Frequently Asked Questions

What kind of computer skills do I need?

While this book provides some instructions about basic computer operations, it does assume familiarity with a computer. If you are comfortable using a word processing program, creating images in a program like KidPix or Photoshop, or surfing the web on your computer, then your skills are adequate to begin your Adventure.

What kind of mathematical skills do I need?

While knowledge of complex mathematics is not required to build models in StarLogo, some mathematical and logical thinking skills are. StarLogo does require beginning knowledge of algebra and geometry to implement certain features in your models. We suggest that elementary-age children who are not yet familiar with these mathematical concepts start by exploring prebuilt StarLogo models (perhaps some that you create for them) or building their own models in another version of Logo, like MicroWorlds Logo (http://www.lcsi.ca).

What do I need to know about models or simulations?

This book is a great way to introduce yourself or your students to models and simulations. Our approach is not merely to present StarLogo mechanics, but to impart an understanding of the art and science of modeling. Of course, StarLogo is just one of many modeling environments. Previous experience with models or simulations can set your StarLogo exploration in a richer context, just as experience with StarLogo will enrich your understanding of the models that you encounter in the future.

Do I need to know how to program in StarLogo or another language?

No, this book begins with basic programming concepts, so you do not need previous programming experience.

Do I need one computer for each student?

No. We suggest that students work together on the Challenges. Groups of two or three students per computer are ideal. It is important that every student has time to play with StarLogo.

What kind of computer do I need?

There are both Java (cross-platform) and Macintosh-specific versions of StarLogo. This book was written for the Java version but can be used with MacStarLogo as well. If you are using a Mac, you can use either the Java version or MacStarLogo. We strongly recommend that you download the Java version if possible. If you are running StarLogo using Java on a PC, you need at least a Pentium 133. To run the Java version on a Mac, you need at least a G3 (all iMacs and iBooks have at least G3 processors). If

you are running MacStarLogo you need a Quadra, Centris, or Performa 600 series or better. The 68K version needs 7 MB of free RAM and the PowerPC version needs 8.5 MB. Information specific to MacStarLogo can be found in Appendix A.

Can this book help my students and me meet the state and national curriculum standards?

While standards vary considerably from state to state, almost all of them call for encouraging students to engage in higher-order thinking and for integrating technology into mathematics and science courses (among others). Some states specifically call for the use of modeling and simulation in secondary classes. The Challenges and the Activities in this book can help you meet these standards. Though we cannot list all of the overlap between this book and the standards in your state, you can find some guidelines and examples in Chapter 5.

What size group of students can this book accommodate?

This book is best used in a course that allows for student-student interaction. It is not intended for use in a large, lecture-format class, unless smaller section meetings supplement the class. The Challenges work best in a class of fewer than 35 students. All of the Activities can accommodate at least 35 students and most work best with more than a dozen participants.

Can I use this book on my own or to teach an individual child?

While the Activities described in this book are intended for groups, the modeling Challenges can be explored on your own, with an individual child, or with a small group of students. If you or your students would like to interact with other StarLogo Adventurers, you can log onto the StarLogo Adventures website (http://www.media.mit.edu/starlogo/adventures) to share ideas, exchange questions, and post solutions. In addition, you can log onto the StarLogo Design Discussion Area (http://education.mit.edu/starlogo/dda), to receive feedback on your models and give others input on their work. If you are learning StarLogo by yourself, you might want to collaborate with other StarLogo users through the email list (starlogo-users@media.mit.edu). You may sign up for the mailing list by emailing starlogo-request@media.mit.edu or by visiting us online at http://www.media.mit.edu/starlogo/community/mailinglist.htm.

How do I get StarLogo?

StarLogo is on the CD that comes with this book and is also available for free on the web at http://www.media.mit.edu/starlogo. Click on download and choose whether you'd like the Java, PowerPC, or the 68K version. We strongly recommend that, if you can, you download the Java version. If you have an older version of StarLogo, please replace it with the latest version included on the CD or available online. When you download StarLogo, you will receive a folder of Sample Projects and a folder of Adventures Projects. In addition, all of the documentation for StarLogo is included in the download. We encourage you to sign up for the starlogo-users@media.mit.edu mailing list and share your experiences with other StarLogo users.