

DesCartes (Combined)

Subject: Mathematics

Goal: Statistics and Probability

Subject: Mathematics
 Goal Strand: Statistics and Probability
 RIT Score Range: Below 171

Skills and Concepts to Develop Below 171	Skills and Concepts to Introduce 171 - 180
Data Analysis and Statistics	Data Analysis and Statistics
<ul style="list-style-type: none"> Solves simple problems based on data from tables* Compares data from simple graphs (e.g., largest, smallest, most often, least often) 	<ul style="list-style-type: none"> Interprets simple graphs or tables Interprets data using tally charts Reads and interprets data from a pictograph* Solves simple problems based on data from pictographs Displays data appropriately - bar graph - scale is 1 to 1* Solves simple problems based on data from bar graphs Compares data from simple graphs (e.g., largest, smallest, most often, least often)
Probability	Probability
	<ul style="list-style-type: none"> Investigates probability of "more likely" or "less likely" using a table*
<i>New Vocabulary:</i> dollar, fewest, longest, shortest	<i>New Vocabulary:</i> fewer, less, quart, taller
<i>New Signs and Symbols:</i> \$ dollar sign, = is equal to	<i>New Signs and Symbols:</i> cm centimeter/centimetre, in. inch, tally mark

Subject: Mathematics
Goal Strand: Statistics and Probability
RIT Score Range: 171 - 180

Skills and Concepts to Enhance Below 171	Skills and Concepts to Develop 171 - 180	Skills and Concepts to Introduce 181 - 190
<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> Solves simple problems based on data from tables* Compares data from simple graphs (e.g., largest, smallest, most often, least often) 	<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> Interprets simple graphs or tables Interprets data using tally charts Reads and interprets data from a pictograph* Solves simple problems based on data from pictographs Displays data appropriately - bar graph - scale is 1 to 1* Solves simple problems based on data from bar graphs Compares data from simple graphs (e.g., largest, smallest, most often, least often) 	<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> Interprets simple graphs or tables Solves simple problems based on data from tally charts* Solves simple problems based on data from pictographs Reads and interprets data from a bar graph Solves simple problems based on data from bar graphs
<p>Probability</p>	<p>Probability</p> <ul style="list-style-type: none"> Investigates probability of "more likely" or "less likely" using a table* 	<p>Probability</p> <ul style="list-style-type: none"> Investigates probability of "more likely" or "less likely" using a spinner Investigates probability of "more likely" or "less likely" with objects hidden in containers*
<p><i>New Vocabulary:</i> dollar, fewest, longest, shortest</p>	<p><i>New Vocabulary:</i> fewer, less, quart, taller</p>	<p><i>New Vocabulary:</i> average, consecutive, lowest, most likely, most often, spinner</p>
<p><i>New Signs and Symbols:</i> \$ dollar sign, = is equal to</p>	<p><i>New Signs and Symbols:</i> cm centimeter/centimetre, in. inch, tally mark</p>	<p><i>New Signs and Symbols:</i> none</p>

Subject: Mathematics
Goal Strand: Statistics and Probability
RIT Score Range: 181 - 190

