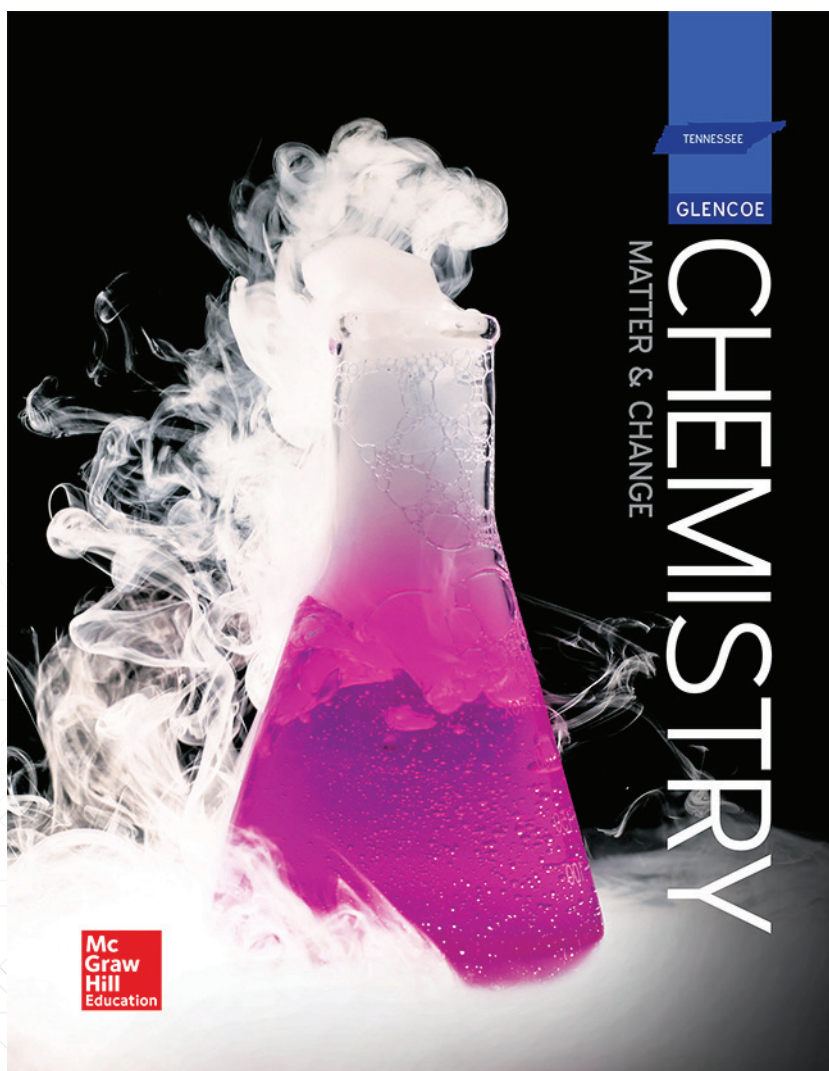


TENNESSEE

GLENCOE

CHEMISTRY

MATTER & CHANGE



Welcome to TENNESSEE

GLNCOE CHEMISTRY

We are your partner in learning by meeting your diverse 21st century needs. Designed for today's tech-savvy high school students, the McGraw-Hill Education's Tennessee Chemistry: Matter and Change program offers hands-on investigations, rigorous science content, and engaging, real-world applications to make science fun, exciting, and stimulating.

With Tennessee Chemistry Matter and Change you are equipped to:

- Meet science standards **Performance Expectations** (PEs).
- Integrate **Science and Engineering Practices** into your science classroom.
- Apply the **Disciplinary Core Ideas** (DCIs).
- Correlate your lessons to **Tennessee State Science Standards**.

Tennessee Chemistry Matter and Change: Leveraging technology to drive personalized student success while engaging and motivating students with hands-on, project-based activities and real-world applications.

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connectED is a time-saving online portal that has all of your digital program resources in one place.



ConnectED allows you to:

- Build lesson plans with easy-to-find print and digital resources.
- Search for activities to meet a variety of learning modalities.
- Teach with technology by providing virtual labs, lesson animations, whole-class presentations and more.
- Personalize instruction with print and digital resources.
- Provide students with anytime, anywhere access to student resources and tools, including eBooks, tutorials, animations, and the eGlossary.
- Access to Online Assessment, track student progress, generate reports, and differentiate instruction.

