

## INTRODUCTION

*Background science* contains information that is needed for S282 and S283. This science is not itself astronomy or planetary science, but underpins much of what you will be studying.

We hope you will dip into the topics as and when you need to — it is *not* the intention that you work through everything all in one go. Just have a quick look at the topics now to get an idea of the support that will be available to you as you work through your course.

You may already have met a good deal of the material presented here, particularly if you have studied the OU course S103 *Discovering Science* or one of its predecessors. *Background science* is intended to refresh your memory of key areas and to provide some basic information on topics that might be unfamiliar to you.

In addition to background science, we have also included basic mathematics. Topic 7 includes various items of useful information, such as the Greek alphabet and tables of physical constants and useful quantities. You will probably need to refer to these tables on many occasions during your study, particularly when working on assignments.

You can search for a particular word or phrase in the PDF files from the menu bar by selecting Edit | Find. In the text, key terms are printed in **bold** where they are introduced.

Each topic contains worked examples to illustrate the topic being discussed, and questions for you to test your own understanding. Worked solutions to all the questions are given at the end of each topic. In all the worked examples and solutions, we have stated the final answer with an appropriate number of significant figures, which generally involves rounding the number shown on a calculator display. Significant figures are explained in Section 6.2.