Skills and Concepts to Enhance 171 - 180	Skills and Concepts to Develop 181 - 190	Skills and Concepts to Introduce 191 - 200
<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Interprets simple graphs or tables • Interprets data using tally charts • Reads and interprets data from a pictograph* • Solves simple problems based on data from pictographs • Displays data appropriately - bar graph - scale is 1 to 1* • Solves simple problems based on data from bar graphs • Compares data from simple graphs (e.g., largest, smallest, most often, least often) 	<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Interprets simple graphs or tables • Solves simple problems based on data from tally charts* • Solves simple problems based on data from pictographs • Reads and interprets data from a bar graph • Solves simple problems based on data from bar graphs 	<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Solves problems using tables • Solves problems using tally charts* • Reads and interprets data from a bar graph • Reads and interprets dual bar graphs* • Reads and interprets simple line graphs • Reads and interprets data given in percent form on a circle graph* • Draws conclusions from data - tally charts or frequency tables*
<p>Probability</p> <ul style="list-style-type: none"> • Investigates probability of "more likely" or "less likely" using a table* 	<p>Probability</p> <ul style="list-style-type: none"> • Investigates probability of "more likely" or "less likely" using a spinner • Investigates probability of "more likely" or "less likely" with objects hidden in containers* 	<p>Probability</p> <ul style="list-style-type: none"> • Investigates probability of "more likely" or "less likely" using a spinner • Investigates probability of "more likely" or "less likely" with a dart board*
<p><i>New Vocabulary:</i> fewer, less, quart, taller</p>	<p><i>New Vocabulary:</i> average, consecutive, lowest, most likely, most often, spinner</p>	<p><i>New Vocabulary:</i> line graph</p>
<p><i>New Signs and Symbols:</i> cm centimeter/centimetre, in. inch, tally mark</p>	<p><i>New Signs and Symbols:</i> none</p>	<p><i>New Signs and Symbols:</i> a.m., °F degrees Fahrenheit, g gram, lb pound, min minute, p.m., % percent, : used with time</p>

Subject: Mathematics
Goal Strand: Statistics and Probability
RIT Score Range: 191 - 200

Skills and Concepts to Enhance 181 - 190	Skills and Concepts to Develop 191 - 200	Skills and Concepts to Introduce 201 - 210
<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Interprets simple graphs or tables • Solves simple problems based on data from tally charts* • Solves simple problems based on data from pictographs • Reads and interprets data from a bar graph • Solves simple problems based on data from bar graphs 	<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Solves problems using tables • Solves problems using tally charts* • Reads and interprets data from a bar graph • Reads and interprets dual bar graphs* • Reads and interprets simple line graphs • Reads and interprets data given in percent form on a circle graph* • Draws conclusions from data - tally charts or frequency tables* 	<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Reads and interprets tables* • Solves problems using tables • Understands how the omission or duplication of data affects the interpretation of results from a pictograph* • Organizes data to create simple bar graphs • Solves problems using bar graphs • Solves problems using dual bar graphs* • Solves problems using line graphs* • Displays data appropriately - simple circle graph - no calculations necessary* • Reads and interprets data given in percent form on a circle graph* • Interprets data given in circle graphs to solve simple problems (with percents) • Solves problems using Venn diagrams • Draws conclusions from data - bar graphs • Predicts from pictographs and bar graphs* • Predicts from simple charts and tables
<p>Probability</p> <ul style="list-style-type: none"> • Investigates probability of "more likely" or "less likely" using a spinner • Investigates probability of "more likely" or "less likely" with objects hidden in containers* 	<p>Probability</p> <ul style="list-style-type: none"> • Investigates probability of "more likely" or "less likely" using a spinner • Investigates probability of "more likely" or "less likely" with a dart board* 	<p>Probability</p> <ul style="list-style-type: none"> • Recognizes events that are certain, likely, unlikely, possible, or impossible* • Uses the concept of chance to determine the likelihood of an event* • Determines the probability for a simple experiment using one or more coins • Determines the probability for a simple experiment using objects - must determine size of sample space
<p><i>New Vocabulary:</i> average, consecutive, lowest, most likely, most often, spinner</p>	<p><i>New Vocabulary:</i> line graph</p>	<p><i>New Vocabulary:</i> bar graph, below, less likely, maximum, random, square mile, times</p>
<p><i>New Signs and Symbols:</i> none</p>	<p><i>New Signs and Symbols:</i> a.m., °F degrees Fahrenheit, g gram, lb pound, min minute, p.m., % percent, : used with time</p>	<p><i>New Signs and Symbols:</i> ft feet, kg kilogram</p>

Subject: Mathematics
Goal Strand: Statistics and Probability
RIT Score Range: 201 - 210

