MATH—</p> <p>Let's Talk About It</p>	<p>Rationale</p> <p>Having participants work in small groups gives everyone a chance to engage in problem-solving and constructing understanding about patterns</p> <p>Large group share out and then debriefing reinforces the learning community;</p> <p>5 activities are designed to bring out different features of patterns</p>
5 PPT 3,4 5, 6 PPT 7, 8	<p>Warm up: Big Idea: Repeating patterns are based on a SET of Attributes: 3 needed; allow predictability</p>	<p>People Pattern warm up with whole group (discuss # of Iterations needed)</p> <p>1st time we do ask; what's my rule? Then get group to review</p> <p>2nd We do and ask: Who will be next (extend) and then snap and clap it (translate)</p> <p>3rd Ask for volunteer: who can make another people pattern group confirms by extending and then someone does movement or sounds to extend.</p> <p>Big Idea/Skill Points Patterns need 3 repetitions, use attributes—simplest use one: allow predictability—can be generalized</p>

	<ul style="list-style-type: none"> things I found challenging about doing the People Sort, something I might do differently another time comment on how you have become aware of opportunities to mathematize sorting activities in the daily life of the classroom or on how you see children observing, naming and classifying? 	
9:00-10:15 75 minutes	LET'S DO MATH— Let's Talk About It	Rationale Having participants work in small groups gives everyone a chance to engage in problem-solving and constructing understanding about patterns Large group share out and then debriefing reinforces the learning community; 5 activities are designed to bring out different features of patterns
5 PPT 3,4 5, 6 PPT 7, 8 10minutes to prepare: 15 mn Share plus debrief Gr 1 PPT9 Gr 2) PPT 10 Gr. 3 PPT 11,12 Gr 4, PPT 13 Gr 5 PPT 14	<p><i>Warm up: Big Idea: Repeating patterns are based on a SET of Attributes: 3 needed; allow predictability</i></p> <p><i>Small Group Work: 5 groups each does a different kind of activity to present to the whole group 5 to present, 10 to</i></p> <p>About 8 minutes for us to pull out Key points about pattern –bring up slide after presentation</p>	<p>People Pattern warm up with whole group (discuss # of Iterations needed) 1st time we do ask; what's my rule? Then get group to review 2nd We do and ask: Who will be next (extend) and then snap and clap it (translate) 3rd Ask for volunteer: who can make another people pattern group confirms by extending and then someone does movement or sounds to extend. Big Idea/Skill Points Patterns need 3 repetitions, use attributes—simplest use one; allow predictability—can be generalized 5 groups 1) Do 3 variations of a pattern using pattern blocks (or assortment of pattern blocks and attribute blocks –one simple pattern but not using color; --one using blocks but deliberately tricky (use multiple attributes) One using pattern block template Big Idea/Skill Points, use attributes—simplest use one; more complex use several; down play color, 2)) Be Pattern Detectives for Jan Brett's The Mitten Big Idea/ Skill feature—mathematizing patterns in texts and illustrations in children's lit 3) Write a new <i>Pete the Cat</i> story set in a preK classroom. Explain how the story is patterned. Big Idea/Skill Points Patterns are part of children's lives, found in the routines verbal—feature of many early childhood books (cf Brown Bear, Brown Bear) 4) Perform a classic children's action song (<i>Old McDonald, Hokey-Pokey</i>) o& do a variation --then explain how music and motion are patterns Big Idea/Skill Points music & movement pattern—supports memory ,multiple modes of representation deepen understanding 5. . Act out <i>Napping House</i> Big Idea/Skill Points growing pattern</p>
10:30-11:00	WHAT DOES UNDERSTANDING LOOK LIKE Developmental Trajectory	RATIONALE The presentations of the 5 pattern activities should have jump-started the participants in constructing their understanding of the Big Ideas and Skills involved in Patterns In discussing the developmental trajectory, participants need to see that the movement from recognizing to extending to generating a pattern is a cycle that repeats as patterns get more complex Videos show children in the process of constructing or beginning to construct understanding of pattern ; 1st child in each set is at "not yet" stage and 2nd one has it.
Begin with 5	<ul style="list-style-type: none"> developmental trajectory; 	Turn and talk –recognizing how much pattern is all around us

<p>Gr 2) PPT 10</p> <p>Gr. 3</p> <p>PPT 11,12</p> <p>Gr 4,</p> <p>PPT 13</p> <p>Gr 5</p> <p>PPT 14</p>		<p>illustrations in children’s lit</p> <p>3) Write a new <i>Pete the Cat</i> story set in a preK classroom. Explain how the story is patterned. Big Idea/Skill Points Patterns are part of children’s lives, found in the routines verbal—feature of many early childhood books (cf Brown Bear, Brown Bear)</p> <p>4) Perform a classic children’s action song (<i>Old McDonald, Hokey-Pokey</i>) o& do a variation --then explain how music and motion are patterns Big Idea/Skill Points music & movement pattern—supports memory ,multiple modes of representation deepen understanding</p> <p>5. . Act out <i>Napping House</i> Big Idea/Skill Points growing pattern</p>
<p>10:30-11:00</p>	<p>WHAT DOES UNDERSTANDING LOOK LIKE</p> <p>Developmental Trajectory</p>	<p style="text-align: right;">RATIONALE</p> <p>The presentations of the 5 pattern activities should have jump-started the participants in constructing their understanding of the Big Ideas and Skills involved in Patterns</p> <p>In discussing the developmental trajectory, participants need to see that the movement from recognizing to extending to generating a pattern is a cycle that repeats as patterns get more complex</p> <p>Videos show children in the process of constructing or beginning to construct understanding of pattern ; 1st child in each set is at “not yet” stage and 2nd one has it.</p>
<p>Begin with 5 minute Turn and Talk—</p> <p>10 min discussion</p> <p>PPT 15</p> <p>some report out then use PPT 16, 17,18</p> <p>VIDEO 20</p> <p>PPT 19</p> <p>worksheet</p>	<ul style="list-style-type: none"> • evelopmental trajectory; • attern units and Structure • ring in building blocks Picture from Newburger 	<p>Turn and talk –recognizing how much pattern is all around us</p> <p>Let’ s Talk discussion, record on chart paper key terms about Ideas and Skills</p> <p>Then PPT Big Ideas then Dev trajectory</p> <p>Focus on the child:</p> <p>Repeating Pattern 1:50 & 4</p> <p>As you watch do you see how the developmental trajectory unfolds?</p> <ul style="list-style-type: none"> • "Zaria, preschool doesn’t get it (can’t copy) • emiah sees and can copy & extends with help • rendan K-ELL has trouble naming & extending much more complex pattern but eventually gets it <p>Video of Research Lesson Napping House</p> <ul style="list-style-type: none"> •
<p>11:10- 11:30</p> <p>6 in video</p> <p>10 plan</p> <p>Video 11:30</p>	<p>TRY AND APPLY Research Lesson</p> <p>Use “Instructional Decision</p>	<p>Napping House Research Lesson</p> <p>Planning form--</p>
	<p>Reflection</p>	

VIDEO 20 PPT 19 worksheet		Video of Research Lesson Napping House <ul style="list-style-type: none"> •
11:10- 11:30 6 min video 10 plan Video 11:30	TRY AND APPLY Research Lesson Use "Instructional Decision	<i>Napping House Research Lesson</i> Planning form--
	Reflection	