



About *Human Body Explorations*

Nothing is more fascinating than the human body! We all have one, and we're intimately familiar with what it can do. But why and how does it do the things it does? The explorations in this book will lead to a better understanding of many of the intriguing and mysterious aspects of the body, both macroscopic and microscopic. All that's needed are a few simple tools, curiosity, and in some cases a little help from others.

Everyone is a learner, and we have written the explorations in this book to reflect that fact. The explorations are successful in the classroom—but most can be done outside the classroom equally well. Many can be conducted by a curious individual. For others, a partner or a few other co-explorers are needed.

The explorations provide experience in asking questions that can be answered through scientific investigation. They ask an explorer to gather, analyze, and interpret data using a variety of simple tools and techniques, and guide the process of developing explanations, predictions, and models using the evidence that's generated. Making connections between evidence and explanation develops critical thinking skills and builds an excellent foundation for further independent inquiry.

With a few exceptions, the materials needed for the explorations are available in a grocery store or pharmacy at little cost, and we give detailed instructions on preparation and setup. We provide extensive scientific background and explanations, and there's a list of additional resources in the back of the book. We've also included useful tips and ideas for inquiry that can be used to modify the explorations to suit individual needs and goals.