1. In a history class, Owen is taking a multiple choice quiz. There are $\mathbf{1 0}$ questions. Each question has $\mathbf{5}$ possible answers. What is the probability that Owen will get exactly 7 correct if he guesses on each question?
2. The probability that Isaac will sink a foul shot is $80 \%$. If Isaac attempts 30 foul shots, what is the probability that he sinks exactly 21 of his shots?
3. A hockey goaltender has a save percentage of $92 \%$. If an opponent takes 9 shots on goal, what is the probability of the opponent making all 9 of those shots?
4. A salesman has a $20 \%$ probability of making a sale to any customer who enters his department. On a typical day, he will meet $\mathbf{3 0}$ customers. What is the probability he makes sales to exactly fifteen of those customers?
5. Determine if a true random sample is produced: Surveying every $5^{\text {th }}$ person exiting the lunch line to determine the most popular method of how students in the school eat lunch. \{bring lunch or buy lunch\}
6. Determine if a true random sample is produced: Sending home a questionnaire to families to gauge interest in after school activities to offer.
7. Any measure indicating the center of a set of data, arranged in an increasing or decreasing order of magnitude , is called a measure of: $\qquad$
8. The elimination of extreme scores at the top of a data set has what effect on the mean? $\qquad$
9. Which measure of central tendency must you arrange the data before calculating?
10. What measure of central tendency is most appropriate to determine the winner of the election for the student council president if each student picks one candidate?