Skills and Concepts to Enhance 191 - 200	Skills and Concepts to Develop 201 - 210	Skills and Concepts to Introduce 211 - 220
<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Solves problems using tables • Solves problems using tally charts* • Reads and interprets data from a bar graph • Reads and interprets dual bar graphs* • Reads and interprets simple line graphs • Reads and interprets data given in percent form on a circle graph* • Draws conclusions from data - tally charts or frequency tables* 	<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Reads and interprets tables* • Solves problems using tables • Understands how the omission or duplication of data affects the interpretation of results from a pictograph* • Organizes data to create simple bar graphs • Solves problems using bar graphs • Solves problems using dual bar graphs* • Solves problems using line graphs* • Displays data appropriately - simple circle graph - no calculations necessary* • Reads and interprets data given in percent form on a circle graph* • Interprets data given in circle graphs to solve simple problems (with percents) • Solves problems using Venn diagrams • Draws conclusions from data - bar graphs • Predicts from pictographs and bar graphs* • Predicts from simple charts and tables 	<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Solves problems using pictographs* • Solves problems using bar graphs • Interprets data in line graphs (e.g., change over time) • Solves problems using line graphs* • Reads and interprets circle graphs* • Interprets data given in circle graphs to solve simple problems (with percents) • Solves problems using circle graphs* • Reads and interprets Venn diagrams • Reads and interprets data in scatter plots • Reads and interprets data in line plots* • Determines the average (mean) of a simple set of data • Solves simple problems involving mean • Draws conclusions from data - charts* • Predicts from pictographs and bar graphs* • Predicts from plotted data*
<p>Probability</p> <ul style="list-style-type: none"> • Investigates probability of "more likely" or "less likely" using a spinner • Investigates probability of "more likely" or "less likely" with a dart board* 	<p>Probability</p> <ul style="list-style-type: none"> • Recognizes events that are certain, likely, unlikely, possible, or impossible* • Uses the concept of chance to determine the likelihood of an event* • Determines the probability for a simple experiment using one or more coins • Determines the probability for a simple experiment using objects - must determine size of sample space 	<p>Probability</p> <ul style="list-style-type: none"> • Determines the probability for a simple experiment using one die • Determines probability from a real-world situation - number of possible outcomes given • Determines the probabilities for a simple experiment using a frequency table - must determine size of sample space • Determines probability when drawing objects from containers - must determine size of sample space • Determines the complement of a simple event* • Determines the possible outcomes for a simple probability experiment using spinners • Solves problems involving permutations • Determines the number of possible combinations of given items • Predicts the sample space, based on the outcome of an

		experiment - tally sheet* • Uses the results of probability experiments or events to predict future events*
<i>New Vocabulary:</i> line graph	<i>New Vocabulary:</i> bar graph, below, less likely, maximum, random, square mile, times	<i>New Vocabulary:</i> combinations, fastest, fitted line, likelihood, line of best fit, line plot, mean, number cube, outcome, positive linear relationship, prove, scatter plot, tails
<i>New Signs and Symbols:</i> a.m., °F degrees Fahrenheit, g gram, lb pound, min minute, p.m., % percent, : used with time	<i>New Signs and Symbols:</i> ft feet, kg kilogram	<i>New Signs and Symbols:</i> { } set notation, ¢ cent sign, d distance, hr hour, mph miles per hour, P() probability, t time

Subject: Mathematics
Goal Strand: Statistics and Probability
RIT Score Range: 211 - 220

