



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>Crash Landing</b>	Comprehension Literal	Science Experiment	Comprehension Inferential	Science Inquiry	Literacy Vocabulary	Multiple Intelligence Visual Spatial	Values Responsibility
<b>Futuristic Park</b>	Comprehension Inferential	Science Experiment	Comprehension Literal	Science Inquiry	Literacy Vocabulary	Multiple Intelligence Visual Spatial	Values Leadership
<b>Incredible Amazon Adventure</b>	Comprehension Inferential	Science Inquiry	Comprehension Literal	Science Inquiry	Comprehension Inferential	Multiple Intelligence Musical	Values Responsibility
<b>The Spooky Man Upstairs</b>	Comprehension Inferential	Science Experiment	Comprehension Literal	Science Inquiry	Literacy Vocabulary	Multiple Intelligence Bodily Kinaesthetic	Values Respect
<b>The Miners and the Morkorth</b>	Comprehension Inferential	Science Inquiry	Comprehension Literal	Science Inquiry	Literacy Vocabulary	Multiple Intelligence Linguistic	Values Responsibility
<b>The Final Wave Goodbye</b>	Multiple Intelligence Interpersonal	Science Experiment	Comprehension Inferential	Science Inquiry	Comprehension Inferential	Comprehension Literal	Values Respect for Others
<b>Secrets of the Sky</b>	Comprehension Inferential	Science Inquiry	Comprehension Literal	Science Inquiry	Literacy Vocabulary	Multiple Intelligence Logical	Values Rights of Others
<b>Fight or Flight</b>	Comprehension Inferential	Science Inquiry	Literacy Vocabulary	Science Inquiry	Comprehension Literal	Multiple Intelligence Visual Spatial	Values Doing Your Best
<b>Dramatic Discovery</b>	Comprehension Inferential	Science History	Comprehension Literal	Science Inquiry	Literacy Vocabulary	Multiple Intelligence Linguistic	Values Tolerance
<b>Beat the Buzzer</b>	Comprehension Inferential	Science Inquiry	Comprehension Literal	Science Inquiry	Science Vocabulary	Multiple Intelligence Interpersonal	Values Honesty
<b>Deadly Space Race</b>	Comprehension Literal	Science Inquiry	Literacy Vocabulary	Science Inquiry	Comprehension Inferential	Multiple Intelligence Visual Spatial	Values Doing Your Best
<b>Saving the Sun</b>	Values Integrity & Trustworthiness	Science Experiment	Comprehension Inferential	Science Inquiry	Comprehension Literal	Multiple Intelligence Logical	Comprehension Inferential

# Saving the Sun

**Science Content and Knowledge:**

Earth Science: Space (Sun)

**Level:** Upper

**Genre:** Science Fiction Thriller

**Reading age:** 11.6 years

**Science Vocabulary**

Asteriod Belt	main sequence star
Ceres	Milky Way galaxy
convection zone	photosphere
core	radiation zone
expanding star	red giant star
gravitational force field	solar flares
helium	solar prominence
inner solar system	solar wind
light-years	sunspots
	trajectory

**Quiz Answers**

*Question 1:*

Hydrogen was being instantly converted to helium, upsetting the balance of the two gases

*Question 2:*

Jupiter’s main gases are hydrogen and helium, similar to those on the sun.

*Question 3:*

Ceres

*Question 4:*

The coolest parts of the photosphere on the sun

*Question 5:*

Core, corona, photosphere, convection and radiation zones

*Question 6:*

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

**Study Guide**

Chapter 1 – Collision with the Sun

Chapter 1 introduces the problem. Read Chapter 1 to find out what the problem is and how the characters deal with the problem.

Chapter 2 - Finding the Experts

Chapter 2 introduces in detail the main characters of the story . Find out who they are, what their purpose is and their relationship with each other.

Chapter 3 – Will They Save Earth?

Do you think the experts will be able to come up with a solution? Will they want to risk their own lives? Do they have a choice in the matter? Decide whether or not you think the experts can save Earth? Read the chapter to find out if you were correct.

Chapter 4 – Hatching a Plan

Read Chapter 4 to find out how the experts think they can save Earth. As you read, decide whether you think their plan will work.

Chapter 5 – To Save the Sun

How do you think the story will end? Do you think the experts will be able to save the sun? What would be the consequences if their plan was unsuccessful?

# Graphic Organizer 1– Literacy

## Saving the Sun

Name \_\_\_\_\_

- Comprehension – Inferential

Complete the story map as you read.

Setting	Main characters	Other characters
The problem		
Sequence of events 1 2 3 4 5		
Solution to the problem		
Story Theme: What is the story about?		



Permission is given to teachers to reproduce this page for classroom use.



## Graphic Organizer 2 – Science

### Saving the Sun

Name \_\_\_\_\_

- Science Inquiry

The book contains diagrams relevant to the story. As you come across these pages in the book, make notes about what you learn.

Visual literacy	Page	What it tells me about magnetism
Map of the solar system		
Diagram of the life cycle of a star		
Graph of distances to the sun		
Explanation of galaxies		
Diagram of zones of the sun		



# Saving the Sun

Name \_\_\_\_\_

- Comprehension – Literal

Once you have finished reading, complete the table below about the characters in the story.

Character	What I found out about them
Xium	
Ra	
Zara	
Universal Emperor	
Royta	
Doctor Zog	



# Saving the Sun

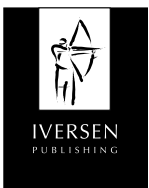
Name \_\_\_\_\_

• Logical Intelligence

Identify the following elements from the story as fact or fiction. Make a prediction about whether they could become fact in the future.

1. The sun converts hydrogen to helium.
2. The sun is twice its original size.
3. Mercury, Venus and Earth are three planets in the inner solar system.
4. The Earth could be moved to Pluto's trajectory.
5. Hydrogen could be put back into the sun.
6. There is an asteroid belt between Mars and Jupiter.
7. Ceres is the largest asteroid in the Asteroid Belt between Mars and Jupiter.
8. A maxipod could fly people to the core of the sun.

	Present fact	Present fiction	Identify present fiction that could become fact in the future.
1			
2			
3			
4			
5			
6			
7			
8			



# Saving the Sun

Name \_\_\_\_\_

- Comprehension – Inferential

Identify five science facts or concepts from the book that you think would be important to understand and remember.

Fact Concept 1	
Fact Concept 2	
Fact Concept 3	
Fact Concept 4	
Fact Concept 5	

Explain why you think it would be important to understand and remember each of these facts.

- 1.
- 2.
- 3.
- 4.
- 5.

