Today's Question

Collecting, representing, and interpreting information are ongoing activities in our daily lives. In today's world, organizing and interpreting data are vital to understanding events and making decisions based on this understanding. Because young students are natural collectors of materials and information, working with data builds on their natural curiosity about the world and people.

Today's Question offers students regular opportunities to collect information, record it on a class chart, and then discuss what it means. While engaged in this data collection and analysis, students are also counting real, meaningful quantities (How many of us have a pet?) and comparing quantities that are significant to them (Are there more girls in our class or more boys?). When working with questions that have only two responses, students explore part-whole relationships as they consider the total number of answers from the class and how that amount is broken into two parts.

Today's Question is introduced in the first unit of the kindergarten curriculum, *Mathematical Thinking in Kindergarten*. The basic routine is described here, followed by variations. Plan to use this routine throughout the school year on a weekly basis, or whenever a suitable and interesting question arises in your classroom.

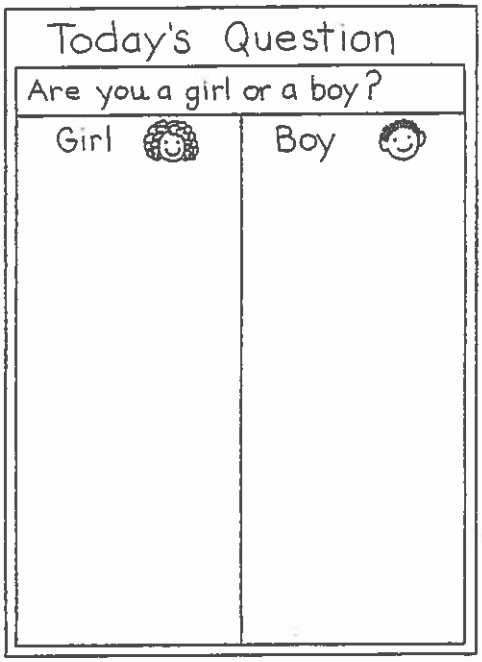
Materials and Preparation

Prepare a chart for collecting students' responses to Today's Question. If you plan to use this routine frequently, either laminate a chart so that students can respond with wipe-off markers, or set up a blank chart on 11-by-17 inch paper and make multiple photocopies. The drawback of a laminated wipe-off chart is that you cannot save the information collected; with multiple charts, you can look back at data you have collected earlier or compare the data from previous questions.

Make a section across the top of the chart, large enough to write the words *Today's Question* followed by the actual question being asked.

Mark the rest of the chart into two equal columns (later, you may want three columns). Leave enough space at the top of each column for the response choices, including words and possibly a sketch as a visual reminder.

Leave the bottom section (the largest part of the chart) blank for students to write their names to indicate their choice. Your chart will look something like this:



Choosing Questions

Especially during the first half of the school year, try to choose questions with only two responses. With two categories of data, students are more likely to see the part-whole relationship between the number of responses in each category and the total number of students in the class.

As your students become familiar with the routine and with analyzing the data they collect, you may decide to add a third response category. This is useful for questions that might not always elicit a clear yes-or-no response, such as these:

Do you think it will rain? *(yes, no, maybe)*

Do you want to play outside today? *(yes, no, I'm not sure)*

Do you eat lunch at school? *(yes, no, sometimes)*

As you choose questions and set up the charts for this routine, consider the full range of responses and modify or drop the question if there seem to be too many possible answers. Later in the year, as students become familiar with this routine, you may want to involve them in organizing and choosing Today's Question.

Questions About the Class With Today's Question, students can collect information about a group of people and learn more about their classmates. For example:

Are you a boy or a girl?

Are you 5 or 6 years old?

Do you have a younger brother?

Do you have a pet?

Did you bring your lunch to school today?

Do you go to an after-school program?

Do you like ice cream?

Did you walk or ride to school this morning?

Some teachers avoid questions about potentially sensitive issues (Have you lost a tooth? Can you tie your shoes?), while other teachers decide to use this routine to carefully raise some of these issues. Whichever you decide, it is best to avoid questions about material possessions (Does your family have a computer?).

Questions for Daily Decisions When you pose questions that involve students in making decisions about their classroom, they begin to see that they are collecting real data for a purpose. These data collection experiences underscore one of the main reasons for collecting data in the real world: to help people make decisions. For example:

Which book would you like me to read at story time? (Display two books.)

Would you prefer apples or grapes for snack?

Should we play on the playground or walk to the park today?

Questions for Curriculum Planning Some teachers use this routine to gather information that helps them plan the direction of a new curriculum topic or lesson. For example, you can learn about students' previous experiences and better prepare them before reading a particular story, meeting a special visitor, or going on a field trip, with questions like these:

Have you ever read or heard this story?

Have you ever been to the science museum?

Have you ever heard of George Washington?

For questions of this type, you might want to add a third possible response (*I'm not sure* or *I don't know*).

Discussing the Data

Data collection does not end with the creation of a representation or graph to show everyone's responses. In fact, much of the real work in data analysis begins after the data has been organized and represented. Each time students respond to Today's Question, it is important to discuss the results. Consider the following questions to promote data analysis in classroom discussions:

What is this graph telling us?

What do you notice about this graph?

What can you tell about [the favorite part of our lunch] by looking at this graph?

If we went to another classroom, collected this same information, and made a graph, do you think that graph would look the same as or different from ours?

Graphs and other visual representations of the data are vehicles for communication. Thinking about what a graph represents or what it is communicating is a part of data analysis that even the youngest students can and should be doing.