## Key Idea

| Data Display <br> Pictograph | What does it do? <br> shows data using pictures <br> Bar Graph <br> shows data in specific categories <br> shows data as parts of a whole |
| :--- | :--- |
| Sistogram | shows how data change over time <br> shows frequencies of data values <br> in intervals of the same size <br> orders numerical data and shows <br> how they are distributed |
| Sot Plot | shows the variability of <br> a data set by using quartiles <br> shows the number of times each <br> value occurs in a data set <br> shows the relationship between <br> two data sets by using ordered <br> pairs in a coordinate plane |

## Choosing an Appropriate Data Display

Ex:) Choose an appropriate data display for the situation. Explain your reasoning. Notes:
A. The number of students in a marching band each year.
B. A comparison of people's shoe sizes and their heights.
A. The population of the United States divided into age groups.
B. The number of students in your school who play basketball, football, soccer, or lacrosse.

## Identifying an Appropriate Data Display

Ex:) You record the number of hits for your school's new website for
Notes:
5 months. Tell whether each data display is appropriate for representing how the number of hits changed during the 5 months. Explain your reasoning.
A.

B.

C.


OYO:) Tell whether the data display is appropriate for representing the data in Example 2. Explain your reasoning.
A. Dot Plot
B. Circle Graph
C. Stem-and-Leaf Plot

## Identifying a Misleading Data Display

Ex:) Which line graph is misleading? Explain.
Notes:



OYO:) Which bar graph is misleading? Explain.


## Modeling Real Life

Ex:) The organizer of a food drive creates the pictograph shown.
Notes:
(a) A volunteer concludes that the number of cans of food and boxes of food donated were about the same. Determine whether this conclusion is accurate. (b) Estimate the number of each item that has been donated.

Food Drive Donation Totals


OYO:) An employee at an animal shelter creates the histogram shown. Notes: A visitor concludes that the number of 7 -year-old to 9 -year-old dogs is triple the number of 1 -year-old to 3 -year-old dogs. Determine whether this conclusion is accurate. Explain.


