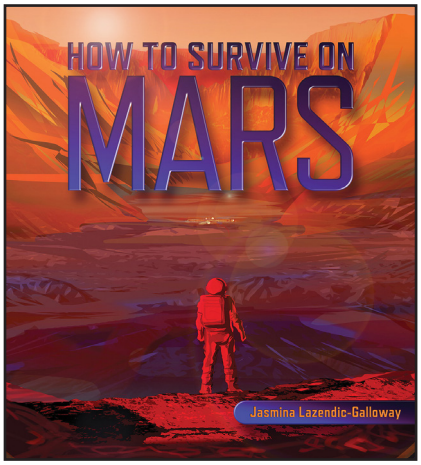
How to Survive on Mars



Written by: Jasmina Lazendic-Galloway.

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How to Survive on Mars is a beautifully presented, informative text written by Jasmina Lazendic-Galloway. Dr Lazendic-Galloway is an astronomer, educationalist, and science communicator. She has extensive teaching experience — ranging from students in university classrooms to the public — via television, radio, and published articles. She is also a valued member of the National Space Society of Australia.

After the introduction, the book provides a mission briefing for teachers and readers (p. 12). The briefing contains strategies on how to use the book and summarises key learning points. I particularly like how key scientific terminology is bolded throughout the text, and later defined in a glossary at the end of the book (p. 113). I think the strategies provided are engaging and effective in creating authentic learning experiences for a range of learners.

The text consists of nine chapters that are jam-packed with information and stunning photographs of Mars. Each chapter incorporates a depth of knowledge incorporating elements of biology, chemistry and physics. The first chapter digs into the red planet and provides information about a day on Mars, landforms, and the evolution of our understanding of the planet. The next few chapters focus on the physics of getting to Mars, which also ties in some engineering content by detailing the structure of rockets. The remaining chapters focus on the issues and future planning required for living sustainably on Mars and I thoroughly enjoyed the chapter 'Cricket Stir Fry and Algae Smoothie' (p. 77). This chapter provides an intriguing insight into farming on Mars as well as potential Martian diets, which can be used as a good starting resource for further class discussion and exploration.

This text, partnered with the CSIRO teacher notes available on the book's page on the CSIRO Publishing website, makes a fantastic resource for science educators and learners. The teaching notes provide a variety of extra activities and discussion points to complement the text and extend student learning. Although this resource is pitched to primary school students, I believe the resource would also be a great addition to secondary science classrooms. The content covered in the text and teaching notes fit well into the Earth and Space secondary science topics. This resource can also be used as a great study text to promote science literacy for lower-ability students or as a tool to engage and extend highly capable students in areas of creativity and innovation.

Further, the layout and language used are well suited for secondary learners. I found myself highly immersed in the content of the book and found the text very enjoyable to read due to the formatting of the content complemented by the appealing colour schemes and visuals. I look forward to incorporating this resource into my classroom to engage and extend Australia's future astronomers.

Miss Katherine Muscat

Secondary Science Teacher, Sydney,
New South Wales