

McDougal Littell Science

There is more to reading than just the score!

Compare ALL the factors that affect success in reading and understanding science texts!

Compare!	McDougal Littell Science
<p><i>How is the content organized?</i></p> <p>What research says:</p> <ul style="list-style-type: none"> Organizing content around Big Ideas provides students with a framework for learning, linking, and remembering science, which helps raise student achievement. Brain-based research notes that students need key anchor points upon which to hook new information. Considerate texts organize content around Big Ideas in clearly stated terms for students. The <i>National Science Education Standards</i> and AAAS Project 2061 Benchmarks recommend teaching key concepts and big ideas in science. 	<p>Only <i>McDougal Littell Science</i> organizes the content around Big Ideas. The BIG IDEA in each chapter is derived from the UNIFYING PRINCIPLES presented in the front of each text and summarizes the content of each chapter.</p> <ul style="list-style-type: none"> The KEY CONCEPTS, which are derived from the <i>National Science Education Standards</i>, detail the essential content needed to master science. The Key Concepts are the section titles and are stated in complete sentences, which aid in increasing student comprehension. See Chapter Opener: Big Idea and Key Concepts clearly stated
<p><i>Does the program draw on prior knowledge?</i></p> <p>What research says:</p> <ul style="list-style-type: none"> Accommodating background knowledge is an essential element of scaffolding the learning process. When readers activate prior knowledge, they are better able to focus on what is important in the text, to make inferences, and to reflect and elaborate on essential ideas. Considerate texts should provide teachers with a variety of activities to help students connect their experiences with the content and to clear up any preconceived misconceptions. 	<p>Includes a variety of activating prior knowledge at the beginning of each chapter <u>and</u> section and an abundance of support for addressing students' misconceptions</p> <ul style="list-style-type: none"> Chapter Opener: Introduces the Big Idea and Key Concepts through an inquiry approach: discussion questions, visuals, and activities Section Opener: 3-Minute Warm-Up activity Previewing Content (B-C pages): Common Misconceptions Throughout Chapter: Address Misconceptions
<p><i>Is there an emphasis on prerequisite knowledge and skills, which specifies and alerts teachers to prerequisite knowledge and skills necessary to learning key ideas?</i></p> <p>What research says:</p> <p>Considerate texts provide ample opportunities for both students and teachers to assess and review essential prior knowledge necessary to read and understand new concepts.</p>	<p>Includes diagnostic strategies in the Pupil's Edition, Teacher's Edition, and Unit Assessment Book to determine students' readiness to learn, link, and remember new science concepts.</p> <ul style="list-style-type: none"> Teacher's Edition Section Opener: Concept Review/Activate Prior Knowledge Pupil's Edition Getting Ready to Learn Page: Concept Review and Vocabulary Review Unit Assessment Book: Diagnostic Test for each chapter Content Review CD and Classzone.com for remediation

<p><i>Are all standards illustrated through useful, relevant and appealing photographs?</i></p> <p>What research says:</p> <ul style="list-style-type: none"> • In considerate texts, visuals such as illustrations, graphs, and charts, are included to clarify and extend students' understanding of essential ideas. • Appropriate and well-designed graphics that re-teach and summarize key concepts in a visually engaging manner help students reflect on concepts in the printed text. 	<p><i>McDougal Littell Science</i> was carefully crafted to ensure each Key Concepts was covered by age-appropriate text tied directly to integrated, instructional visuals.</p> <ul style="list-style-type: none"> • Engaging visuals provide real world connections. • Visual Key Concept Summary: Chapter Review Content Review CD-ROM Power Presentations CD-ROM • Classzone.com: Animations and Visualizations
<p><i>Are there consistent note-taking and vocabulary strategies?</i></p> <p>What research says:</p> <ul style="list-style-type: none"> • An inability of students to take notes is one of the key reasons for failure in higher education. • Note taking is best taught through exemplary modeling. The use of note-taking models helps students focus their thinking and construct meaning from what they read. This is vital for students to learn and recall science information. <p>What research says:</p> <ul style="list-style-type: none"> • Vocabulary development for older students must include repetition, integration, and meaningful use. • Students need multiple exposures to key concepts in order to add them to their vocabulary. • Considerate texts provide daily vocabulary instruction of key content vocabulary. 	<p><i>McDougal Littell Science</i> was carefully crafted to consistently include all research-based note-taking and vocabulary strategies that are proven to affect comprehension:</p> <ul style="list-style-type: none"> • Only program to consistently model and reinforce strategies for keeping a science notebook. Reading and vocabulary strategies are introduced on the Getting Ready to Learn page at the beginning of the chapter and reinforced throughout the chapter. <i>(See prompts throughout chapter to stop and practice.)</i> • Student Handbook: Note-Taking Handbook at end of each text provides students review of all note-taking strategies. • Science Toolkit provides time-saving lessons with transparencies for teaching essential reading skills: <i>Building Science Vocabulary, Reading in the Science Content Area, Daily Vocabulary Scaffolding, and Strategies for Decoding Words</i>
<p><i>Does the program provide ongoing opportunities for creating graphic representations of key concepts?</i></p> <p>What research says:</p> <ul style="list-style-type: none"> • Robert Marzano notes that our brains first search for a picture or image when attempting to connect prior knowledge with a new concept. Drawing pictures or pictographs (i.e., symbolic pictures) to represent key concepts is a powerful way for students to demonstrate their understanding of essential concepts. • The more teachers use both linguistic and non-linguistic systems of representation the better students are able to think about and recall knowledge. • Considerate texts provide abundant activities for students to express their understandings in both linguistic and visual mediums. 	<p>Consistent instructional strategies woven throughout the program that provide opportunities for students to represent Key Concepts through symbolic pictures:</p> <ul style="list-style-type: none"> • Unit Resource Book: Reading Study Guides A and B provide practice of vocabulary and note-taking strategies introduced at beginning of chapter on Getting Ready to Learn page. • Note various graphic representation strategies woven throughout each chapter in the Teacher's Edition's wrap around margin.

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