

GLENCOE CORRELATION
CHEMISTRY: MATTER AND CHANGE
NEW JERSEY
 Core Curriculum Content Standards for Science
 Grade 12

STANDARDS	PAGE REFERENCES
STANDARD 5.1 (SCIENTIFIC PROCESSES) ALL STUDENTS WILL DEVELOP PROBLEM-SOLVING, DECISION-MAKING AND INQUIRY SKILLS, REFLECTED BY FORMULATING USABLE QUESTIONS AND HYPOTHESES, PLANNING EXPERIMENTS, CONDUCTING SYSTEMATIC OBSERVATIONS, INTERPRETING AND ANALYZING DATA, DRAWING CONCLUSIONS, AND COMMUNICATING RESULTS.	
Building upon knowledge and skills gained in the preceding grades, by the end of Grade 12, students:	
A. Habits of Mind	
1. When making decisions, evaluate conclusions, weigh evidence, and recognize that arguments may not have equal merit.	SE: 10-13 <i>Chemistry and Society</i> 80, 482 <i>Chemistry and Technology</i> 768 <i>ChemLab</i> 46-47, 410-411, 550-551 <i>Problem-Solving Lab</i> 130, 191, 583, 860
2. Assess the risks and benefits associated with alternative solutions.	SE: 3-6, 828-831 <i>Chemistry and Society</i> 482, 834 <i>Chemistry and Technology</i> 344, 690 <i>Everyday Chemistry</i> 730 <i>Problem-Solving Lab</i> 44, 390, 860
3. Engage in collaboration, peer review, and accurate reporting of findings.	SE: 10-15, 36-41, 129-134, 893-896 <i>Chemistry and Society</i> 20, 110 <i>Chemistry and Technology</i> 344, 690, 768 <i>Everyday Chemistry</i> 730
4. Explore cases that demonstrate the interdisciplinary nature of the scientific enterprise.	SE: <i>Chemistry and Society</i> 20, 80, 482 <i>Chemistry and Technology</i> 690, 768 <i>Everyday Chemistry</i> 412 <i>Physics Connection</i> 808 <i>Problem-Solving Lab</i> 647, 679, 860
B. Inquiry and Problem Solving	
1. Select and use appropriate instrumentation to design and conduct investigations.	SE: 118-120, 827-828 <i>Problem-Solving Lab</i> 96, 478 <i>ChemLab</i> 480-481, 626-627, 688-689, 796-797, 832-833, 862-863
2. Show that experimental results can lead to new questions and further investigations.	SE: 92-104, 117-126, 151-158 <i>Chemistry and Society</i> 110 <i>ChemLab</i> 78-79, 170-171, 300-301, 520-521, 626-627, 832-833
C. Safety	
1. Understand, evaluate and practice safe procedures for conducting science investigations.	SE: 14-16 <i>ChemLab</i> 142-143, 300-301, 520-521, 654-655, 728-729, 832-833 <i>Problem-Solving Lab</i> 60, 390, 830