With ConnectEd Mobile you can browse your course content on the go.

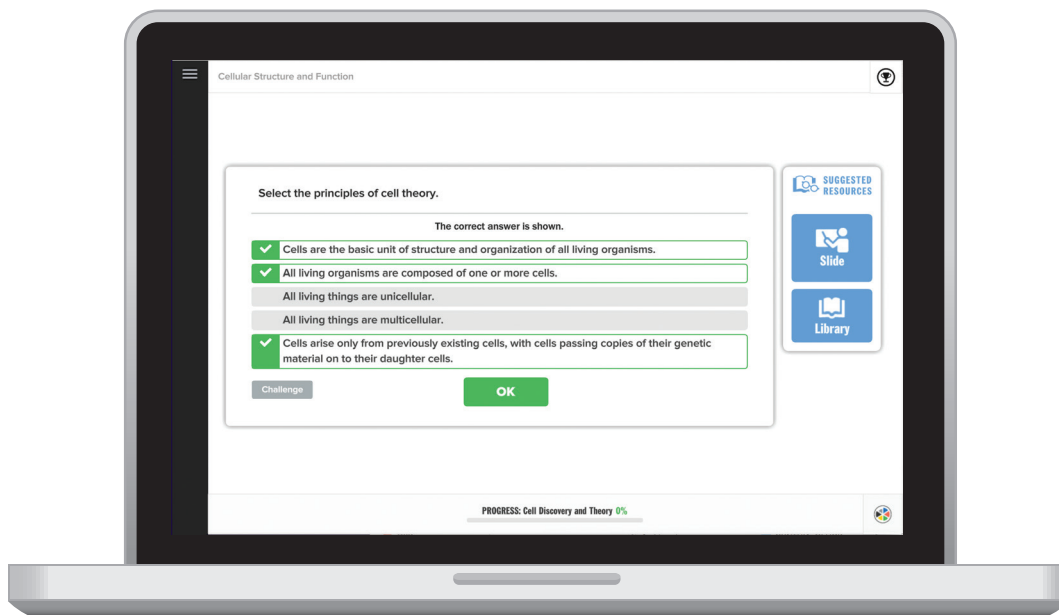
The app includes a powerful eBook engine where you can download, view, and interact with your books.

Help students learn faster, study more efficiently, and retain more knowledge.

The **LearnSmart®** adaptive learning engine with **SmartBook®** gives every student a unique learning path and every teacher the power to reach all students in class.

SmartBook® is an eBook whose text is fully integrated with **LearnSmart®** technology. As a student reads, this technology determines precisely which learning objectives each student understands or struggles with, highlighting the most critical content for the student to read next.

LEARNSMART®



Pinpoint knowledge gaps for individual students and across classes

Empower students to personalize their learning experiences with optimal learning paths so they spend more time on what they don't know with **LearnSmart®**.

- Practice of basic science concepts to improve recall and application before moving on.
- Additional exposure and increased practice to master new concepts.
- Presentation of concepts individual students struggle to master.

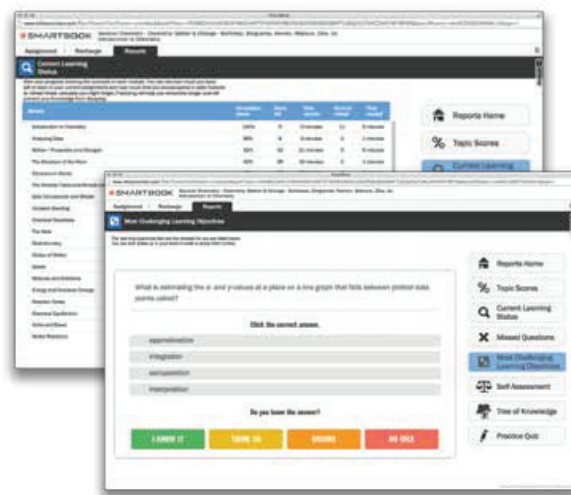
Support Each Student's Unique Needs

LearnSmart® is a proven adaptive learning program that helps students' success by providing a personalized learning path that's based on their responses to questions, as well as their confidence about the answers they provide.

