



These notes are designed so that you can use them as a guide for teaching or alternatively you can give them to a group of students who will then complete the reading and activities independently or with a partner.

Each set of notes has:

- An activity grid
- The science content and knowledge
- The science vocabulary in the glossary
- The answers to the quiz
- Questions for each chapter to guide reading

There is more than one way to read this book. Here are four examples. No one way is better than the another. You may also like to use the graphic organizers to help guide your reading.

- You can skim through the pages of the entire book, stopping at and studying the diagrams. Then check the glossary to clarify your understanding of any unknown science-related words. This will give you the background science information before you read the story. Then go back and read the story.
- You can read the blurb on the back cover, then jump straight into reading Chapter 1. Read the story as if there were no diagrams or bolded words at all. When you have finished, go back and study the diagrams and glossary words to add to your knowledge.

- You can do a combination of both the above. Read the back cover blurb to find out the storyline. Study the initial diagrams. Then read the book, stopping to consolidate your understanding of the science concepts. Check out the bolded words in the glossary if you are unsure of their meaning.
- You can read the book chapter by chapter, stopping and discussing the story and the science as you go.

When you have finished reading, take the test. You should get six out of six. If you aren't sure of an answer, follow the quiz clues at the end of the book.

Now do one or both of the activities. When you have finished these, complete the black line master activities.

<b>Book Title</b>	<b>Book Activity 1</b>	<b>Book Activity 2</b>	<b>Graphic Organiser 1</b>	<b>Graphic Organiser 2</b>	<b>Black Line Master 1</b>	<b>Black Line Master 2</b>	<b>Black Line Master 3</b>
<b>Cassandra's Clever Dad</b>	Values Honesty	Science Inquiry	Comprehension Literal	Science Inquiry	Literacy Vocabulary	Multiple Intelligence Logical	Literacy Inquiry
<b>Bushfire</b>	Comprehension Inferential	Science Vocabulary	Literacy Vocabulary	Science Inquiry	Comprehension Literal	Multiple Intelligence Linguistic	Values Cooperation & Teamwork
<b>Magnets Malwinski</b>	Values Tolerance	Science Vocabulary	Comprehension Literal	Science Inquiry	Literacy Vocabulary	Multiple Intelligence Linguistic	Comprehension Inferential
<b>Alexander Becomes and Astronaut</b>	Values Responsibility	Science Inquiry	Comprehension Literal	Science Inquiry	Science Vocabulary	Multiple Intelligence Linguistic	Comprehension Inferential
<b>Battered to Bits</b>	Comprehension Literal	Science Experiment	Literacy Vocabulary	Science Inquiry	Comprehension Inferential	Multiple Intelligence Logical	Values Respect
<b>The Devious Desert Racer</b>	Comprehension Inferential	Science Inquiry	Multiple Intelligence Logical	Science Inquiry	Literacy Vocabulary	Comprehension Inferential	Values Respect, Care, Integrity, Responsibility
<b>The Wild Ride</b>	Literacy Vocabulary	Science Inquiry	Comprehension Literal	Science Inquiry	Comprehension Literal	Multiple Intelligence Linguistic	Values Responsibility
<b>Day of Fire</b>	Comprehension Inferential	Science Inquiry	Comprehension Literal	Science Inquiry	Literacy Vocabulary	Multiple Intelligence Linguistic	Values Priorities
<b>Isabella Remington – Basketball Star</b>	Comprehension Inferential	Science Experiment	Comprehension Literal	Science Inquiry	Literacy Vocabulary	Multiple Intelligence Bodily Kinaesthetic	Values Doing Your Best
<b>Hurricane Tamer</b>	Comprehension Inferential	Science Numbers	Values Doing Your Best	Science Inquiry	Literacy Vocabulary	Multiple Intelligence Musical	Comprehension Literal
<b>Trouble on the Track</b>	Literacy Vocabulary	Science Numbers	Comprehension Literal	Science Inquiry	Comprehension Inferential	Multiple Intelligence Naturalist	Values Relationships
<b>Beyond the Thicket</b>	Comprehension Literal	Science Inquiry	Comprehension Inferential	Science Inquiry	Science Vocabulary	Multiple Intelligence Visual Spatial	Values Compassion & Fair Go

# Alexander Becomes an Astronaut

## Science Content and Knowledge:

Earth Science: Space (Mars)

**Level:** Middle

**Genre:** Science Fiction

**Reading age:** 9.7 years

## Science Vocabulary

carbon dioxide	nanosecond
Deimos	orbiting
DNA profiles	Phobos
extremophiles	schematic
gravity	solar system
hypno-learning	sunspot
meteor	suspended animation
micrometeor	terraforming
nano-analysis	ultraviolet rays
nanorovers	

## Quiz Answers

*Question 1:*

227, 920, 000 km

*Question 2:*

The colour of it's volcanic soil is red

*Question 3:*

Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune

*Question 4:*

Phobos and Deimos

*Question 5:*

One-third

*Question 6:*

Cold climate and poisonous atmosphere

## Study Guide

Chapter 1 – The Countdown Begins

Read Chapter 1 to find out who the main characters are, and where the story is set.

