

## **Data & Probability Compacted DesCartes**

### **Interprets Graphs**

- Below 171 Compares data from simple graphs (largest, smallest, most often, least often)  
171-180 Same  
Matches simple data to lists, tables, or graphs  
Interprets data using tally charts, simple graphs, picture graphs, or tables
- 181-190 Interprets simple graphs, bar graphs, and tables
- 191-200 Reads and interprets simple line graphs, bar graphs, & dual bar graphs  
Draws conclusions from data
- 201-210 Draws conclusions from data  
Reads and interprets tables  
Understands how the omission or duplication of data affects the interpretation of results  
Predicts from pictographs, bar graphs, simple charts, & tables
- 211-220 Draws conclusions from data  
Predicts from pictographs & bar graphs

### **Problem Solving**

#### **Solves ....**

- Below 171 simple problems based on data from tables
- 171-180 simple problems based on pictographs and bar graphs
- 181-190 simple problems based on pictographs, bar graphs, and tally charts
- 191-200 problems using tables and tally charts
- 201-210 problems using tables, line graphs, bar graphs, tables, and dual bar graphs
- 211-220 problems using picture graphs, line graphs and bar graphs

### **Creates Graphs & Charts**

#### **Organizes data .....**

- 201-210 to create simple bar graphs and pie charts
- 231-240 using tables and to create bar graphs
- 250 + to create circle graphs

### **Data Collection and Analysis**

- 211-220 Determines the average (mean) of a simple set of data  
Solves simple problems involving mean
- 221-230 Determines the average (mean) and middle value (median) of a simple set of data  
Solves simple problems involving mean

### **Probability, Permutations, & Combinations**

- 171-180 Investigates probability of more or less likely using a table
- 181-190 Investigates probability of more or less likely using a spinner and with objects hidden in containers
- 191-200 Investigates probability of more or less likely using a spinner or dart board

### **Probability, Permutations, & Combinations Continued**

- 201-210 Recognizes events that are certain, likely, unlikely, possible, or impossible  
Uses the concept of chance to determine the likelihood of an event  
Determines the possible outcomes for a simple probability experiment using one or more coins or other objects
- 211-220 Uses the results of probability of experiments or events to predict future events  
Determines the possible outcomes for a simple probability experiment using a frequency table, dice, spinners  
Determines probability when drawing objects from containers  
Determines probability from a real situation  
Determines the number of possible combinations of given items
- 221-230 Determines possible outcomes for a simple probability using spinners and dart boards  
Determines the outcome of simple multiple events  
Determines sample space to find probability  
Determines probability using tree diagrams  
Determines the number of possible combinations of given items  
Uses previous results to predict future events  
Explains the difference between predictions based on theoretical and experimental probability
- 231-240 Recognizes the relationship between events and probability  
Determines sample space using probability and to find probability for 2-step problems  
Determines certainty from a set data
- 241-250 Determines probability using tables, an area model, and counting procedures  
Determines certainty from a set of data  
Uses theoretical probability to predict future events