Using revolutionary adaptive technology, **LearnSmart®** builds a learning experience unique to each student's individual needs.

LearnSmart® gives students an advantage - **improving learning outcomes** by ensuring every minute a student spends studying is the most productive minute possible.

SMARTBOOK®



Maximize Study Time

- Within **LearnSmart®**, discover **Smartbook®**, the only adaptive reading experience designed to transform the way students read.
- The interactive challenge format highlights content and helps each student identify content they know, don't know, and are most likely to forget.
- **Learning Resources** close knowledge gaps by immediately clarifying the concepts the student finds most challenging.
- Teachers receive detailed reports of student progress.

Access a **LearnSmart®** Demo at www.connected.mcgraw-hill.com

Username: TN612SCIDEMO | Password: tn2018science

Go to Course > Menu > Resources > Program Resources > **LearnSmart®**

Real-World Connections

Be confident helping students achieve more!

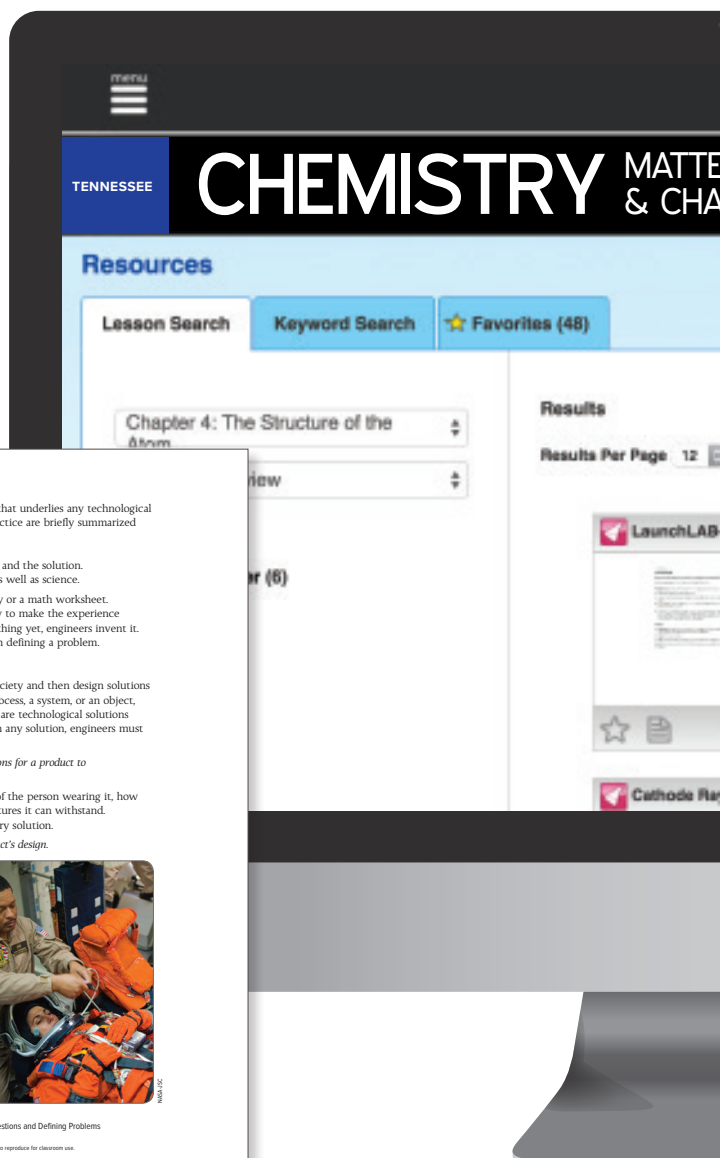
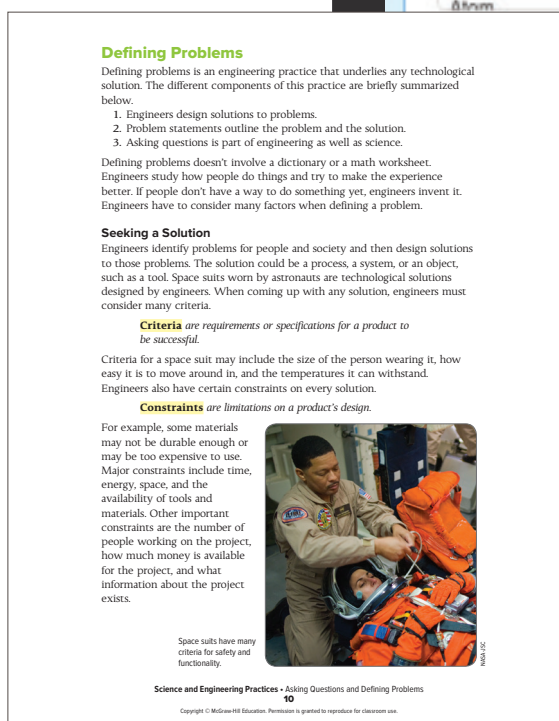
Use the **Science and Engineering Practices Handbook** to introduce the skills to students and support their scientific investigations and engineering projects.