Skills and Concepts to Enhance 201 - 210	Skills and Concepts to Develop 211 - 220	Skills and Concepts to Introduce 221 - 230
<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Reads and interprets tables* • Solves problems using tables • Understands how the omission or duplication of data affects the interpretation of results from a pictograph* • Organizes data to create simple bar graphs • Solves problems using bar graphs • Solves problems using dual bar graphs* • Solves problems using line graphs* • Displays data appropriately - simple circle graph - no calculations necessary* • Reads and interprets data given in percent form on a circle graph* • Interprets data given in circle graphs to solve simple problems (with percents) • Solves problems using Venn diagrams • Draws conclusions from data - bar graphs • Predicts from pictographs and bar graphs* • Predicts from simple charts and tables 	<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Solves problems using pictographs* • Solves problems using bar graphs • Interprets data in line graphs (e.g., change over time) • Solves problems using line graphs* • Reads and interprets circle graphs* • Interprets data given in circle graphs to solve simple problems (with percents) • Solves problems using circle graphs* • Reads and interprets Venn diagrams • Reads and interprets data in scatter plots • Reads and interprets data in line plots* • Determines the average (mean) of a simple set of data • Solves simple problems involving mean • Draws conclusions from data - charts* • Predicts from pictographs and bar graphs* • Predicts from plotted data* 	<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Determines the most accurate sample for a situation* • Interprets data given in tables to solve problems • Interprets data given in circle graphs to solve complex problems (with percents) • Solves problems using circle graphs* • Determines the average (mean) of a simple set of data • Determines the mean of a complex set of data (e.g., fractions, integers, many data points) • Estimates the mean from a set of data* • Solves simple problems involving mean • Solves problems with missing data when the mean is known • Determines the middle value (median) from a simple set of data* • Determines the mode of a set of data • Explains rationale for determining the mean, median, or mode of a set of data* • Draws conclusions from data - charts* • Predicts from line graphs* • Predicts from plotted data*
<p>Probability</p> <ul style="list-style-type: none"> • Recognizes events that are certain, likely, unlikely, possible, or impossible* • Uses the concept of chance to determine the likelihood of an event* • Determines the probability for a simple experiment using one or more coins • Determines the probability for a simple experiment using objects - must determine size of sample space 	<p>Probability</p> <ul style="list-style-type: none"> • Determines the probability for a simple experiment using one die • Determines probability from a real-world situation - number of possible outcomes given • Determines the probabilities for a simple experiment using a frequency table - must determine size of sample space • Determines probability when drawing objects from containers - must determine size of sample space • Determines the complement of a simple event* • Determines the possible outcomes for a simple probability experiment using spinners • Solves problems involving permutations • Determines the number of possible combinations of 	<p>Probability</p> <ul style="list-style-type: none"> • Determines likelihood using tree diagrams* • Determines probability - must determine size of sample space • Determines the complement of a simple event* • Determines the possible outcomes for a simple probability experiment using spinners • Determines the possible outcomes for a simple probability experiment using dart boards* • Solves problems involving combinations • Determines the number of possible combinations of given items • Determines the outcome of simple multiple events* • Uses previous results to predict future events* • Computes probability as a fraction, given equivalent

	<p>given items</p> <ul style="list-style-type: none"> • Predicts the sample space, based on the outcome of an experiment - tally sheet* • Uses the results of probability experiments or events to predict future events* 	<p>forms*</p> <ul style="list-style-type: none"> • Given probability as a decimal, estimates probability as a fraction*
<i>New Vocabulary:</i> bar graph, below, less likely, maximum, random, square mile, times	<i>New Vocabulary:</i> combinations, fastest, fitted line, likelihood, line of best fit, line plot, mean, number cube, outcome, positive linear relationship, prove, scatter plot, tails	<i>New Vocabulary:</i> frequency table, median, mode, survey
<i>New Signs and Symbols:</i> ft feet, kg kilogram	<i>New Signs and Symbols:</i> { } set notation, ¢ cent sign, d distance, hr hour, mph miles per hour, P() probability, t time	<i>New Signs and Symbols:</i> h hour (SI metric), – negative number, oz ounce, s second (SI metric)

