

# Settling Down

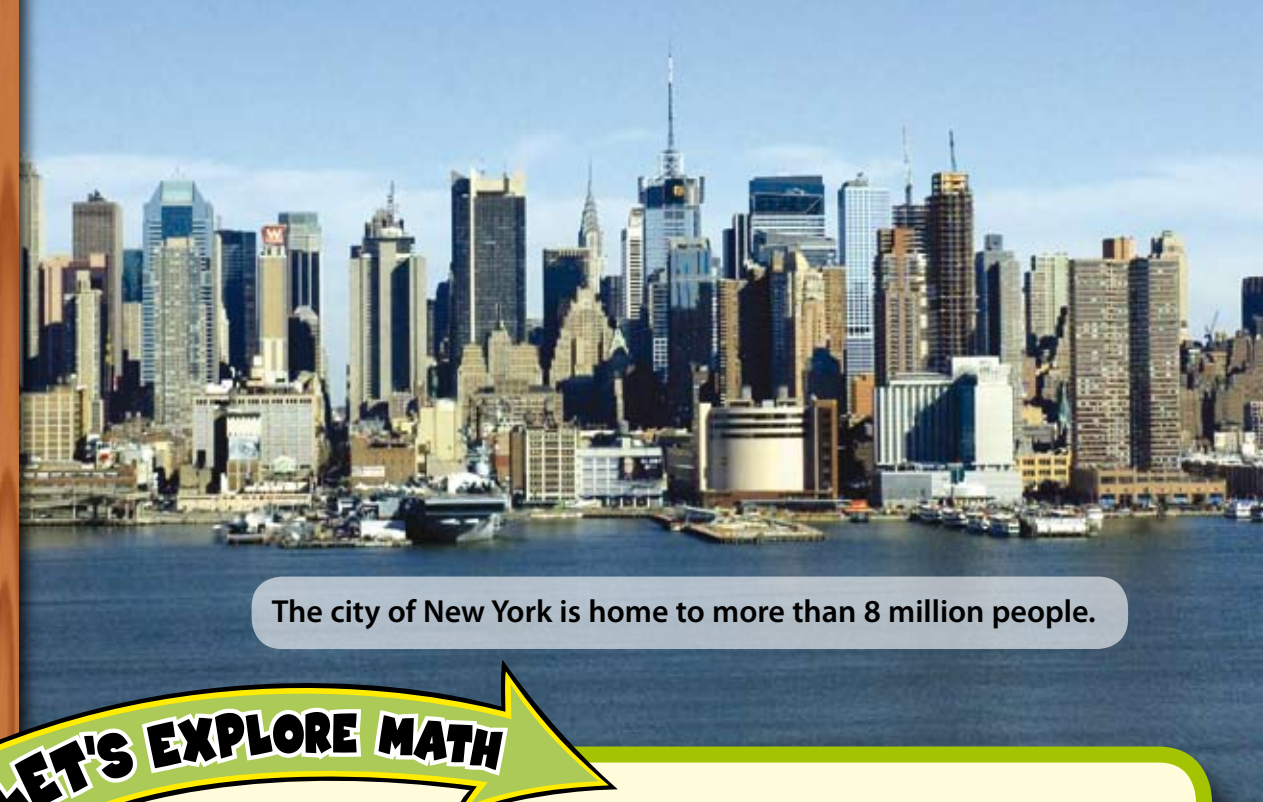
Towns and cities began when people started to live in **permanent** (PUR-muh-nuhnt) settlements. This was more than 10,000 years ago. Today, many people live in towns and cities.

Governments provide services. They make rules for how towns and cities should grow or change. These rules set **standards** about how things should be built.



## Old Town Planning

Even in ancient times, many towns were planned. Often, these towns were laid out using a **grid** pattern. The streets were straight and lined with houses. There were public spaces, such as town parks and squares, where people could meet.



The city of New York is home to more than 8 million people.

## LET'S EXPLORE MATH

One hundred years ago, the **area** of Smalltown was 1 mile  $\times$  1 mile, or 1 square mile (1 mi.<sup>2</sup>). This means that the space inside Smalltown was 1 square mile. The **perimeter** of the town was 1 mile + 1 mile + 1 mile + 1 mile, or 4 miles. This means that the distance around Smalltown was 4 miles.

Over time, Smalltown grew bigger in size. Its **dimensions** changed. Fifty years ago, Smalltown was 2 miles long and 2 miles wide.

**a.** What were its area and perimeter?

Twenty-five years ago, Smalltown was 3 miles long and 2 miles wide.

**b.** What were its area and perimeter?

Today, the area of Smalltown is 9 square miles. Only the width of the town has changed.

**c.** What is the perimeter of Smalltown today?

# Towns and Cities Today



Cities today may be very crowded. So, many people live in the **suburbs**. Highways are built to take people from their homes in the suburbs to the cities.

A busy highway in Beijing, China



New homes in a suburb

Sometimes, whole new suburbs are created beyond the original suburbs. These may be quite far from the city. They have schools, parks, factories, offices, and shopping malls. Each of the buildings in these new suburbs is carefully planned and measured.

## City Populations

City	2006	2004	2000
Beijing, China	15,810,000	14,900,000	13,819,000
Seoul, South Korea	10,352,202	10,288,000	9,980,000
New York City, U.S.A.	8,214,426	8,178,201	8,018,350
Sydney, Australia	4,284,400	4,245,900	4,085,600
Los Angeles, U.S.A.	3,849,378	3,837,490	3,705,060

Sources: Beijing Municipal Bureau of Statistics; Seoul Metropolitan Government; U.S. Census; Australian Bureau of Statistics.

## LET'S EXPLORE MATH

Two suburbs lie next to each other. Both suburbs have rectangular shapes. Surrey Hills is 14 miles long and 8 miles wide. Richmond has an area of 45 square miles.

- What is the area and perimeter of Surrey Hills?
- What could be the length and width of Richmond?

*Hint:* There may be more than one answer.