As a reference book, the **Science and Engineering Practices Handbook** provides students with background information, definitions, examples, and Quick Practice activities to stimulate and reinforce learning.

The Science and Engineering Practices Handbook is an easy-to-use reference for all eight practices.

1. Asking questions (for science) and defining problems (for engineering).
2. Developing and using models.
3. Planning and carrying out investigations.
4. Analyzing and interpreting data.
5. Using mathematics and computational thinking.
6. Constructing explanations (for science) and designing solutions (for engineering).
7. Engaging in argument from evidence.
8. Obtaining, evaluating, and communicating information.

Find the **Science and Engineering Practices Handbook** in your teacher resources.



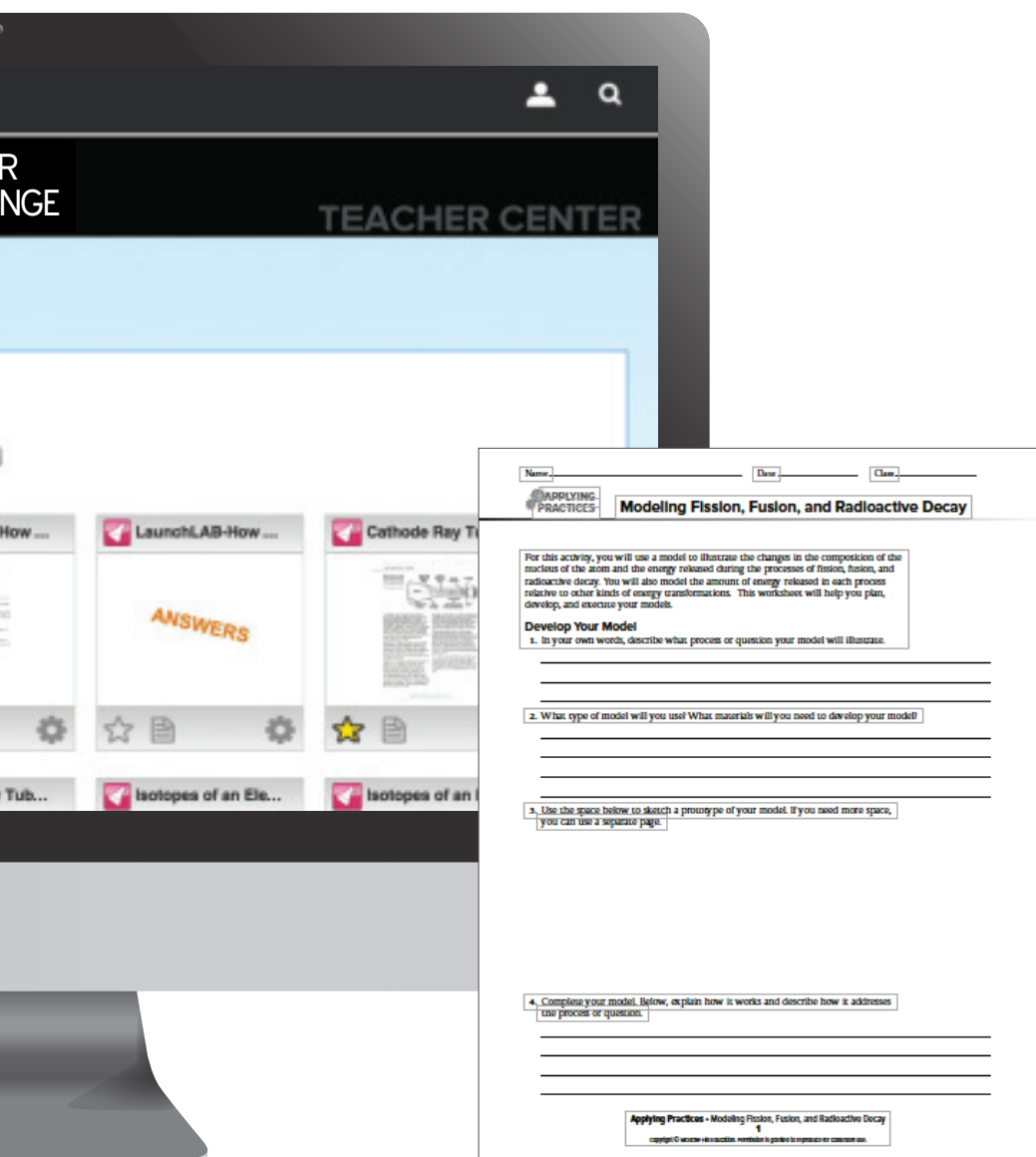
Integrated Student Resources

Support Each Student's Unique Needs

Written to meet performance expectation, **Applying Practices Worksheets** and **Project-Based Learning Activities** (PBLs) challenge your students to solve real problems in the real world. These sheets are editable, downloadable, accessible online, and designed to meet specific performance expectations.

Students practice chemistry in action with these learning tools.