Subject: Mathematics

Goal Strand: Statistics and Probability

RIT Score Range: 221 - 230

Skills and Concepts to Enhance 211 - 220	Skills and Concepts to Develop 221 - 230	Skills and Concepts to Introduce 231 - 240
<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Solves problems using pictographs* • Solves problems using bar graphs • Interprets data in line graphs (e.g., change over time) • Solves problems using line graphs* • Reads and interprets circle graphs* • Interprets data given in circle graphs to solve simple problems (with percents) • Solves problems using circle graphs* • Reads and interprets Venn diagrams • Reads and interprets data in scatter plots • Reads and interprets data in line plots* • Determines the average (mean) of a simple set of data • Solves simple problems involving mean • Draws conclusions from data - charts* • Predicts from pictographs and bar graphs* • Predicts from plotted data* 	<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Determines the most accurate sample for a situation* • Interprets data given in tables to solve problems • Interprets data given in circle graphs to solve complex problems (with percents) • Solves problems using circle graphs* • Determines the average (mean) of a simple set of data • Determines the mean of a complex set of data (e.g., fractions, integers, many data points) • Estimates the mean from a set of data* • Solves simple problems involving mean • Solves problems with missing data when the mean is known • Determines the middle value (median) from a simple set of data* • Determines the mode of a set of data • Explains rationale for determining the mean, median, or mode of a set of data* • Draws conclusions from data - charts* • Predicts from line graphs* • Predicts from plotted data* 	<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Performs basic operations on matrices* • Organizes data using tables* • Interprets data given in tables to solve problems • Determines appropriate intervals and/or scale for a bar graph* • Interprets data given in horizontal and vertical bar graphs to solve problems • Interprets data given in line graphs to solve problems* • Interprets data given in circle graphs to solve complex problems (with percents) • Reads and interprets data in box-and-whisker plots • Determines the mean of a complex set of data (e.g., fractions, integers, many data points) • Estimates the mean from a set of data* • Solves problems with missing data when the mean is known • Determines the median from a complex set of data (e.g., not in order, many data points) • Determines the range of a complex set of data • Estimates line of best fit to make predictions • Identifies outliers on a data display (e.g., uses interquartile range to identify outliers on a box-and-whisker plot)* • Predicts from an analysis of data and statistical measures* • Predicts from charts and tables
<p>Probability</p> <ul style="list-style-type: none"> • Determines the probability for a simple experiment using one die • Determines probability from a real-world situation - number of possible outcomes given • Determines the probabilities for a simple experiment using a frequency table - must determine size of sample space • Determines probability when drawing objects from 	<p>Probability</p> <ul style="list-style-type: none"> • Determines likelihood using tree diagrams* • Determines probability - must determine size of sample space • Determines the complement of a simple event* • Determines the possible outcomes for a simple probability experiment using spinners • Determines the possible outcomes for a simple probability experiment using dart boards* 	<p>Probability</p> <ul style="list-style-type: none"> • Determines certainty from a set data* • Determines sample space given probability of all possible outcomes* • Determines probability - must determine size of sample space • Modifies sample space to change the probability of an event* • Determines the probability of independent simple

<p>containers - must determine size of sample space</p> <ul style="list-style-type: none"> • Determines the complement of a simple event* • Determines the possible outcomes for a simple probability experiment using spinners • Solves problems involving permutations • Determines the number of possible combinations of given items • Predicts the sample space, based on the outcome of an experiment - tally sheet* • Uses the results of probability experiments or events to predict future events* 	<ul style="list-style-type: none"> • Solves problems involving combinations • Determines the number of possible combinations of given items • Determines the outcome of simple multiple events* • Uses previous results to predict future events* • Computes probability as a fraction, given equivalent forms* • Given probability as a decimal, estimates probability as a fraction* 	<p>compound events</p> <ul style="list-style-type: none"> • Determines the complement of a complex event* • Recognizes the relationship between events and probability - selects an experiment which matches a given probability*
<p><i>New Vocabulary:</i> combinations, fastest, fitted line, likelihood, line of best fit, line plot, mean, number cube, outcome, positive linear relationship, prove, scatter plot, tails</p>	<p><i>New Vocabulary:</i> frequency table, median, mode, survey</p>	<p><i>New Vocabulary:</i> average salary, box-and-whisker plot, data point, interquartile range, lower quartile, matrix, meters per minute, middle, outlier, percentile, quartile, sample, successive, upper quartile</p>
<p><i>New Signs and Symbols:</i> { } set notation, ¢ cent sign, d distance, hr hour, mph miles per hour, P() probability, t time</p>	<p><i>New Signs and Symbols:</i> h hour (SI metric), - negative number, oz ounce, s second (SI metric)</p>	<p><i>New Signs and Symbols:</i> () ordered pair, \$ dollar sign, °C degrees Celsius, m meter/metre, mL milliliter/millilitre, ? next in sequence, • outlier</p>

