Grade K/ 1	**Winding Game- Subtracting within 10 or 20 (Comparison Model for Subtraction focus)**
Common Core Standard	K.OA.2 Solve addition and subtraction problems (written or oral), and add and subtract within 10 by using objects or drawings to represent the problem. 1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem 1.OA.3 Apply properties of operations as strategies to add and subtract. For example, if 8 + 3 = 11 is known, then 3 + 8 = 11 is also known (Commutative Property of Addition); to add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12 (Associative Property of Addition). Students need not use formal terms for these properties.
1. Shared event: What might be the introduction to the task and description of the task the students will be experiencinev;/[f,,g,km tbgw8u8u89huu4884i8 ig?	**Kindergarten-** Two teams of students will be formed. The first team to go will choose a number card (6-10) to "Wind" first. Then the first student will walk that number beginning at the starting point. The second winder will roll a six-sided die to create the comparison (subtraction) problem and "wind" that number. Example: Student A chooses number card "7" and winds to the 7th chair and sits. Student B rolls the dice and gets a "6" and winds to the 6th chair and sits. The goal for the opposite team is to compare the difference between the two winds- essentially 7-6=1 however using a comparison model for subtraction instead of the removal method. **First Grade-** Same as Kindergarten activity, however students will possibly "wind" around two times forming numbers up to 20 instead of 10. Number cards will contain number 9-20 and will use a 10 sided die.

2. Picture or model: What types of pictures might you see?	Students may draw pictures of: ● Chairs ● Students walking around the chairs ● Students rolling die/drawing number cards ● Students counting chairs
3. People-talk: What do we think students are going to say about the shared experience?	Students may write ● We counted ● Ten chairs ● Walked around chairs ● Picked a number ● Rolled dice
4. Feature-talk: What terms, ideas, comments, do you think the students will bring out and what are the mathematical ideas you hope to flush out?	Count, ones, more, less, subtract, minus, behind, in front
5. Symbolic representation: What are some possible symbolic representations that may result from the feature talk?	Number Sentence - Example: 8 - 6 = 2/ 18-6=2 Drawing circle of 10 chairs and showing the movement of the students Drawing a number line and showing the "jumps" Drawing semi-circles to show the difference in comparison
Materials needed: Paper, pencil, clipboards 10 Chairs with Numbers Number cards or tiles 6 sided dice / 10 sided dice	

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