Big Idea Science offers curriculum content in accessible and highly visual books to engage all students, particularly ELLs and striving readers.

- The opening spread of each book engages the readers with a big idea, a concise introduction, an authentic image to support the text, and an essential question to give context to reading and critical thinking.
- The three chapters in each book present curriculum content at a low reading level and make use of textual and visual clues to support reading and learning.

- The variety of questions and activities in each book provide opportunities for students to work collaboratively with a partner or a group and encourage them to present and communicate ideas in oral or written form.
- Each book promotes visual literacy through the use of photographs, illustrations, diagrams, charts, legends, and symbols. Visual literacy is an important skill for all students, including ELLs and striving readers.

Essential Questions help readers connect to the topic and provide a context that promotes critical thinking.
INQUIRY PROCESS AND ESSENTIAL QUESTIONS

Each Big Idea book is designed to offer opportunities for students to engage in the inquiry process. Students learn to investigate a topic, ask questions, gather and analyze information, draw conclusions, and communicate what they find out. Wiggins and McTighe (2000) argue that curriculum must deal with big ideas or questions worth investigating. These are questions that do not have a simple answer. For example, in the book Flight, students are asked the Essential Question “How can air be used to fly?” They then read about and investigate the properties of air and the forces that allow animals and machines to fly, as well a some of the history of flight, the purposes for which we use flight, and its impact on our world. Students are encouraged to read, discuss, experiment, solve problems, make connections, form opinions, and share what they have learned both orally and in writing.

Essential questions require students to think critically, drawing upon personal experience or knowledge, or information they have gathered, to form their own answers. There is no right or wrong answer. Students are encouraged to think and discuss different points of view, evaluate information to support their views, make decisions after careful consideration, and then communicate their views. The inquiry process is beneficial for all students, particularly ELLs for whom it is critical that teachers do everything possible to make instruction engaging and comprehensible. If ELLs can stay focused on the lesson being delivered in English, there is a greater chance they will learn the concepts and acquire more of the new language. Success increases motivation to make the mental effort needed to comprehend new subject content in a language unfamiliar to them.