Subject: Mathematics
Goal Strand: Statistics and Probability
RIT Score Range: 231 - 240

Skills and Concepts to Enhance 221 - 230	Skills and Concepts to Develop 231 - 240	Skills and Concepts to Introduce 241 - 250
<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Determines the most accurate sample for a situation* • Interprets data given in tables to solve problems • Interprets data given in circle graphs to solve complex problems (with percents) • Solves problems using circle graphs* • Determines the average (mean) of a simple set of data • Determines the mean of a complex set of data (e.g., fractions, integers, many data points) • Estimates the mean from a set of data* • Solves simple problems involving mean • Solves problems with missing data when the mean is known • Determines the middle value (median) from a simple set of data* • Determines the mode of a set of data • Explains rationale for determining the mean, median, or mode of a set of data* • Draws conclusions from data - charts* • Predicts from line graphs* • Predicts from plotted data* 	<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Performs basic operations on matrices* • Organizes data using tables* • Interprets data given in tables to solve problems • Determines appropriate intervals and/or scale for a bar graph* • Interprets data given in horizontal and vertical bar graphs to solve problems • Interprets data given in line graphs to solve problems* • Interprets data given in circle graphs to solve complex problems (with percents) • Reads and interprets data in box-and-whisker plots • Determines the mean of a complex set of data (e.g., fractions, integers, many data points) • Estimates the mean from a set of data* • Solves problems with missing data when the mean is known • Determines the median from a complex set of data (e.g., not in order, many data points) • Determines the range of a complex set of data • Estimates line of best fit to make predictions • Identifies outliers on a data display (e.g., uses interquartile range to identify outliers on a box-and-whisker plot)* • Predicts from an analysis of data and statistical measures* • Predicts from charts and tables 	<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Performs basic operations on matrices* • Reads and interprets data in tables • Reads and interprets data in box-and-whisker plots • Reads and interprets data in stem-and-leaf plots • Determines the range of a complex set of data • Determines the correlation for a set of data* • Identifies a set of data with a given mean, median, and/or mode* • Predicts from an analysis of data and statistical measures*
<p>Probability</p> <ul style="list-style-type: none"> • Determines likelihood using tree diagrams* • Determines probability - must determine size of sample space • Determines the complement of a simple event* • Determines the possible outcomes for a simple probability experiment using spinners • Determines the possible outcomes for a simple probability experiment using dart boards* 	<p>Probability</p> <ul style="list-style-type: none"> • Determines certainty from a set data* • Determines sample space given probability of all possible outcomes* • Determines probability - must determine size of sample space • Modifies sample space to change the probability of an event* • Determines the probability of independent simple 	<p>Probability</p> <ul style="list-style-type: none"> • Determines certainty from a set data* • Determines probability using counting procedures* • Determines probability using tables • Determines the complement of a complex event* • Determines probability using an area model • Uses multiplication principle of counting to determine possibilities • Uses counting procedures to determine possibilities*

