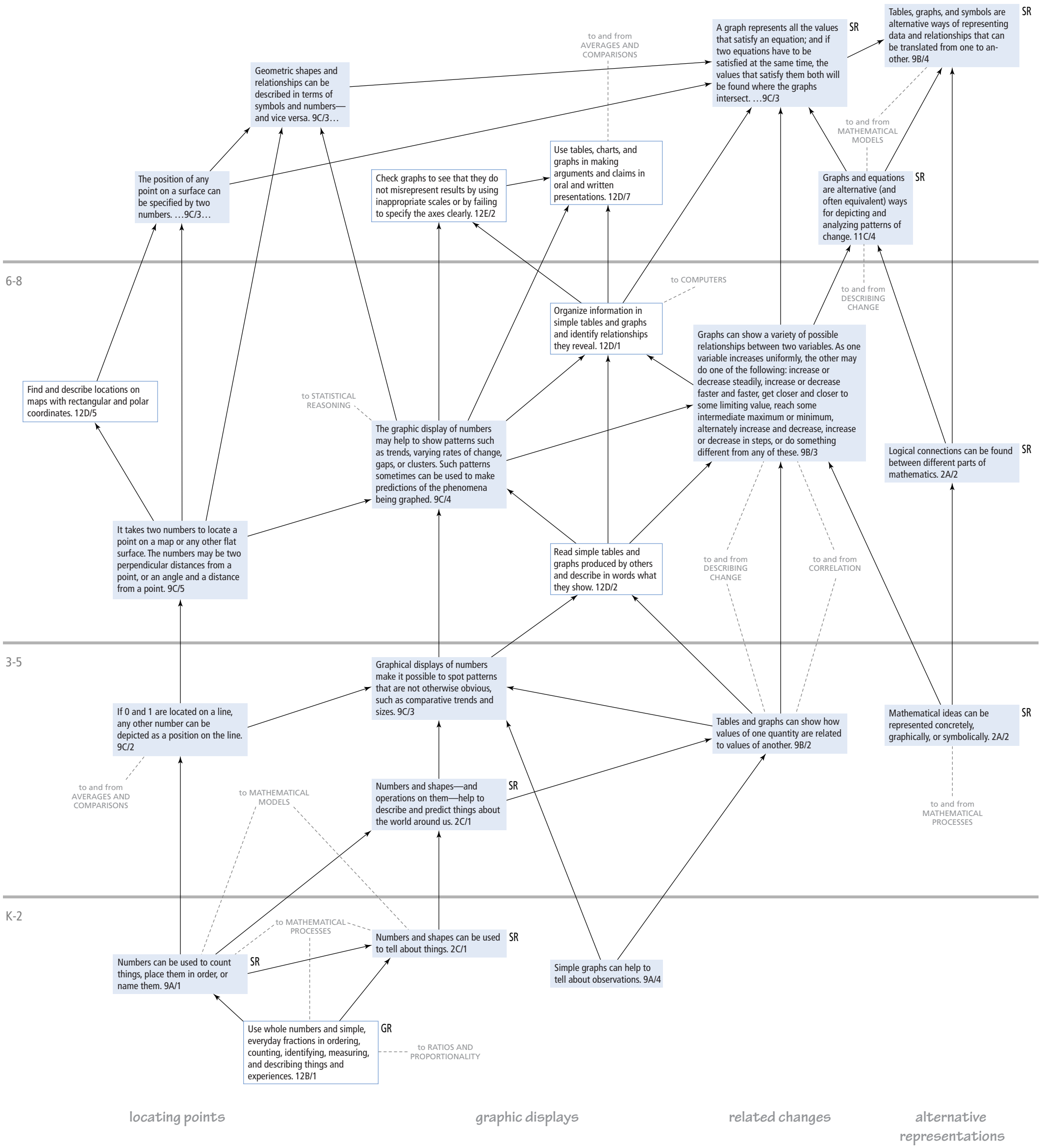
9-12
6-8
3-5
K-2
A graph represents all the values that satisfy an equation; and if two equations have to be satisfied at the same time, the values that satisfy them both will be found where the graphs intersect. …9C/3
SR
Tables, graphs, and symbols are alternative ways of representing data and relationships that can be translated from one to another. 9B/4
SR
to and from AVERAGES AND COMPARISONS
Geometric shapes and relationships can be described in terms of symbols and numbers—and vice versa. 9C/3…
to and from MATHEMATICAL MODELS
Use tables, charts, and graphs in making arguments and claims in oral and written presentations. 12D/7
The position of any point on a surface can be specified by two numbers. …9C/3…
Check graphs to see that they do not misrepresent results by using inappropriate scales or by failing to specify the axes clearly. 12E/2
Graphs and equations are alternative (and often equivalent) ways for depicting and analyzing patterns of change. 11C/4
SR
to COMPUTERS
to and from DESCRIBING CHANGE
Organize information in simple tables and graphs and identify relationships they reveal. 12D/1
Graphs can show a variety of possible relationships between two variables. As one variable increases uniformly, the other may do one of the following: increase or decrease steadily, increase or decrease faster and faster, get closer and closer to some limiting value, reach some intermediate maximum or minimum, alternately increase and decrease, increase or decrease in steps, or do something different from any of these. 9B/3
Find and describe locations on maps with rectangular and polar coordinates. 12D/5
to STATISTICAL REASONING
The graphic display of numbers may help to show patterns such as trends, varying rates of change, gaps, or clusters. Such patterns sometimes can be used to make predictions of the phenomena being graphed. 9C/4
Logical connections can be found between different parts of mathematics. 2A/2
SR
It takes two numbers to locate a point on a map or any other flat surface. The numbers may be two perpendicular distances from a point, or an angle and a distance from a point. 9C/5
Read simple tables and graphs produced by others and describe in words what they show. 12D/2
to and from DESCRIBING CHANGE
to and from CORRELATION
Graphical displays of numbers make it possible to spot patterns that are not otherwise obvious, such as comparative trends and sizes. 9C/3
If 0 and 1 are located on a line, any other number can be depicted as a position on the line. 9C/2
Tables and graphs can show how values of one quantity are related to values of another. 9B/2
Mathematical ideas can be represented concretely, graphically, or symbolically. 2A/2
SR
to and from AVERAGES AND COMPARISONS
to MATHEMATICAL MODELS
Numbers and shapes—and operations on them—help to describe and predict things about the world around us. 2C/1
SR
to and from MATHEMATICAL PROCESSES
to MATHEMATICAL PROCESSES
Numbers and shapes can be used to tell about things. 2C/1
SR
Numbers can be used to count things, place them in order, or name them. 9A/1
SR
Simple graphs can help to tell about observations. 9A/4
Use whole numbers and simple, everyday fractions in ordering, counting, identifying, measuring, and describing things and experiences. 12B/1
GR
to RATIOS AND PROPORTIONALITY
locating points
graphic displays
related changes
alternative representations