- **Applying Practices** and **Project-Based Learning Activities** that integrate traditional science content with science and engineering practices.
- Design-your-own labs.
- Guided laboratory investigations.
- Modeling activities.
- Research and communicate projects.



*Find **Applying Practices Worksheets** in your teacher resources and teacher blades. Also accessible at point-of-use in student resources.*

Student Engagement

Create a teaching environment in which students are curious and actively engaged in learning.

Student Digital Resources

Your Tennessee Science program offers a variety of digital assets and interactives that bring abstract concepts to life and make your presentations even more engaging.

- Tennessee Science ebook
- Videos
- Animations and simulations
- Virtual Investigations
- Personal Tutors
- BrainPOPs
- Vocabulary eGames




Practical Professional Development

Designed on the principles of effective professional development, Effective Professional Development


- Self-paced courses
- Foldables
- Science and Engineering Practice Videos
- On-demand webinars

Media

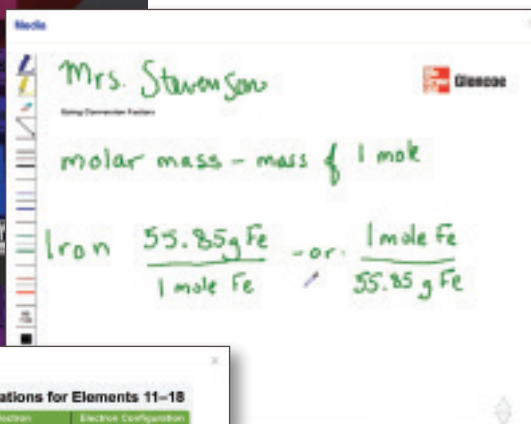
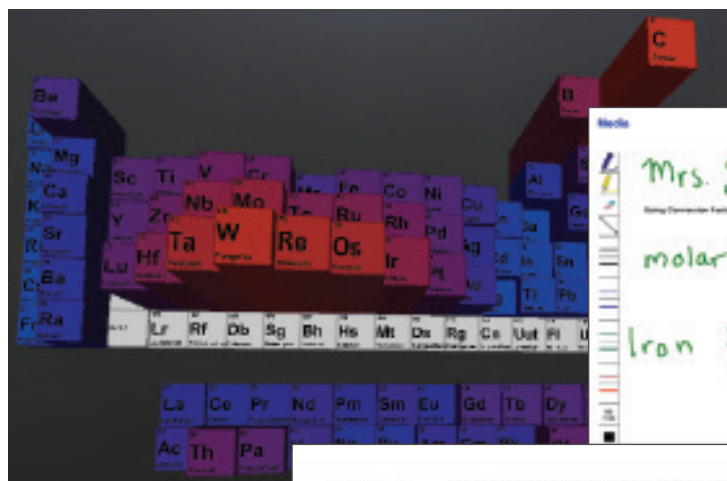


FOLDABLES®

Fold a sheet of paper into a two-tab book. Label the tabs as shown. Use it to organize information about the different types of passive and active transport.



