Teaching Unit E (Continued)

Math Background

Telling Time  In the previous grade, students were introduced to telling time to the hour and to five minutes on analog clocks. In Unit E, students begin by reviewing the features and functions of clocks and telling time to the hour. Then they read time to 15 minutes, learning that a single time can be said in several different ways. After linking times to 15 minutes to daily activities, students go on to review reading time to five minutes using counting by 5s and then extend their skills to reading time to one minute. In the final activity of Lesson 1, students learn to read times as before and after the hour to five minutes and to one minute.

Elapsed Time on a Calendar  In the previous grade, students used a calendar to explore how a year is divided into months, weeks, and days and they used ordinal numbers to say dates and to refer to days, weeks, or months in position. In Unit E, students review the features and functions of calendars and find elapsed time in days, weeks, and months including solving real-world problems.

Elapsed Time on Clocks  In the previous grade, students found elapsed time in hours and half-hours from a start time and an end time. In this unit, students find elapsed time in hours and minutes including solving real-world problems. The principle that clocks are comprised of iterated units, like all measuring tools, is reinforced as students count the sectors that the clock hands have traveled through to find elapsed time.

Clock Angles  In Unit E, students relate elapsed time on a clock to angles of rotation. They begin by identifying the angle of rotation when the minute hand has traveled 15 minutes, 30 minutes, 45 minutes, and 60 minutes. They then establish that the minute hand has a 6° rotation each minute it travels. By dividing and multiplying by 6, students complete exercises about finding the angle of rotation of different elapsed times and finding end times from start times and angles of rotation of the minute hand.

Students use their 5 count-bys to read minutes and their 6 multiples to find angles of rotation.