# Lesson Plan for KNP Activity <br> S 2209.5: Problem Solvers 

| Teacher Planning Notes: |
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| Strand: Structuring |
| KNP Activity Link with access to Printables and Student Instructions: <br> Lknp/activity.php?id=2209.5\&prefix=S |
| Numeracy Target: Facile structures to 20 <br> Numeracy Targets Chart |
| Fluency Benchmark: KY.2.OA.2 Fluently add and subtract within 20. |
| Kentucky Academic Standard(s): KY.1.OA.1, KY.1.OA.6, KY.1.OA.8 |
| Student-Friendly Learning Target: I am learning to model and solve word problems in the <br> range of 1-20. |
| Suggested Student Grouping(s): whole group, small group, partners, or independent work |
| Materials: question cards, number and symbol cards, bead rack |
| Activity Description: Students will draw a question card, build the equation with numeral and <br> symbol cards, then solve for the unknown quantity. Students can use a 10 or 20 bead rack to <br> support their thinking and to justify their solution. |

Teacher Notes: The goal of this activity is for students to represent and solve word problems, using numbers to represent known quantities and symbols to represent unknown quantities within 20. Students should have a good understanding of the part-part-whole relationship of numbers for this activity, and should have well-developed strategies for interpreting word problems. Students have the support of the bead rack in this activity to help with computation, if needed, and to use to demonstrate their thinking. Teachers are encouraged to create additional questions to supplement the questions provided within the activity. Using classroom and/or school specific questions reinforce the understanding of computation while using real-world examples that are relevant to students. Other extensions for this activity could include student-created questions to share with partners or small groups. Problem cards are labeled with letters indicating the increasing level of complexity. Cards labeled with letter A address kindergarten levels of master. Cards labeled with letter B address first grade levels of master. Cards labeled with letter C address second grade levels of master. First grade students will continue to work with card type A while progressing to mastery to card type B. Second grade students will work with card type A and B while progressing to mastery of card type C. Students should not be restricted to a specific card type with they are ready to advance. Be flexible and allow they to work with what card type will challenge them.

Evidence of Learning (Diagnostic Assessment of Progress): Verbally pose a math problem that involves situations of adding to, taking from, putting together, taking apart, and comparing in the range of 1-20, with unknowns in all positions and ask student to say or write an equation that represents the problem and solve.

KNP ID \#S 2209.5


Kentucky Numeracy Project
www.kymath.org
kcm@nku.edu