Use the title of the story, the title of the

chapter and the blurb on the back cover to predict what might happen.

Chapter 2 – The Do-or-Die Test

Think about the title of Chapter 2 – *The Do-or-Die Test*. What does do-or-die imply?

How could this affect the main character Alexander?

Chapter 3 – Spaced Out

Alexander finally has the chance to join his family on Cybloc. Jot down how life will be different for Alexander on Cybloc compared to Earth. After you have read the chapter, your list. Add other differences that Alexander found to your list.

Chapter 4 – The Big Day Arrives

Using the information you have read in the previous chapters, predict what might happen in Chapter 4 – *The Big Day Arrives*.

Chapter 5 – Alexander's Big Decision

In this chapter Alexander has a big decision to make. Read this chapter to find out what that decision is. Do you agree with the choices Alexander made? What would you have done?

# Graphic Organizer 1– Literacy

Alexander Becomes an Astronaut **Name** \_\_\_\_\_

- Comprehension – Literal

As you read the story, jot down the steps Alexander took to becoming an astronaut.

Steps	Description



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## Graphic Organizer 2 – Science

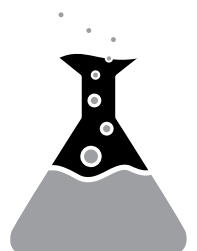
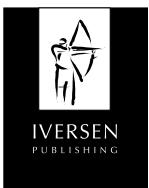
Alexander Becomes an Astronaut

**Name** \_\_\_\_\_

- Science Inquiry

At the end of each chapter, jot down one science fact or concept that you think would be important to remember.

Chapter	Fact or concept



• Vocabulary

Use the book to answer the quiz.

1. Which of the following is not an inner planet?

- |          |           |
|----------|-----------|
| A. Mars  | C. Venus  |
| B. Earth | D. Saturn |

2. Which of the following is a moon of Mars?

- |           |          |
|-----------|----------|
| A. Titan  | C. Gama  |
| B. Phobos | D. Pluto |

3. Mars is the \_\_\_\_\_ closest planet to the Sun.

- |        |        |
|--------|--------|
| A. 2nd | C. 3rd |
| B. 4th | D. 5th |

4. The length of a day on Mars is approximately...

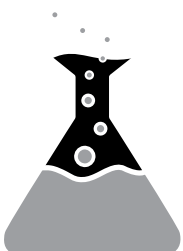
- |                   |                   |
|-------------------|-------------------|
| A. 28½ Earth days | C. 32 Earth days  |
| B. 20½ Earth days | D. 24½ Earth days |

5. The main gas found in the atmosphere of Mars is...

- |                   |                    |
|-------------------|--------------------|
| A. Carbon dioxide | C. Carbon monoxide |
| B. Oxygen         | D. Nitrogen        |

6. The largest known volcano in the universe is on Mars. What is it called?

- |                 |                     |
|-----------------|---------------------|
| A. Vesuvius     | C. Valles Marineris |
| B. Olympus Mons | D. Deimos           |



## BLM 2 – Multiple Intelligence

Alexander Becomes an Astronaut

**Name** \_\_\_\_\_

- Linguistic Intelligence

Compare and contrast the characters of Alexander and Bryan. Make a list of their similarities and differences.

Alexander

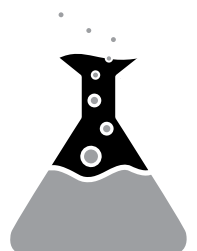
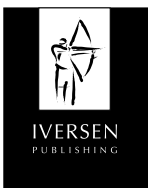
Bryan

### Similarities

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Differences

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_



## BLM 3 – Literacy

Alexander Becomes an Astronaut **Name** \_\_\_\_\_

- Comprehension – Inferential

Identify the following elements from the story as fact or fiction. Tick the Fact or Fiction box. Which fictional elements do you predict will become fact in the future? Tick the Future fact box.

Element	Fiction	Fact	Future fact
There is an international space station called Cybloc orbiting Mars.			
Phobos and Deimos are the two moons of Mars.			
Dust storms on Mars can last for months.			
Young people like Mason are training to be astronauts.			
A meteor shower could happen in space.			
Mars is cooler than Earth.			
Mars has lighter gravity than Earth.			
Scientists have proof of life on Mars.			
The terraforming of Mars has begun.			

Use two other resources to verify the present facts, e.g. Internet, textbooks and encyclopaedias.



Which present fiction do you think is most likely to become fact?  
Why?

