

Kindergarten Calendar Time

Grade Level

Kindergarten

Overview

The regular use of a calendar time routine is important for the development of students' number sense, flexibility, and fluency, which will support students' performances on any mathematical task. The calendar math activities suggested here cover routine topics such as counting, time, money, positional words, patterns, tallying, and graphing. Even though there are specific units for each of these topics taught in Kindergarten that emphasize key standards and big ideas at specific times of the year, these topics also need to be addressed on an ongoing basis. This can be done through the use of daily calendar math time experiences.

Key Standards

The majority of the Kindergarten math standards can be addressed during daily calendar math time experiences. It is essential to provide these daily types of experiences throughout the school year in as many different tasks and activities as possible in order to stress the natural connections that exist among mathematical topics.

Possible Materials

- Large number line over board that has both numerals 0-10 and dots to represent the amount
- 99's chart (0-99) and a chart with the numbers 100-199
- Basic calendar with interchangeable month strips
- A variety of shapes (circles, triangles, rectangles, etc) in numerous colors and sizes to be used for placing on the days of the week in some sort of abab, aabb, abba, etc. pattern (the pattern changes each month) Also need some special way to mark any special events that occur on certain days of the week and months of the year, such as birthdays and holidays
- Days of the week strips (Mon., Tues., Wed., etc) to be placed on the following statements...
- Yesterday was _____ ; Today is _____ ; Tomorrow will be _____
- List of the 12 months of the year
- Poster of the four seasons of the year.
- Straws to bundle and put in the correct place value spot-ones, tens, hundreds (add a straw every day; keeping track of the number of days in school)
- 3 Boxes or cups, labeled as ones/tens/hundreds to hold straws
- Space for recording numbers and writing addition/subtraction sentences
- Large coins- 2 of each so you can show front and back of coins (penny, nickel, dime, quarter)
- Money Chart and coins for counting out the number of days you have been in school and for modeling addition and subtraction sentences
- Posters of daily and weekly class schedules.
- Space for pictures and/or graphs to be used to show what is being counted for the day.
- Objects (buttons, unifix cubes, beans, etc) that can be counted and then quantity represented as pictures on a class picture graph.

Task

Calendar time occurs daily in kindergarten classrooms. The students will sit on the floor in front of the bulletin board or wall space that has the calendar math components displayed. Everything needs to be easily accessible to students (i.e. at a height they can reach). Students should be actively engaged by participating in the answering (and eventually asking of) the questions that go along with calendar math time (see list below). Additionally, when appropriate, manipulatives (see above materials list) and technology should be used to enhance student learning.

During calendar discussion time, it is important to remember that students need many opportunities to revise their thinking based on teacher feedback, peer feedback, and self-assessment and reflection. This type of daily discussion and conversation is an excellent way to differentiate instruction. It allows each child to develop their own understanding of these various mathematics concepts at their own pace.

Sample Questions and Solutions

- Who knows what month we are in? What is the date? How did you figure that out? (Use the calendar)
- Who can tell us what season is it right now? What helped you decide it is _____? (Look at the calendar, know what month it is, notice the weather)
- How many days have we been in school? So what does that make today? How did you know that? (I counted up to the next number)
- Why do we need to be able to count objects? (Counting tells how many things are in a set. When counting, the last number word names the quantity for that set)
- How do we use numbers every day? How do we show these numbers? Why would I need to be able to read number words? (A number helps us know how much we have or gave away or need, etc. Numbers can be represented by a numeral, a word, and a set of objects.)
- In what way are numbers related to each other? (Numbers are related to each other through a variety of number relationships. For example, 6 is one more than 5 and 4 less than 10, is composed of 3 and 3 as well as 4 and 2, and can be recognized quickly in patterned arrangements of dots, can be six pennies or one nickel and one penny, etc)
- Is a number closer to 0, 5 or 10? How close? How did you figure that out?
- Why would we use 5 and 10 as benchmarks? (They are easy numbers to count by, makes it a faster/quicker way to count if you have a lot of stuff to count!)
- At what times do events occur during our day such as breakfast, lunch, dinner, bedtime? (morning, afternoon, night)
- What events happen daily at school? (reading, writing, math, lunch, recess)

- How would you decide whether these things happen in the morning time of our day or the afternoon time of our day?
- What is the order of the daily events at school? What comes first, second, third, last?(this will vary depending on your daily schedule)
- When do we attend _____ (fill in with specific event such a music, PE, etc.)?
- Why do we estimate? (To help us know what our answer should be close to, to know what is a reasonable and unreasonable answer)
- When would an estimate be a correct answer? (When we don't need to know an exact amount, like about how much candy should I buy to hand out on Halloween)
- How can I use a picture graph to show information?

Assessment Ideas

Assessment will be ongoing and take place on a daily basis, during calendar math time discussions. Students should demonstrate that they are able to...

- Tell time of day when daily events occur (morning, afternoon, or night).
- Order daily events correctly.
- Name of the day of the week when weekly events occur according to a class schedule.
- Tell what month it is currently
- Identify the 12 months of the year and the four seasons of the year
- Rote count to 30.
- Provide an example of their understanding of one-to-one correspondence when counting in order up to 30.
- State the total amount in a set after counting it.
- Count on and/or back from a number of objects.
- Recognize quantities of objects 1 to 20 in terms of benchmark numbers 5 and 10. .
- Group objects by 5's and 10's.
- Count objects and show the quantity by putting pictures on a class picture graph.