# Overview | Use Unit Rates to Solve Problems

# **Connect to Culture**

➤ Use these activities to connect with and leverage the diverse backgrounds and experiences of all students. Engage students in sharing what they know about contexts before you add the information given here.

# SESSION 1 □ □ □ □

Try It The speed limit is the maximum legal speed that a vehicle can drive on the road. In 1901, Connecticut was the first state to adopt a speed limit law. The maximum speed was 12 miles per hour (mph) on city roads and 15 mph on country roads. At that time, driving was not nearly as safe as it is now. Cars had no seatbelts or lights. Roads did not have stop signs or lines distinguishing separate lanes. As cars and roads have become safer, speed limits have risen. Ask students to generate a list of pros and cons for raising the speed limit on roads in their community.

# SESSION 2 ■ □ □ □

**Try It** Encourage students who run to share their experiences. The great thing about running is that you can start out as slow or as fast as you want. You can run alone or with friends. Many communities have running programs and races for people of all ages. You can also run when playing sports or games. Ask students to share what sports or games they like to play that involve running.

# SESSION 3

Try It Blowing bubbles is a fun activity for people of all ages. You can make bubble solution using dish soap and water. Bubbles pop when the water molecules evaporate. When it is cold outside, it takes longer for the molecules to evaporate. A bubble can even freeze if it is cold enough. Glycerin and corn syrup slow the evaporation down, causing the bubbles to last longer. The world record for the largest free-floating bubble was set by John Erck in 2005. The bubble was 105.4 cubic feet in volume. It was big enough to hold 788 gallons of water, or 13,627 baseballs. If time allows, students can research more bubble world records.

### SESSION 4

Try It The African American Day Parade is held the third Sunday in September in New York City. Since 1968, the parade has promoted "unity, integrity, and excellence among African Americans." People throughout the United States celebrate African Americans and their accomplishments. Community and political leaders and celebrities march alongside organizations, bands, and dance groups to celebrate African American culture. Have students research parades or other cultural celebrations in their community.

### SESSION 5

**Apply It Problem 1** Riding bikes is a great way to get exercise and is a clean form of transportation. You develop strength and balance when you ride a bike. Two common types of bikes are road bikes and mountain bikes. Road bikes are designed with smooth, skinny tires and light frames, which allow for smooth and fast rides on pavement. Mountain bikes are designed with wide, knobby tires and shock absorbers for riding trails with rough terrain. Survey students to see if they enjoy or think they would enjoy riding bikes. If not, ask students to share what other healthy activities they enjoy.