<ul style="list-style-type: none"> • Solves problems involving combinations • Determines the number of possible combinations of given items • Determines the outcome of simple multiple events* • Uses previous results to predict future events* • Computes probability as a fraction, given equivalent forms* • Given probability as a decimal, estimates probability as a fraction* 	<p>compound events</p> <ul style="list-style-type: none"> • Determines the complement of a complex event* • Recognizes the relationship between events and probability - selects an experiment which matches a given probability* 	<ul style="list-style-type: none"> • Uses theoretical probability to predict future events
<p><i>New Vocabulary:</i> frequency table, median, mode, survey</p>	<p><i>New Vocabulary:</i> average salary, box-and-whisker plot, data point, interquartile range, lower quartile, matrix, meters per minute, middle, outlier, percentile, quartile, sample, successive, upper quartile</p>	<p><i>New Vocabulary:</i> correlation, hyperbolic, mileage table, stem and leaf plot</p>
<p><i>New Signs and Symbols:</i> h hour (SI metric), - negative number, oz ounce, s second (SI metric)</p>	<p><i>New Signs and Symbols:</i> () ordered pair, \$ dollar sign, °C degrees Celsius, m meter/metre, mL milliliter/millilitre, ? next in sequence, • outlier</p>	<p><i>New Signs and Symbols:</i> ° degrees, E east, × multiplication, NE northeast, NNE north northeast, N north, NW northwest, S south, W west</p>

Subject: Mathematics
Goal Strand: Statistics and Probability
RIT Score Range: 241 - 250

Skills and Concepts to Enhance 231 - 240	Skills and Concepts to Develop 241 - 250	Skills and Concepts to Introduce 251 - 260
<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Performs basic operations on matrices* • Organizes data using tables* • Interprets data given in tables to solve problems • Determines appropriate intervals and/or scale for a bar graph* • Interprets data given in horizontal and vertical bar graphs to solve problems • Interprets data given in line graphs to solve problems* • Interprets data given in circle graphs to solve complex problems (with percents) • Reads and interprets data in box-and-whisker plots • Determines the mean of a complex set of data (e.g., fractions, integers, many data points) • Estimates the mean from a set of data* • Solves problems with missing data when the mean is known • Determines the median from a complex set of data (e.g., not in order, many data points) • Determines the range of a complex set of data • Estimates line of best fit to make predictions • Identifies outliers on a data display (e.g., uses interquartile range to identify outliers on a box-and-whisker plot)* • Predicts from an analysis of data and statistical measures* • Predicts from charts and tables 	<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Performs basic operations on matrices* • Reads and interprets data in tables • Reads and interprets data in box-and-whisker plots • Reads and interprets data in stem-and-leaf plots • Determines the range of a complex set of data • Determines the correlation for a set of data* • Identifies a set of data with a given mean, median, and/or mode* • Predicts from an analysis of data and statistical measures* 	<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Performs basic operations on matrices* • Uses random sampling techniques* • Displays data appropriately - circle graph - calculations necessary* • Solves complex problems involving mean* • Computes and compares mean, median, mode, and range in simple examples to demonstrate that they may differ for a given set of data* • Evaluates how adding data to a set of data affects the measures of center* • Uses the regression line method to make predictions*
<p>Probability</p> <ul style="list-style-type: none"> • Determines certainty from a set data* • Determines sample space given probability of all possible outcomes* • Determines probability - must determine size of sample space • Modifies sample space to change the probability of an event* • Determines the probability of independent simple 	<p>Probability</p> <ul style="list-style-type: none"> • Determines certainty from a set data* • Determines probability using counting procedures* • Determines probability using tables • Determines the complement of a complex event* • Determines probability using an area model • Uses multiplication principle of counting to determine possibilities • Uses counting procedures to determine possibilities* 	<p>Probability</p> <ul style="list-style-type: none"> • Determines certainty from a set data* • Determines the probabilities of complex compound events (independent)*

