INTEGRATED MATH 2 - KEY OBJECTIVES STATISTICS & PROBABILITY

STATISTICS

PROBABILITY

WHAT:

Calculate Statistical Measures:

- Calculate measures of central tendency (mean, median, mode) for discrete data, by hand or by using the calculator.
- Calculate measures of spread, including the range and interquartile range.
- Identify the lower and upper quartiles of a set of data, by hand or by using the calculator.

Represent and Interpret Data:

- Represent and interpret data using bar graphs.
- Represent and interpret data using stem-and-leaf plots.
- Represent and interpret data using histograms.
- Represent and interpret data using cumulative frequency graphs.
- Represent and interpret data using box-and-whisker plots.

WHY:

How does an understanding of statistics help you to interpret what you read and hear?



How does statistics influence your perceptions of the world?



How can you use statistics to make decisions?



WHAT:

Calculate Probabilities:

- Use the results of an experiment to calculate observed probabilities.
- Use tabled data to calculate probabilities
- Use Venn diagrams, tree diagrams, lists and grids to represent outcomes of combined events.
- Calculate probabilities of single and compound events.
- o Construct tree diagrams to represent outcomes involving sampling with and without replacement, and use these diagrams to calculate probabilities.
- Distinguish between mutually exclusive and nonmutually exclusive events.
- Solve problems involving conditional probability.

WHY:

How can we use math to help us make wise choices?



How does knowing the likelihood of an event effect our day-to-day lives?



