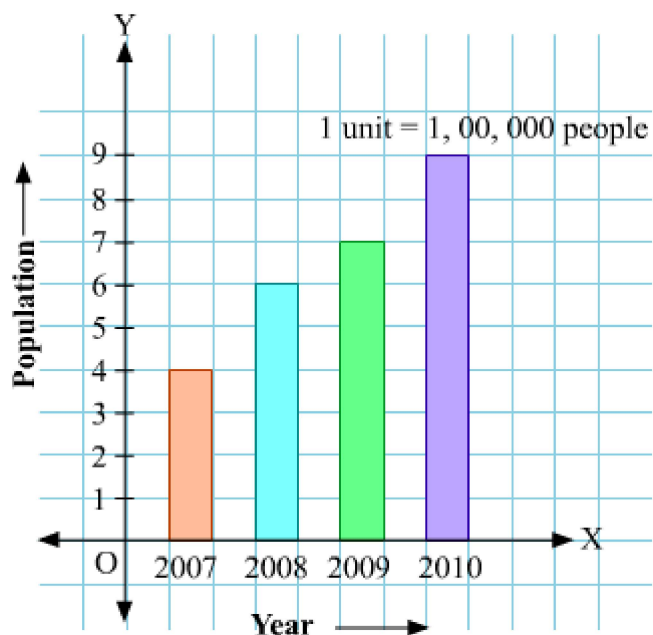


## 6. Bar Graphs

- We can interpret a bar graph by reading and analyzing it.

For example, the given bar graph represents the population of a small town in four consecutive years.



We can analyze the given bar graph and answer the following questions.

1. What is the population of town in 2010?

**Solution:** The population of town in 2010 =  $1,00,000 \times 9 = 9,00,000$

2. In which year was the population of town maximum?

**Solution:** Population of town in 2007 =  $1,00,000 \times 4 = 4,00,000$

Population of town in 2008 =  $1,00,000 \times 6 = 6,00,000$

Population of town in 2009 =  $1,00,000 \times 7 = 7,00,000$

Population of town in 2010 =  $1,00,000 \times 9 = 9,00,000$

So, population of town was maximum in 2010.

3. By how much does the population increased from 2007 to 2010?

**Solution:** Difference between the population of 2010 and 2007 =  $9,00,000 - 4,00,000 = 5,00,000$

So, population of the town is increased by 5,00,000 from 2007 to 2010.

- Data can also be represented by using **bar diagram** or **bar graph**.

In a bar graph, bars of uniform width are drawn horizontally or vertically. These bars are placed at equal distance from each other. The length of each bar gives the required information.

**Example:**

The given data represents the number of bikes sold by a retailer in the first five months of a year. Construct a bar graph of this data.

Month	Number of bikes sold
January	560
February	720
March	600
April	450
May	820

**Solution:**

To draw the bar graph for the given data, we proceed as follows:

- Draw two perpendicular lines, one vertical and one horizontal
- Mark the months along the horizontal line and mark the corresponding number of bikes along the vertical line.
- Draw bars of same width and maintain uniform gaps between them.
- Choose a suitable scale along the vertical line. Let 1 unit length = 100 bikes sold and mark the corresponding values.

Hence, the bar graph of the given data can be drawn as:

