

Fairfield Public Schools Balanced Math Instructional Model

<p>Materials: Fluency: Ten-Frames, Numeral Cards, Attendance dots(with child’s photo or name on each – optional), Pocket chart, easel, or tack board for displaying the name cards. Lesson: Clothespin Graph or the Graphing Mat</p>	
Fluency Work (1-5 min.)	Repeat Attendance and Count-Around from Lesson 2. Ask class, how many students are here? T&T and discuss how many are here and how you know.
Teaching Point	Counting and recording the count (including graphs) 1:1 Correspondence and cardinality Counting sequence Turn & Talk (T&T)
Mini-Lesson	Tell the students that today we will be using numbers to find out a little more about who we are. Explain that the attendance ten frames help us see and graph how many students are in school and how many are absent. Tell students that today we will be asking ourselves questions and graphing results that will focus on a single attribute. For example, students are either wearing red or not wearing red.
Focus Questions for APS	What do you notice about us? How many are... and how many are...? How do you know how many there are?
Active Problem Solving	<p>Place a large sorting circle on the floor (or use tape to create a square or use on carpet, off carpet). Begin by asking students to be in the sorting circle if they have the attribute and outside the circle if they do not. Then provide students in each group with a clothespin to put on the clothespin graph. (An alternative to the clothespin graph is to provide students with squares cut out of construction paper and tape, glue or place on a bar graph on the floor. – <i>Note: It is very important to use the same sized squares and spacing between them when placing them on the graph or use the graphing mat or something similar.</i> Ask them to figure out how many have the attribute and how many do not. Provide them with time to T&T to share their thinking with each other before sharing as a group. Then ask how they know how they determined the total number of each. Many may use a counting strategy, while others may see number groupings at a glance. Encourage students to repeat the reasoning of their peers, like, “Josh, can you tell us what Sandy just said?” *Display numerals under each part of the graph to match the number of students who have the attribute and those who don’t. Emphasize the strategies students use. Then ask “Which has more? Those with the attribute or those without and how do you know.” Elicit different questions to graph from students and repeat the process. Below are some examples:</p> <ul style="list-style-type: none"> • Chose all the children wearing a certain color. Have the rest of the classroom count how many children are wearing that color. Have them come up and stand in the front and tap each child as you count and stand in the sorting circle. • Children with ponytails. • Children wearing shoes with laces, without laces. How many shoes? Notice that there are two shoes for one child. Try and count by two’s. • Children with pockets, no pockets <p>Try other ways of counting friends so each child has a chance to come to the front of the room in each group.</p>

Differentiation Suggestions	For students who may not be using 1:1 correspondence, provide them with ample opportunities to count small numbers by physically touching or moving objects/people.
Assessment Point	<p>Keep anecdotal records on who demonstrates an understanding of The counting sequence (1-5), (1-10), (beyond 10) 1:1 correspondence (is tagging with synchrony saying the number names once as each object is touched) Cardinality – after counting can answer the question “So how many do you have?” Note student behaviors to address and address in future lessons: support their listening to their peers, helping each other, keeping an ‘inside voice’, appropriately handing school materials...</p>
Reconvene & Focus Q.	Reconvene the student in the meeting area. Ask the students what we learned about ourselves today. Encourage them to use numbers to support their thinking. Encourage other students to rephrase what others have said in their own words.
Additional Activities / Extension	<p>These activities may be completed in addition to the formal lesson. As the duration of math lessons increases, this extension is optional and can be done at any point in the day.</p> <p><i>Free exploration of math manipulatives: Students may explore math manipulatives at their work spaces. This time will give students the opportunity to become familiar with classroom math materials that will be used in future lessons to learn math concepts.</i></p> <p>Tell the students that today they will have an opportunity to work with a new manipulative called <u>colored tiles</u>.</p> <ul style="list-style-type: none"> • <i>Today you will explore colored tiles. Soon you will use them to do math work.</i> • <i>What can we do with these? What do you notice?</i> (children may offer ideas such as making patterns, towers, stacking, sorting, or building) <p>Then tell them that there are some colored tiles at their work spaces and that you are going to give them some time to build with them. Tell them that you will be asking them to share what they made when you reconvene.</p> <p>Explain to the students your expectations for how to handle math materials, e.g. sharing and using materials carefully. Discuss your rules for how to leave the meeting area and your expected behaviors for walking to and from the tables.</p>