

Counting Jar

Math Focus Points

- ◆ Developing strategies for accurately counting and keeping track of quantities up to 12
- ◆ Creating an equivalent set
- ◆ Representing quantities with pictures, numbers, and/or words

Today's Plan		Materials
1 <small>ACTIVITY</small> Introducing the Counting Jar	 5–10 MIN  CLASS	<ul style="list-style-type: none"> • Counting Jar*
2 <small>MATH WORKSHOP</small> Counting and Representing Quantities 2A Counting Jar 2B <i>Grab and Count</i> 2C Making a Counting Book	 20–30 MIN	<ul style="list-style-type: none"> 2A • Counting Jar* from Activity 1 • Materials for the Counting Jar (as you have it set up) 2B • M12* • Materials from Session 1.2, p. 33; bins of smaller items 2C • Materials from Session 1.1, p. 26
3 <small>DISCUSSION</small> Checking In	 5 MIN  CLASS	
4 <small>SESSION FOLLOW-UP</small> Practice		<ul style="list-style-type: none"> • <i>Student Math Handbook Flip Chart</i>, p. 20

*See *Materials to Prepare*, p. 23.

Classroom Routines

Today's Question: Are you a boy or a girl? On chart paper, create a vertical two-column table entitled "Are you a boy or a girl?" with the label "Boy" at the bottom of one column and "Girl" at the bottom of the other. Have students write their names above the appropriate label. Count the responses as a class. After counting, have a short discussion about the results of the survey.

Teaching Note

- 1 **Counting Jar** The *Student Math Handbook Flip Chart* provides visual cues that can help students remember the steps of this activity.

1 ACTIVITY

Introducing the Counting Jar



5-10 MIN CLASS

Place five red and three blue square tiles in the Counting Jar and show it to students. Because the Counting Jar should be a familiar activity by this point in the school year, students should need only a brief review of how this activity works in your classroom.

I've put a set of objects in the Counting Jar. Your job is to visit the jar at some point over the next few days and find out how many objects are in it. Then make a set of your own that has the same number of objects, and record what you found out.

Take a minute to discuss strategies for figuring out how to write a number.

Suppose I counted and I thought there were six things in the jar, but I didn't know how to write a six. How could I figure out what a six looks like?

Students might say:



"I could look at the calendar and find a six."

As you discuss students' ideas, be sure to point out other places in your classroom—the class number line, the 100 Chart, the number line at the bottom of the Counting Jar poster—where students can find the written numbers in order. Model, or have students model, counting on one or more of these tools from 1 to 6. 1

2 MATH WORKSHOP

Counting and Representing Quantities



20-30 MIN INDIVIDUALS

Explain that the following three activities are available during this Math Workshop. Remind students what each activity entails, what materials are required, and where they are located.

2A Counting Jar



INDIVIDUALS

Students count the objects in the Counting Jar—a set of five red and three blue square tiles. They make a set of the same size and then find a way to record what they found out. 2

ONGOING ASSESSMENT: Observing Students at Work



Students count a set of objects, create an equivalent set, and record their work.

- **How do students count the objects in the jar?** Do they organize the objects in any way? Do they know the sequence of number names? Do they count each item once and only once? Do they double-check?
- **Do any students use the two subsets to figure out the number in the jar (e.g., “5 and 3 more is 5, 6, 7, 8”)?**
- **How do students create an equivalent set?** Do they think, “The Counting Jar has eight. I need eight tiles. One, two, three . . .”? Do they recreate the Counting Jar set, matching them one to one? Do they double-check?
- **How do students record their work?** Do they draw a picture of the items?

As you observe, look for students who sort the tiles into lines of each color to count them. You will refer to this strategy during the discussion at the end of Session 1.6.

2B Grab and Count



INDIVIDUALS

For complete details on this activity, see Session 1.2, page 34.

DIFFERENTIATION: Supporting the Range of Learners



Extension Students who are ready to count slightly larger quantities can grab and count materials that result in larger handfuls such as marker caps, rocks, or buttons.

2C Making a Counting Book



INDIVIDUALS

For complete details on this activity, see Session 1.1, page 28.

Teaching Note

- 2 **Assembling a Portfolio** Because students do Counting Jar in every unit, you will have an opportunity to see students’ growth over time. Therefore, have students record their work on a piece of paper you can later collect and put in their portfolio.

3 DISCUSSION

Checking In



Take this opportunity to discuss any difficulties that you noticed while observing students at work. The topic may be mathematical in nature, such as a strategy you would like all students to consider, such as lining up objects to count them; or a common error or misconception that you would like students to discuss, such as counting the number of red tiles and the number of blue tiles in the Counting Jar but not finding the total number of tiles.

The difficulty may also be logistical, such as reminding students of the steps involved in the Counting Jar activity; or management-related, such as noise level, making choices, and working productively during Math Workshop.

Other alternatives include checking in with students about which activities they have been choosing (e.g., “Thumbs up if you worked on your Counting Book today. Thumbs up if you worked on *Grab and Count*. Thumbs up if you visited the Counting Jar.”), or asking about students’ progress with a particular activity (e.g., “Thumbs up if you’ve worked on the Four page, the Five page, etc. Raise your hand if you think your Counting Book is finished.”).

4 SESSION FOLLOW-UP

Practice



Student Math Handbook Flip Chart: Use the *Student Math Handbook Flip Chart* page 20 to reinforce concepts from today’s session. See pages 176–181 in the back of this unit.