Section 1.3/1.4: Graphs
statistics software: $\quad R$ statistics package (open source)
types of graphs:
for categorical date from a qualitative variable can use - pie charts

- bar charts
- pictor graphs

for quantitative ask,
Univariate:

$$
\begin{aligned}
& \text { - pie charts } \\
& \text { - bar charts } \\
& \text { - dat plots } \\
& \text { - stem } \left.\begin{array}{l}
\text { st leaf } \\
\text { - histograms }
\end{array}\right\} \begin{array}{l}
\text { not commonly } \\
\text { Used in } \\
\text { science tenge }
\end{array} \\
& \qquad \text { Section } 1.5
\end{aligned}
$$

bivariate:
line chart scatter plot

line charts connect the dots

scatterplots dart
Coffer add a least-squores fit line)