Personal
Tutor



Expanded features
such as Personal
Tutor, VIVED[®],
Concepts-in-Motion
go beyond the
limitations of the
printed page.

Table 5.5 Electron Configurations for Elements 11–18

Element	Atomic Number	Complete Electron Configuration	Electron Configuration Using Noble Gas
Sodium	11	1s ² 2s ² 2p ⁶ 3s ¹	
Magnesium	12	1s ² 2s ² 2p ⁶ 3s ²	
Aluminum	13	1s ² 2s ² 2p ⁶ 3s ² 3p ¹	
Silicon	14	1s ² 2s ² 2p ⁶ 3s ² 3p ²	
Phosphorus	15	1s ² 2s ² 2p ⁶ 3s ² 3p ³	
Sulfur	16	1s ² 2s ² 2p ⁶ 3s ² 3p ⁴	
Chlorine	17	1s ² 2s ² 2p ⁶ 3s ² 3p ⁵	
Argon	18	1s ² 2s ² 2p ⁶ 3s ² 3p ⁶	

1s²2s²2p⁶

1s²2s²

1s²2s²2p⁶

1s²2s²2p⁶3s²3p⁶

1s²2s²2p⁶

1s²2s²2p⁶

1s²2s²

1s²2s²2p⁶

Drag each configuration to its corresponding element.

Apply Interactive Practice

Students have their own digital learning platform called the **Connected Student Center**, complete with student worksheets and digital resources. Assignments you create appear in their to-do lists. Students can message you directly and submit their work.

Use expanded **Student Center** features such as **Personal Tutor**, **BrainPOP[®]**, and **VIVED[®]** videos to go beyond the limitations of the printed page and bring science into your students' lives like never before.

