Tick Tock

Companion Text: The Jakry Kids: Curiosity Shop, by Lin Jakary & illustrated by Ryan Olson
Subject Area & Grade Level: Mathematics, 1st Grade
Materials: Digital clock, analog clock

Objectives

After this lesson, students will be able to:

- Compare and contrast digital and analog clocks
- Tell time to the hour using an analog or a digital clock

Activity

Begin this lesson at the beginning of the school day, and end it near the end of the day.

Ask students to raise their hands if they know how to tell time. If there are raised hands, call on a few students, and ask them to briefly describe how they learned how to tell time in a few sentences.

Tell students that we are going to talk about telling time today. Read the story once without stopping. Ask students to guess how many hours passed in the story (roughly 3pm to 7pm= 4 hours). Then, tell students that there are many different kinds of clocks that can be used to tell time. Return to page 8 and direct students' attention to the clocks on the wall. Ask them if they recognize any particularly interesting clock that works differently than the other clocks (the cuckoo clock). Ask if anyone has ever seen a cuckoo clock in real life. Tell students that today, you are going to teach them about two different clocks (as you name them, hold them up)—an analog clock with line marks for all 60 minutes, and a digital clock.

Describe that the "sticks" on the analog clock are called "hands," and that the mark in the middle of the digital clock is called a "colon." Ask students to offer comparisons and contrasts of the two types of clocks. Comparisons: They both have numbers; they both tell time; they both show hours and minutes. Contrasts: The analog has hands, while the digital does not; the digital has a colon, while the analog does not; the numbers on a digital clock change, while the ones on an analog clock stay the same.

Leave the two clocks next to each other at the front of the classroom, and tell students they are not to talk about them until you say so, but that they should look closely at them when you tell them to throughout the day. Then, on the hour or a minute or so before or after the hour, direct students' attention to the clocks. Ask, "Where is the long hand (on the 12), and what number is after the colon (00)?" Have them look at the clocks, but keep any observations they make to themselves.

Reflection

Ask students if they know how many hours are in every day, and how many minutes are in every hour. Confirm the answers. Then, ask what they noticed about the two clocks by watching them side-by-side all day. Point out the correlations between the first number of the digital clock, and the long hand of the analog one; and, between the second number of the digital clock, and the short hand of the analog one. Then, ask what we say when the long hand is on the 12 or the number after the colon reads "00?" Tell them it's "blank o'clock," with the "blank" being the first number of a digital clock, or the number the short hand is pointing to on an analog one. Ask a few example questions for reinforcement. For example, "If the digital clock has '00' for the second number and '5' for the first number, what time is it? (5 o'clock)" or "If the long hand is on the 12, and the short hand is on the 5, what time is it?" (5 o'clock).