

# Lesson Plan for KNP Activity

## S 2295.5: Quick Images

### Teacher Planning Notes:

**Task Group Number:** 2295

**Task Group Name:** Quick Images

**Strand:** Structuring

**Activity Level and Color:** 5 Pink

**KNP Activity Link with access to Printables and Student Instructions:**

</knp/activity.php?id=2295.5&prefix=S>

**Numeracy Target:** Facile structures to 20

[Numeracy Targets Chart](#)

**Fluency Benchmark:** KY.2.OA.2 Fluently add and subtract within 20.

**Kentucky Academic Standard(s):** [KY.2.OA.2](#)

**Student-Friendly Learning Target:** I am learning to fluently add two sets of dots or beads when each set is 10 or less.

**Suggested Student Grouping(s):** various

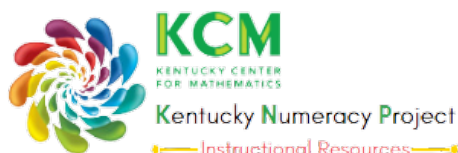
**Materials:** 10 frames (1 to 10 - 2 each) or bead rack with 2 rows of 10 beads

**Activity Description:** Flashed images: Place two 10 frames under a cover. Briefly lift cover to show the pair. Ask student to say (or write) the total number of dots and the number of dots on each card. Ask students how they determined the total. Look for strategies that use known facts and reasoning using groups. For example, suppose a pair of 10 frames is shown with 8 dots on one and 6 on the other. A student might reason "If I move one from the 8 to the 6 it's the same as 7+7 which is 14." Or a student might reason "It's like adding 10 + 6 (which is 16) but two less. So it's 14." If student struggles or asks to see card again, flash the pair of cards again. Alternatively, totals may be shown by placing each quantity on a row of a double bead rack.

**Teacher Notes:** If students are working on a bead rack without a teacher, the students can use a 0 to 9 die to determine how many beads to place on each row. If the teacher is generating the tasks, the teacher can choose problems to bring out specific ideas (such as adding through 10 or near doubles). The teacher should invite students to share multiple strategies for working out each problem. If using the bead rack, the student or teacher can move beads to help illustrate a strategy. The interactive website link is for a virtual bead rack. With this bead rack, the teacher can control the number of rows (up to 10 rows) and the amount on each row. Click on the beads or enter a number in the box to move beads on the rack. The matching numeral can be shown by clicking "show amount" or turned off by clicking "hide amount". Click "hide all" to hide the beads of the row. When hidden, click "subitize" to briefly show the row. A minor drawback is that the subitize appears to work for only one row at a time. However, the webpage can be minimized to "screen" rack.

**Evidence of Learning (Diagnostic Assessment of Progress):** Using a double bead rack\*, flash 14 (shown as 8 and 6). Ask student "What do you see?" If needed, prompt student to state the total and the amounts on each row. Repeat showing 17 (as 9 & 8) and 13 (shown as 5 and 8). If desired, continue with other amounts. Look for explanations that show student is not counting by ones to determine the total.

**KNP ID #S 2295.5**



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