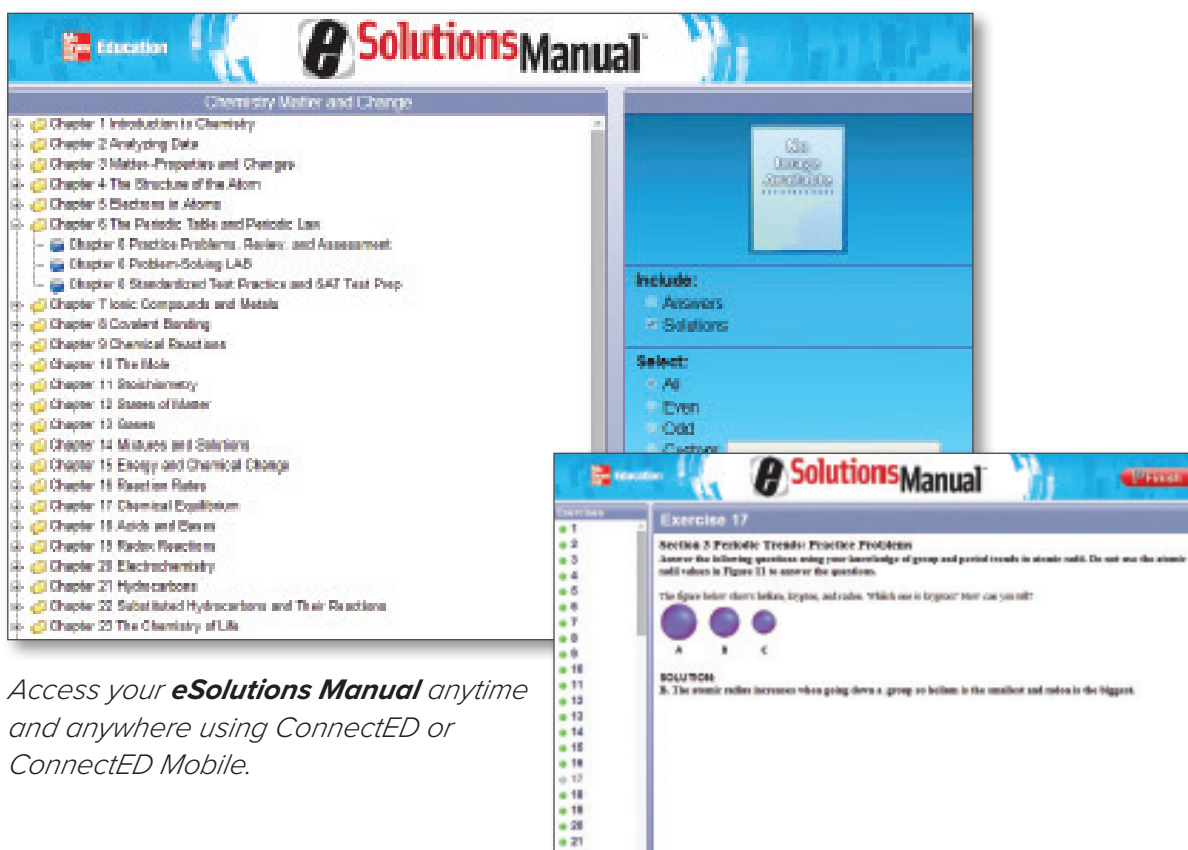
All Answers, Always Up To Date

Use the **eSolutions Manual** to design a dynamic learning environment and effectively personalize content to meet each student's specific learning needs.

Replace your traditional solutions manual with this digital **eSolutions Manual** to effectively create customized homework assignments and assign ready-made practice activities.

The **eSolutions Manual** can help you use class time more effectively. Use the “view online” feature in class and project questions and solutions on a screen or interactive whiteboard to make class time more interactive and productive.

Display questions on at a time and reveal steps to help students work through problem sets individually or collaboratively.



The eSolutions Manual features:

- All questions from the Student Edition.
- The flexibility to show answers, solutions, both, or neither.
- The ability to make customized worksheets from questions in the Student Edition, using evens, odds, or all problems.

Take Student Achievement to the Next Level with eAssessment

Assessment is a key element to teaching science. McGraw-Hill Education **eAssessment** supports you from diagnostic to summative evaluations, giving you the ability to monitor students' progress, make data-driven instructional decisions, and motivate your students' academic achievement.

Simplify Data-Informed Decision Making

Use **eAssessment** to create tests and other assignments that can be delivered to students digitally or in print.

Maximize eAssessment by generating reports and beneficial data

The **eAssessment** reporting feature gives you 24/7 access to valuable data on individual students and whole classes to help you differentiate and support students more effectively.

The screenshot displays the McGraw-Hill eAssessment interface. On the left, a sidebar shows a tree view of 'Question Sets' and 'Tests'. The main area is divided into two panes. The left pane shows a 'Multiple Choice' question editor for 'Chapter 8 Assessment (Ancillary)'. The right pane shows 'Assignment Results' for a 'Practice Homework' assignment, dated June 11, 2014. The results table lists 17 questions with their types, points, and responses.

Question #	Question Type	Points	Response
X 1	True / False	0 / 1	T
X 2	True / False	0 / 1	F
3	True / False	1 / 1	T
4	True / False	1 / 1	T
X 5	True / False	0 / 1	T
6	True / False	1 / 1	F
7	True / False	1 / 1	T
8	True / False	1 / 1	F
9	True / False	1 / 1	F
X 10	True / False	0 / 1	F
11	True / False	1 / 1	T
12	True / False	1 / 1	F
X 13	True / False	0 / 1	T
14	True / False	1 / 1	T
X 15	True / False	0 / 1	T
16	True / False	1 / 1	T
X 17	True / False	0 / 1	T

Other features of iScience eAssessment include:

- Question sets with questions organized by chapter and lesson
- Assessment creation
- Report generation on proficiency and accuracy
- Assignment time restrictions and multiple attempts at assignment completion
- Access to ready-made assessments
- Assess using premade diagnostic and summative evaluations

To learn more about the Tennessee science program,
visit mheducation.com/prek12Tennessee or contact your
Tennessee Sales Representative.