TEACHER GUIDE

TELL TIME (NEAREST MINUTE)
GRADES 3–5

COMMON MISCONCEPTIONS

• If the hour hand is between two numbers, you read the greater number.
  Students may read 7:45 as 8:45, because the hour hand is closer to the 8. Remind students that when the hour hand is on the 8 it is 8 o’clock. Anytime before that is a certain number of minutes past 7. It may help to do some practice rounds where students are shown a clock and they just name the hour.

• You can read the numbers on the clock as minutes.
  Students confuse the double values of the numbers on the clock. When reading the clock at 4:10, they may see the minute hand pointing to 2 and read the time as 4:02. It is important that students see each number on the clock as representing two values. It may help students to actually label a clock for reference. Next to the 1, they can label 5 minutes, next to 2, 10 minutes, etc. This will align with what they learned when reading half hours, because the label next to 6 is 30 minutes.

• The longer hand is the hour hand and the shorter hand is the minute hand.
  Students may confuse times such as 2:45 and 9:15 because they look similar on the clock. Remind students that when stating the time, we usually state the hour first. So, read the hour hand, the shorter hand, first. The shorter hand is between two numbers unless the time is on the hour. Choose the hour by selecting the number at or below the hour hand. The minute hand, or longer hand, tells how many minutes after the hour. It may help to do some practice rounds.

SKIP COUNTING USING A MODEL

Students can build on prior knowledge of finding time to the hour and half hour to find time to the nearest 5 minutes and to the nearest minute. A brief review of the numbers on the clock and the hour and minute hands may be helpful. Having students construct a paper clock can help strengthen their understanding of how clocks work. Students should also be familiar with colon notation.

In this lesson, students relate each of the 12 numbers on the clock to intervals of 5 minutes. They use skip-counting by 5s to tell time to the nearest 5 minutes.
Using a number line helps build students’ understanding of time as a continuous unit of measure. Relating the number line to the clock will be beneficial for students when they begin work with lapsed time. At this stage, they can plot the point related to certain times on the clock. For lapsed time, they will plot two times on the number line and find a length of time by finding the distance between the two points.

Have students compare the number line with the clock model. How are they the same? You count by 5s for multiples of 5 minutes, and then count on to measure the remaining single minutes. The clock is like a number line formed in a circle. How are they different? A number line starts at 0, while the starting point on a clock is 12.

USING FRACTION AND SKIP-COUNTING SKILLS

Students start their work with time by finding the time to the hour and half hour. This starts the connection of time to fractions. One hour is 60 minutes, 30 minutes is one half hour. Students may use the phrase half past 2 for the time of 2:30, which means a half an hour, or 30 minutes, past 2. When students make their model clocks, they can fold the clock in half twice to mark the numbers 12, 3, 6, and 9. The connection can be made that there are 4 equal sections, and each section represents one fourth. This leads to the reference of the time 4:15 as quarter past 4, meaning one fourth of an hour after 4. Even though the concept is not covered in this lesson, students may eventually make the connection. You can ask students, “half of what?” and “a quarter of what?”

Students can use fraction skills and counting on to find time to the nearest 5 minutes or the nearest minute. Show the time 1:38 and ask students to name the time. The hour hand is between 1 and 2 so the hour is 1. The minute hand is 3 dashes past the label 7. Students may count by 5s 7 times. Some students may see that from 12 to 6 is 30 minutes, so they can jump to 6 and then count on 5 minutes to get to 7. This leads to 35 minutes. Then counting on 3 single minutes: 35, 36, 37, 38. The time is 1:38. Some students may see that they can use a similar concept to read a time like 6:25. Students can jump to the 3, counting it as 15, then they can count by 5s to the label 5: 15, 20, 25. The time is 6:25.

TEACHER TIPS

Using models such as analog clocks and number lines help students visualize the concept of time. While the digital clock may be easy for kids to read, they get a better understanding of time from an analog clock. Help students see that each number on the clock represents two units: hours and minutes. It may be helpful for students to make a clock for reference with the minutes labeled after each hour number. Relating time to number lines will be helpful when students move to time intervals.