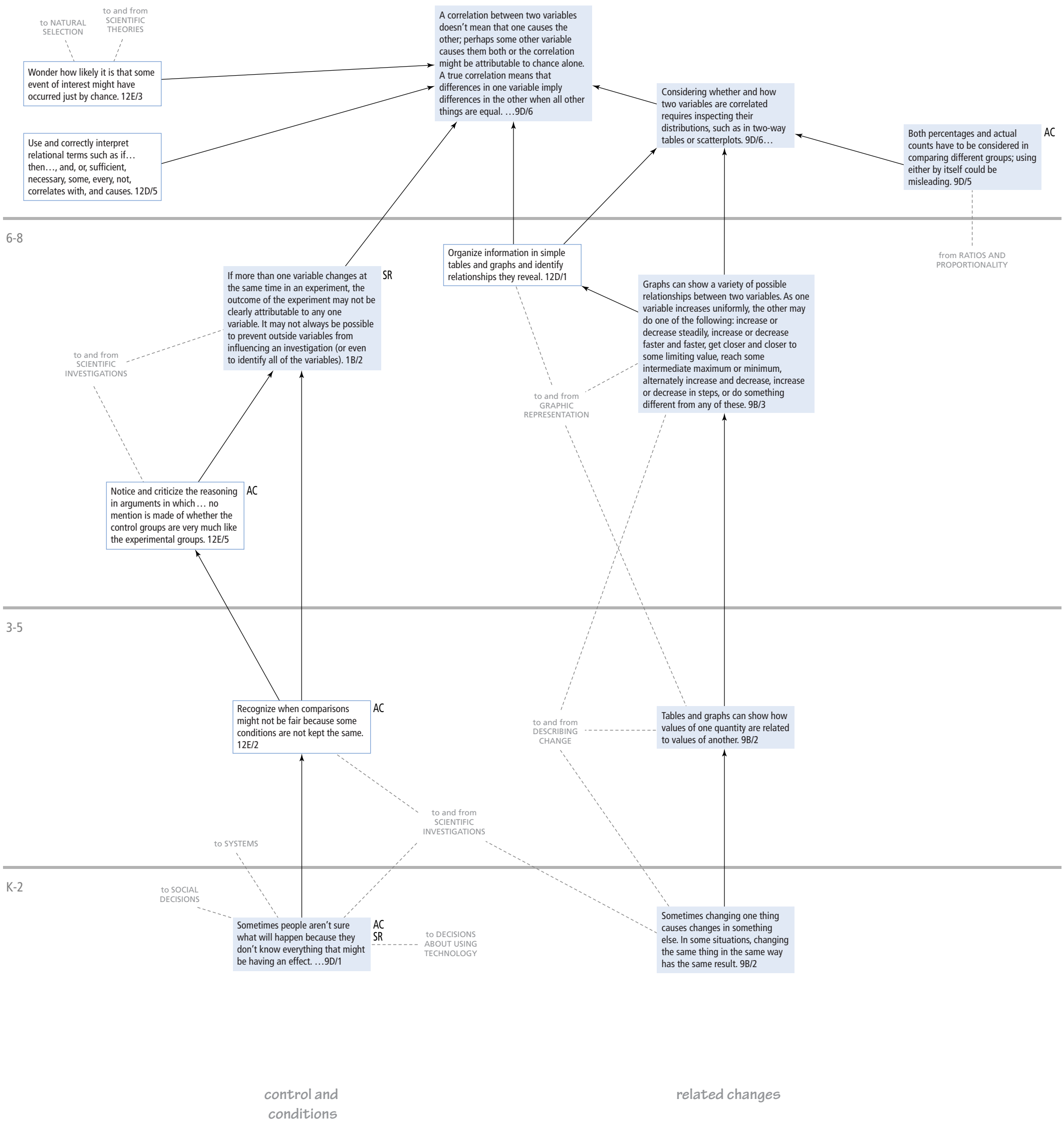
9-12
to NATURAL SELECTION
to and from SCIENTIFIC THEORIES
Wonder how likely it is that some event of interest might have occurred just by chance. 12E/3
Use and correctly interpret relational terms such as if… then…, and, or, sufficient, necessary, some, every, not, correlates with, and causes. 12D/5
A correlation between two variables doesn't mean that one causes the other; perhaps some other variable causes them both or the correlation might be attributable to chance alone. A true correlation means that differences in one variable imply differences in the other when all other things are equal. …9D/6
Considering whether and how two variables are correlated requires inspecting their distributions, such as in two-way tables or scatterplots. 9D/6…
Both percentages and actual counts have to be considered in comparing different groups; using either by itself could be misleading. 9D/5
AC
from RATIOS AND PROPORTIONALITY
6-8
If more than one variable changes at the same time in an experiment, the outcome of the experiment may not be clearly attributable to any one variable. It may not always be possible to prevent outside variables from influencing an investigation (or even to identify all of the variables). 1B/2
SR
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
to and from SCIENTIFIC INVESTIGATIONS
to and from GRAPHIC REPRESENTATION
Notice and criticize the reasoning in arguments in which… no mention is made of whether the control groups are very much like the experimental groups. 12E/5
AC
3-5
Recognize when comparisons might not be fair because some conditions are not kept the same. 12E/2
AC
to and from DESCRIBING CHANGE
Tables and graphs can show how values of one quantity are related to values of another. 9B/2
to and from SCIENTIFIC INVESTIGATIONS
to SYSTEMS
K-2
to SOCIAL DECISIONS
Sometimes people aren't sure what will happen because they don't know everything that might be having an effect. …9D/1
AC
SR
to DECISIONS ABOUT USING TECHNOLOGY
Sometimes changing one thing causes changes in something else. In some situations, changing the same thing in the same way has the same result. 9B/2
control and conditions
related changes