compound events • Determines the complement of a complex event* • Recognizes the relationship between events and probability - selects an experiment which matches a given probability*	• Uses theoretical probability to predict future events	
<i>New Vocabulary:</i> average salary, box-and-whisker plot, data point, interquartile range, lower quartile, matrix, meters per minute, middle, outlier, percentile, quartile, sample, successive, upper quartile	<i>New Vocabulary:</i> correlation, hyperbolic, mileage table, stem and leaf plot	<i>New Vocabulary:</i> none
<i>New Signs and Symbols:</i> () ordered pair, \$ dollar sign, °C degrees Celsius, m meter/metre, mL milliliter/millilitre, ? next in sequence, • outlier	<i>New Signs and Symbols:</i> ° degrees, E east, × multiplication, NE northeast, NNE north northeast, N north, NW northwest, S south, W west	<i>New Signs and Symbols:</i> + addition

Subject: Mathematics
Goal Strand: Statistics and Probability
RIT Score Range: 251 - 260

Skills and Concepts to Enhance 241 - 250	Skills and Concepts to Develop 251 - 260	Skills and Concepts to Introduce Above 260
<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Performs basic operations on matrices* • Reads and interprets data in tables • Reads and interprets data in box-and-whisker plots • Reads and interprets data in stem-and-leaf plots • Determines the range of a complex set of data • Determines the correlation for a set of data* • Identifies a set of data with a given mean, median, and/or mode* • Predicts from an analysis of data and statistical measures* 	<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Performs basic operations on matrices* • Uses random sampling techniques* • Displays data appropriately - circle graph - calculations necessary* • Solves complex problems involving mean* • Computes and compares mean, median, mode, and range in simple examples to demonstrate that they may differ for a given set of data* • Evaluates how adding data to a set of data affects the measures of center* • Uses the regression line method to make predictions* 	<p>Data Analysis and Statistics</p> <ul style="list-style-type: none"> • Reads and interprets interquartile range in box-and-whisker plots*
<p>Probability</p> <ul style="list-style-type: none"> • Determines certainty from a set data* • Determines probability using counting procedures* • Determines probability using tables • Determines the complement of a complex event* • Determines probability using an area model • Uses multiplication principle of counting to determine possibilities • Uses counting procedures to determine possibilities* • Uses theoretical probability to predict future events 	<p>Probability</p> <ul style="list-style-type: none"> • Determines certainty from a set data* • Determines the probabilities of complex compound events (independent)* 	<p>Probability</p> <ul style="list-style-type: none"> • Determines the probabilities of compound events (dependent)
<p><i>New Vocabulary:</i> correlation, hyperbolic, mileage table, stem and leaf plot</p>	<p><i>New Vocabulary:</i> none</p>	<p><i>New Vocabulary:</i> none</p>
<p><i>New Signs and Symbols:</i> ° degrees, E east, × multiplication, NE northeast, NNE north northeast, N north, NW northwest, S south, W west</p>	<p><i>New Signs and Symbols:</i> + addition</p>	<p><i>New Signs and Symbols:</i> none</p>

Subject: Mathematics

Goal Strand: Statistics and Probability

RIT Score Range: Above 260

Skills and Concepts to Enhance 251 - 260	Skills and Concepts to Develop Above 260
Data Analysis and Statistics <ul style="list-style-type: none">• Performs basic operations on matrices*• Uses random sampling techniques*• Displays data appropriately - circle graph - calculations necessary*• Solves complex problems involving mean*• Computes and compares mean, median, mode, and range in simple examples to demonstrate that they may differ for a given set of data*• Evaluates how adding data to a set of data affects the measures of center*• Uses the regression line method to make predictions*	Data Analysis and Statistics <ul style="list-style-type: none">• Reads and interprets interquartile range in box-and-whisker plots*
Probability <ul style="list-style-type: none">• Determines certainty from a set data*• Determines the probabilities of complex compound events (independent)*	Probability <ul style="list-style-type: none">• Determines the probabilities of compound events (dependent)
<i>New Vocabulary: none</i>	<i>New Vocabulary: none</i>
<i>New Signs and Symbols: + addition</i>	<i>New Signs and Symbols: none</i>