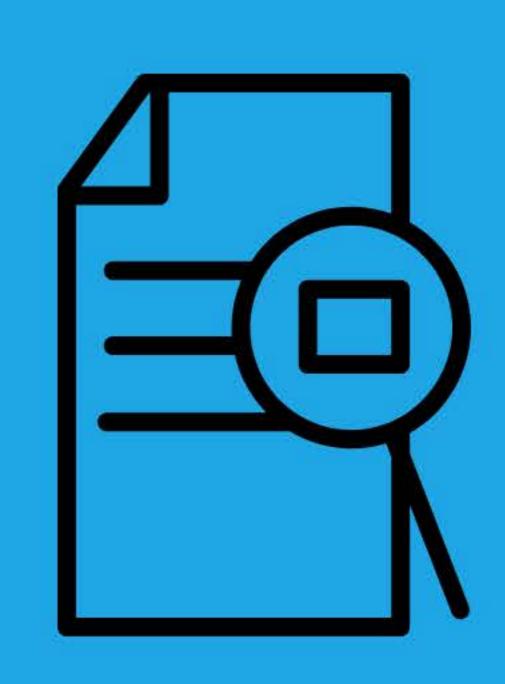
## CARERS THAT USE STATISTICS



Teachers can use statistics to determine if a test is too hard, too easy, or just right. They can use measures of central tendency (how typical are the scores?), measures of variability (how varied are the scores?), and measures of reliability (how dependable are the scores?) to make sure they give their students only tests that are fair.

Understanding how to interpret and analyze data using statistics is important for professional researchers. Making sure that a new drug or treatment really is helpful (producing a statistically significant benefit) and ensuring that their research and other scientists' research can be replicated are both examples of how statistics is crucial for professional researchers.

RESEARCHERS



URBAN PLANNING Using past, current, and predicted data trends to learn the growing needs of a community is at the heart of urban planning. Understanding data that correlate together, such as a community's average family income and the frequency of new restaurants opening, can help urban planners make informed decisions.





GOVERNMENT AGENCIES

To make informed decisions about health, education, and the economy, government officials need to know how to interpret statistics. Has unemployment really dropped? What is this year's risk for a flu epidemic? How precisely can we estimate the international value of the dollar? These are all questions that government officials use statistics to answer.

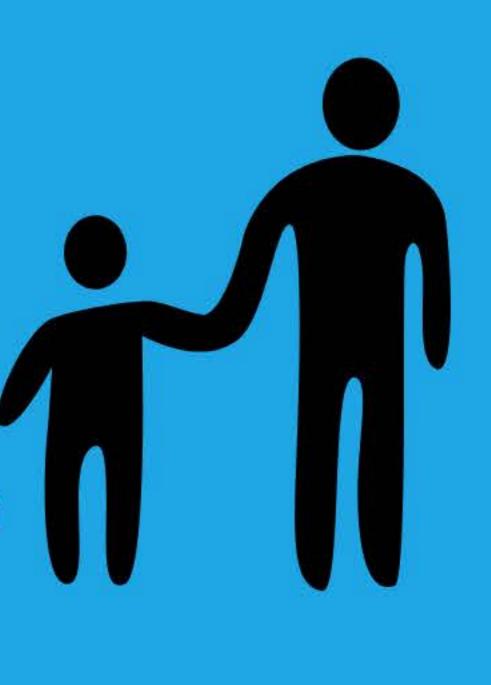
LAWYERS AND ATTORNEYS



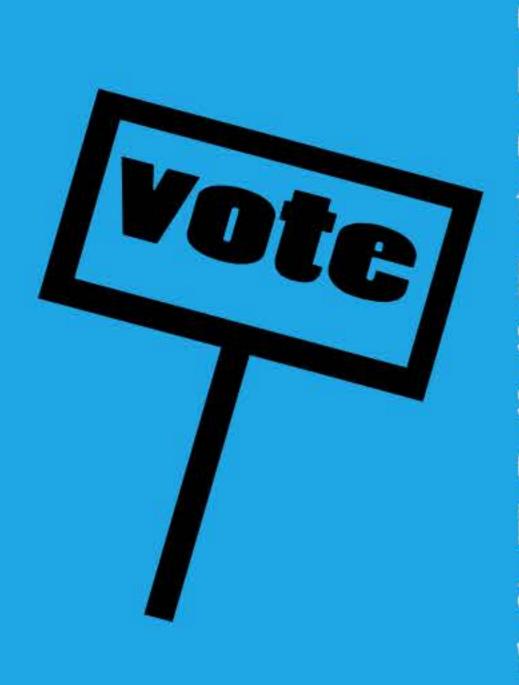
The legal field often turns to statistical information. Understanding the probability that a DNA sample found at the scene of a crime matches that of a suspect or the probability that a criminal offender will reoffend during their lifetime can help lawyers and attorneys create more convincing arguments or better defend their clients.

Parents who choose to stay home and raise their children also use statistics. Whether it's understanding percentages when balancing the family budget, understanding variability when making purchases, or understanding percentiles when looking over charts of their child's development at the pediatrician's office, stay-at-home parents use statistics.

STAY-AT-HOME PARENTS



POLITICIANS



For a career in politics, being able to understand statistics can help win elections. Politicians can use statistics to predict election outcomes through random sample polling. By understanding statistical concepts, such as the margin of error, politicians can better assess their actual chances of winning on election night.



LARGE CORPORATIONS

People who make decisions at large corporations use statistics every day. For example, corporations need to know how to display earnings and loss data in figures and graphs that their shareholders understand and that their shareholders won't suspect to be deceptive. Knowing statistics is vital!